

# Draft Appendices

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## Appendix A - Analysis Methodology

# Analysis Methodology

**Table 1** summarizes performance measures for each mode, while the remaining sections outline methodologies employed to analyze facility demand, safety, network quality, operations, and connectivity associated with each of the four major modes of travel (pedestrian, bicycle, transit and auto).

**Table 1 Multimodal Performance Measure Matrix**

Performance Measure	Pedestrian	Bicycle	Transit	Vehicular System
<b>Demand</b>	San Diego Pedestrian Priority Model, Census Data, and Peak Period Pedestrian Counts	San Diego Bicycle Demand Model, Census Data, Peak Period Bicycle Counts	Boardings and Alightings Data from MTS and Census Data	Census Data, Auto Related Counts, On-Street Parking Occupancy
<b>Safety</b>	5-years of Pedestrian Collision Records (2018 - 2022)	5-years of Bicycle Collision Records (2018 - 2022)	5-years of Pedestrian and Bicycle Collisions Records near Transit Stations/Stops (2018 - 2022)	5-years of Vehicle Collision Records (2018 - 2022)
<b>Quality</b>	Pedestrian Environment Quality Evaluation (PEQE)	Bicycle Level of Traffic Stress (LTS)	Station Quality – Presence of Amenities, Service Quality – Transit Speeds	Roadway Segment and Intersection Level of Service, Travel Speed to Posted Speed Ratios
<b>Connectivity</b>	Sidewalk Inventory	Bicycle Facilities	Transit Routes and Stops	Roadway Characteristics and Functional Classifications

# **Pedestrian**

## **Pedestrian Demand**

The Pedestrian Priority Model (PPM) was used to document relative pedestrian demands across the study area. The model consists of three submodels – trip attractors, generators, and detractors – reflecting high pedestrian propensity land uses and population concentrations, along with factors indicating potential pedestrian barriers or safety issues. The high pedestrian demand areas identified through the Pedestrian Priority Model evaluation were used to define the Pedestrian Study Area which then becomes the focus of quality and connectivity assessments. Thresholds for high demand/need across the community were established relative to the community itself and not relative to the City as a whole.

### **Pedestrian Attractors**

Specific pedestrian attractor features used in this portion of the model include the following:

- Pedestrian Intensive International Border
- Major Multi-Modal Transit Center (> 10,000 boardings and alightings per day)
- Major Transit Stops (1,000-10,000 boardings and alightings per day)
- Transit Stops (100-1,000 boardings and alightings per day)
- Elementary Schools (Including Private)
- Middle Schools
- Universities and Colleges
- Neighborhood Civic Facilities (Libraries, Post Office & Religious Facilities)
- Neighborhood and Community Retail
- Pedestrian Intensive Beaches
- Parks & Recreation (excludes non-useable open space)
- High Schools

### **Pedestrian Generators**

Specific pedestrian generator features used in this portion of the model include the following:

- Census Mobility: People who walk to work
- Population Density (People per acre)
- Employment Density (Employees per acre)
- Age Density: Senior Citizens per acre (65+)
- Household Income (Affects Transportation)
- Age Density: Children per acre (under 16)
- Disability Density: People with disabilities
- Existing Mixed Land Use Adjacencies
- Proposed Mixed Use (As shown in adopted Community Plan)

### **Pedestrian Detractors**

Specific pedestrian detractor features used in this portion of the model include the following:

- Pedestrian / Vehicular Collisions
- Street Lighting
- Slope

- ADT (Average Daily Trips)
- Speed Limits
- Railroads and Freeways

### **Pedestrian Safety (Informational, Analyzed for Existing Conditions only)**

Historic vehicular-pedestrian collision data was obtained from the Transportation Injury Mapping System (TIMS), an open data service provided by Safe Transportation Research and Education Center at University of California, Berkeley for the period from 2018 to 2022. This data was mapped to display pedestrian-involved collision locations in the study area. Additional focus will be placed on these locations when considering pedestrian-related improvements. Collision causes were tabulated to further understand pedestrian safety and trends.

### **Pedestrian Environment Quality Evaluation (PEQE)**

The quality of all pedestrian facilities (roadway segments, intersections and mid-block crossings) within the study area were evaluated using the Pedestrian Environment Quality Evaluation (PEQE) tool under existing conditions. **Table 2** outlines the evaluation scale. The quality of the pedestrian environment quality is categorized as High, Medium or Low, based upon the following scoring system:

<i>High</i>	> 6 points
<i>Medium</i>	= 4 – 6 points
<i>Low</i>	< 4 points

The PEQE analysis results (score and rating) are presented in tabular and mapped formats for each individual pedestrian facility within the Pedestrian Study Area, including currently designated mobility element roadways (both sides of the road), study intersections, and mid-block crossings.

**Table 2 Pedestrian Environment Quality Ranking System**

Facility Type	Measure	Description/Feature	Scoring
<b>Segment between two intersections</b>	1. Horizontal Buffer	Between the edge of auto travel way and the edge of clear pedestrian zone	0 point: < 6 feet 1 point: 6 - 14 feet 2 points: > 14 feet or vertical buffer
	2. Lighting		0 point: below standard/requirement 1 point: meet standard/requirement 2 points: exceed standard/requirement
	3. Clear Pedestrian Zone	5' minimum	0 point: has obstructions 2 points: no obstruction
	4. Posted Speed Limit		0 point: > 40 mph 1 point: 30 - 40 mph 2 points: < 30 mph
<b>Maximum</b>			<b>8 points</b>
<b>Intersection by Leg</b>	1. Physical Feature	<ul style="list-style-type: none"> <li>Enhanced/High Visibility Crosswalk</li> <li>Raised Crosswalk/Speed Table</li> <li>Advanced Stop Bar</li> <li>Bulb out/Curb Extension</li> </ul>	0 point: < 1 feature per ped crossing 1 point: 1 – 2 features per ped crossing 2 points: > 2 features per ped crossing
	2. Operational Feature	<ul style="list-style-type: none"> <li>Pedestrian Countdown Signal</li> <li>Pedestrian Lead Interval</li> <li>No-Turn On Red Sign/Signal</li> <li>Additional Pedestrian Signage</li> </ul>	0 point: < 1 feature per ped crossing 1 point: 1 – 2 features per ped crossing 2 points: > 2 features per ped crossing
	3. ADA Curb Ramp		0 point: no ramps and no truncated domes 1 point: ramps only, no truncated domes 2 points: meet standard/requirement
	4. Traffic Control		0 point: no control 1 point: side stop sign controlled/permissive-left signal 2 points: all-way stop controlled/signal protected/roundabout/traffic circle
<b>Maximum</b>			<b>8 points</b>
<b>Mid-block Crossing</b>	1. Visibility		0 point: w/o high visibility crosswalk 2 points: with high visibility crosswalk
	2. Crossing Distance		0 point: no treatment 2 points: with bulb out or median pedestrian refuge
	3. ADA		0 point: no ramps and no truncated domes 1 point: ramps only, no truncated domes 2 points: meet standard/requirement
	4. Traffic Control		0 point: no control 1 point: flashing beacon (In-pavement, RRFB, etc.) 2 points: signal/pedestrian hybrid beacon (HAWK)
<b>Maximum</b>			<b>8 points</b>

## Pedestrian Network Connectivity

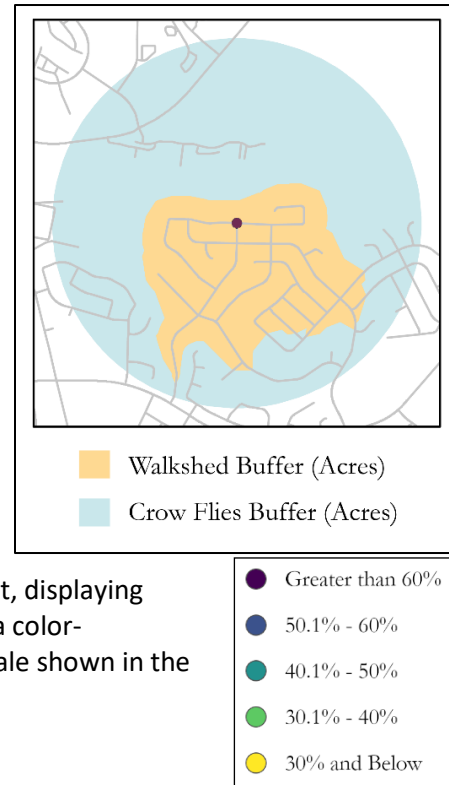
Pedestrian network connectivity was assessed using a two-step process: 1) develop the pedestrian network; and 2) perform a pedestrian travelshed analysis for the network. A description of these steps is provided below.

### Developing the Pedestrian Network

The SANDAG “Roads\_All” shapefile is the base network for the pedestrian travelshed analysis. However, since the Roads\_All shapefile does not include all pedestrian connections – such as trolley stations where people accessing stations may traverse large parking lots, universities, parks, shopping centers or other large institutions – they were manually added to the shapefile to reflect the actual pedestrian network within the study area, prior to conducting the travelshed analysis. In addition, all roadway segments in the Roads\_All shapefile that do not allow pedestrians are removed from the analysis, including freeway segments and freeway ramps.

### Travelshed Analysis

The pedestrian travelshed analysis assesses the level of connectivity provided at each study intersection within the study area. The travelshed analysis requires first creating a 0.5-mile pedestrian network buffer at each study intersection. That area is then compared to the area of a 0.5-mile as-the-crow-flies buffer (~503 acres) to develop a Pedestrian Connectivity Ratio for each intersection. The higher the Pedestrian Connectivity Ratio, the better the overall connectivity is at the intersection.



The Pedestrian Connectivity Ratio is presented in a mapped format, displaying results for each intersection. Each intersection is represented by a color-symbolized dot, with the color reflecting the Connectivity Ratio scale shown in the legend to the right<sup>1</sup>.

## Bicycle

### Bicycle Demand

The Bicycle Priority Model (BPM) was used to document relative bicycling demands throughout the study area. The BPM consists of a demand and detractor submodels. The demand submodel assesses two forms of cycling demand: inter-community – long trips, typically occurring on higher classification mobility element roads, and intra-community – shorter, utility-driven trips which may occur on a variety of streets. The detractor submodel considers barriers to bicycling comfort and safety, such as posted speed limits, traffic volumes and collisions. The submodels are combined to generate a priority point score for every roadway segment in the community.

<sup>1</sup> 65% is typically the highest connectivity ratio that can be achieved in even the most ideal communities (i.e. urban downtown settings with tight street grid networks). Therefore, any community with a connectivity ratio over 50% should be considered ideal.

## Bicycle Safety (Informational, Analyzed for Existing Conditions only)

Historic vehicular-bicycle collision data was obtained from TIMS for the period from 2018 to 2022. This data was mapped to display bicycle-involved collision locations in the study area. Additional focus will be placed on these locations when considering bicycle-related improvements. Collision causes were tabulated to further understand bicycle safety and trends.

## Bicycle Facility Quality

The Bicycle Level of Traffic Stress (LTS) tool, as documented in the Mineta Transportation Institute Report entitled “Low Stress Bicycling and Network Connectivity”, was utilized to assess the cycling environment quality (Mekuria et al., 2012). All roadways in the study area were assessed using the LTS tool. Results were tabulated and graphically displayed on a map for every roadway segment.

LTS scoring criteria for each of the elements is described in the following section.

### LTS Scoring Criteria for Roadway Segments

As shown in **Tables 3 through 5**, speed and roadway width (or number of travel lanes) are major factors considered in the LTS score. Bike lane width and the frequency of bike lane obstructions are also considered for developing LTS scores along roadways with bike lanes. Separate scoring methods are used for roadway segments with and without bike lanes. Table 3 shows the LTS segment criteria for cyclists traveling along roadways without a bike lane in mixed traffic. Table 4 shows the LTS segment criteria for cyclists traveling along roadways with bike lanes and an adjacent parking lane. Table 5 shows the LTS segment criteria for cyclists traveling along roadways with bike lanes and without adjacent parking lanes.

**Table 3: LTS Criteria for Segment – Mixed Traffic, No Bike Lane**

		Street Width		
		2-3 Lanes	4-5 Lanes	6+ Lanes
Speed Limit	≤25 mph	LTS 1 <sup>a</sup> or 2 <sup>a</sup>	LTS 3	LTS 4
	30 mph	LTS 2 <sup>a</sup> or 3 <sup>a</sup>	LTS 4	LTS 4
	≥35 mph	LTS 4	LTS 4	LTS 4

Source: Mekuria et al. (2012)

Note:

<sup>a</sup> Use lower value for streets without marked centerlines or classified as residential and with fewer than 3 lanes; use higher value otherwise.



**Table 4: LTS Criteria for Segment – Bike Lane with Adjacent Parking Lane**

Level of Stress (LTS)	LTS ≥ 1	LTS ≥ 2	LTS ≥ 3	LTS ≥ 4
Street width (through lanes per direction)	1	(no effect)	2 or more	(no effect)
Sum of bike lane and parking lane width (includes marked buffer and paved gutter)	15 ft. or more	14 or 14.5 ft <sup>a</sup>	13.5 ft. or less	(no effect)
Speed limit or prevailing speed	25 mph or less	30 mph	35 mph	40 mph or more
Bike lane blockage (typically applies in commercial areas)	Rare	(no effect)	Frequent	(no effect)

Source: Mekuria et al. (2012)

Note:

(no effect) = factor does not trigger an increase to the level of traffic stress.

<sup>a</sup> If speed limit < 25 mph or Class = residential, then any width is acceptable for LTS 2.

**Table 5: LTS Criteria for Segment – Bike Lane without Adjacent Parking Lane**

Criteria	LTS ≥ 1	LTS ≥ 2	LTS ≥ 3	LTS ≥ 4
Street width (through lanes per direction)	1	2, if directions are separated by a raised median	More than 2, or 2 without a separating median	(no effect)
Bike lane width (includes marked buffer and paved gutter)	6 ft. or more	5.5 ft. or less	(no effect)	(no effect)
Speed limit or prevailing speed	30 mph or less	(no effect)	35 mph	40 mph or more
Bike lane blockage (typically applies in commercial areas)	Rare	(no effect)	Frequent	(no effect)

Source: Mekuria et al. (2012)

Note:

(no effect) = factor does not trigger an increase to the level of traffic stress.

Table 5 for example would be interpreted as follows, using the weakest link principle: if a roadway segment has one travel lane in each direction and a 6-foot bike lane (LTS 1), but also has a speed limit of 40 mph or more (LTS 4), then the prevailing level of traffic stress score for the segment is LTS 4, the weakest link.

## Bicycle Network Connectivity

### Bicycle Connectivity Analysis – Bicycle Ratio

A bicycle travelshed analysis was performed to assess the level of connectivity provided at each intersection within the study area. A Bicycle Connectivity Ratio was calculated by comparing the area of a 1.0-mile bicycle network buffer (using all bikeable roadways plus bike paths) at each intersection to the area of a 1.0-mile as-the-crow-flies buffer (or 2,010.6 acres). A higher Connectivity Ratio indicates better overall bicycle connectivity from the individual intersection. The Bicycle Connectivity Ratio

results for each intersection within the study area are reported for existing conditions and displayed in a mapped format.

**Bicycle Priority Model - Demand**

This approach integrates demand into a composite evaluation metric. This evaluation process includes the following:

Step 1: Identifying Bicycle Land Uses

**Table 3** presents land use types identified as bicycle trip generators and attractors, as well as land uses that should not be considered in this evaluation. These land uses are consistent with the BDM’s Intra-Community Bicycle Demand submodel, unless noted otherwise.

**Table 3 Bicycle Land Use Categories**

Generators	Attractors	Not Included as Bicycle Land Uses
<ul style="list-style-type: none"> <li>Residential Land Uses<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>Retail</li> <li>Office<sup>2</sup></li> <li>Class I Bike Path Access Points</li> <li>Transit Stations</li> <li>Parks/Recreational Uses/Beaches</li> <li>Schools/College/Universities</li> <li>Neighborhood Civic Uses</li> <li>Inter-community Access Points<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Retail Catering to Automobiles/Automobile Services (car dealers, service stations, etc.)</li> <li>Passive or Low-Intensity Recreation (Golf Courses, etc.)/Open Space/Preserves</li> <li>Communications/Utilities Infrastructure</li> <li>Industrial/Warehousing/Junkyards/Landfills</li> <li>Agricultural</li> <li>Police/Fire Stations</li> <li>Military Bases</li> </ul>

Notes:

1. The Intra-Community Bicycle Demand submodel includes population densities by various types, such as youth, bicycle commuters, and zero-vehicle households. This input has been simplified as “residential land use” for the purposes of the connectivity assessment since having all inputs by TAZs will facilitate GIS analyses.
2. Office land uses were not included in the PPM or the BDM, but were deemed as possibly important at the community level.
3. Inter-community Access Points were not included in the Intra-Community Bicycle Demand submodel since that facet of travel was modeled via the Inter-Community Bicycle Demand submodel. These connection points just outside the community were deemed as important attractions for this community-level connectivity assessment.

**Transit**

**Transit Demand**

Transit demand was evaluated for all stations/stops within the study area by examining ridership data obtained from MTS and by researching commute mode share as reported in recent US Census Bureau data.

**Safety Near a Transit Stop/Station (Informational, Analyzed for Existing Conditions only)**

Historic collision data within 500 feet of a transit stop or station was obtained from TIMS for the period from 2018 to 2022. This data was mapped to display collision locations in the study area. Additional focus will be placed on these locations when considering improvements near transit stops or stations.

## Transit Quality

### Station Quality – Presence of Amenities

Each transit station/stop was reviewed for the presence of the following amenities:

- Shelters
- Benches
- Trash Receptacles
- Station Signs
- Maps/Wayfinding
- Lighting
- ADA compliancy

The San Diego MTS designates minimum amenity standards for transit stops based on the average number of daily boardings that occur at each stop per the *MTS Designing for Transit* manual (2018).

**Table 4** outlines the standard amenities that should be provided at transit stations/stops based on the projected daily passenger boardings (across all routes), according to MTS.

Table 4 Transit Amenity Standards by Ridership Levels

Amenity	Daily Passenger Boardings by Stop/Station				
	< 50	50 - 100	101 - 200	201 – 500	> 500
Sign and Pole	✓	✓	✓	✓	○
Built-in Sign	-	-	-	○	✓
Expanded Sidewalk	○	○	✓	✓	✓
Accessible	✓	✓	✓	✓	✓
Seating	○	✓	✓	✓	✓
Passenger Shelter	○	○	✓	✓	✓
Route Designations	✓	✓	✓	✓	✓
Schedule Display	○	○	○	✓	✓
Route Map	○	○	○	✓	✓
System Map	-	-	○	○	✓
Trash/Recycling	○	○	○	✓	✓
Real Time Digital Display	-	-	○	○	○
Bus Pads (Street)*	*	*	*	*	✓
Red Curbs	✓	✓	✓	✓	✓

Source: Designing for Transit, MTS (2018)

Notes:

✓ Standard feature

○ Optional feature

\* Required for stops with four or more buses per hour. Bus pads (street) are a specification of the jurisdiction that controls the right-of-way.

- Not applicable

Amenities at all stations/stops in the study area are reported in a table, indicating station ridership levels and whether station amenities are sufficient.

### Transit Service Quality – Transit Speeds

On-time bus performance can be directly affected by vehicular traffic congestion along roadways serving bus routes. A roadway arterial speed analysis was used to identify locations where on-time performance is currently, or may be impacted under future conditions, due to vehicular traffic congestion. To identify areas where roadway congestions affects transit on-time performance, an HCM arterial speed analysis was performed for all bus route serving roadways.

## **Vehicular System**

### **Vehicular Demand**

#### ***Ground Truth Traffic Counts***

Ground truth roadway segment counts were collected using tubes during a typical weekday over a 24-hour period. Intersection turning movement counts were collected using video counters to capture the total number of vehicles entering and exiting an intersection by movement (e.g., turning, through). These counts were also collected during a typical weekday during the morning peak period (7:00 AM to 9:00 AM) and evening peak period (4:00 PM to 6:00 PM). Due to rainy weather conditions, street-sweeping schedules, and ongoing construction, existing traffic counts were staggered over several weeks. All existing traffic counts were conducted between March and April 2024, by Counts Unlimited, Inc. and Elite Traffic Dynamics, LLC.

#### ***Historical Traffic Counts***

Historical traffic counts were obtained from City staff and traffic studies conducted within the study area, including the following:

- Historic Data from City, ranging from 2015-2023
- University Avenue Complete Street, April 2018
- University Bikeway, May 2020
- 2281 Fairmount Marijuana Outlet, July 2018
- 4337 Home Avenue Marijuana Outlet, March 2019
- Salvation Army Kroc Center TIS, June 2018
- University Manor, May 2018

#### ***Replica-Sourced Traffic Counts***

To ensure the accuracy and reliability of the Replica-sourced data, these counts were cross-referenced and balanced against nearby existing or historical traffic counts. This validation process included an extensive application of engineering judgement and a comprehensive understanding of the local traffic patterns and conditions.

### **Vehicular Safety (Informational, Analyzed for Existing Conditions only)**

Historic vehicular collision data was obtained from TIMS for the period from 2018 to 2022. This data was mapped to display vehicular collision locations in the study area. Additional focus will be placed on these locations when considering vehicle-related improvements. Collision causes were tabulated to further understand trends in these occurrences.

## Vehicular System Operations

Analysis of the vehicular systems – roadway segment, travel time/speed, and intersection analyses – were prepared for this study based on local knowledge, previous findings, and discussions with City staff. The vehicular analyses provide an evaluation of vehicular operations of roadway segments and intersections. A description of the methodologies employed to evaluate vehicular travel is outlined throughout this section. Level of Service (LOS) is a quantitative measure representing the quality of service from the driver’s perspective. LOS A represents primarily free-flow conditions whereas LOS F represent low speed, typically 30% or less than the base free-flow speed. **Table 5** describes generalized definitions of auto LOS A through F.

**Table 5 Vehicular Level of Service Definitions**

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections have a volume-to-capacity ratio greater than 1.0.

*Source: Highway Capacity Manual 6th Edition, Transportation Research Board (2016)*

## Peak Hour Intersection Level of Service Standards and Thresholds

This section presents the methodologies used to perform peak hour intersection capacity analyses at the signalized and unsignalized intersections within the study area. The following assumptions were utilized in conducting all intersection LOS analyses:

- **Pedestrian Calls per Hour:** Obtained from existing pedestrian counts, where available.
- **Heavy Vehicle Factor:** HCM standard 3% heavy vehicle factor was utilized on all intersection movements.
- **Peak Hour Factor:** Obtained from existing peak hour counts, where available. Assumed 0.92 for all approaches at locations where peak hour factor data was unavailable.
- **Signal Timing:** Obtained from existing signal timing plans (as of March 2024)

## Signalized Intersection Analysis

The analysis of signalized intersections utilized the operational analysis procedure as outlined in the Highway Capacity Manual (HCM) 6th Edition signalized (Chapter 19) intersection analysis methodology. This method defines LOS in terms of delay, or more specifically, average stopped delay per vehicle. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption and lost travel time. This technique uses 1,900 vehicles per hour per lane (VPHPL) as the maximum saturation volume of an intersection. This saturation volume is adjusted to account for lane width, on-street parking, pedestrians, traffic composition (i.e., percentage trucks) and shared lane movements (i.e., through and right-turn movements originating from the same lane). The LOS criteria used for the analysis of signalized intersections are described in **Table 6**, identifying the thresholds of control delays and the associated LOS. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd.

**Table 6 Signalized Intersection Level of Service HCM Operational Analysis Method**

Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
≤10.0	<i>LOS A</i> occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	<i>LOS B</i> occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with <i>LOS A</i> .
20.1 – 35.0	<i>LOS C</i> occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	<i>LOS D</i> occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	<i>LOS E</i> occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	<i>LOS F</i> occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

*Source: Highway Capacity Manual, Transportation Research Board (2016)*

## Unsignalized Intersection Analysis

Unsignalized intersections were analyzed utilizing the HCM 6th Edition intersection analysis methodologies for two-way stop-controlled (Chapter 20), all-way stop-controlled (Chapter 21), and roundabout (Chapter 22) intersections. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd. The LOS is determined as follows:

- *All-way stop-controlled intersections* – Reported for the entire intersection delay as an averaged value.
- *Side-street stop-controlled intersections* – Reported for the movement with the worst delay.
- *Roundabout* – Reported for the worst-case approach.

**Roadway Arterial Travel Time/Traffic Speed:**

Travel time and traffic speed surveys were conducted during the morning, mid-day, and evening peak hours of a typical weekday for the following segments:

- El Cajon Boulevard
- Orange Avenue
- University Avenue

Travel time and traffic speed was measured through GPS while field staff drove through each corridor following the speeds and behaviors of other drivers. The purpose of the travel time/traffic speed survey is to provide a baseline to compare with and without project conditions. Travel time/traffic speeds provide a more accurate representation of traffic conditions to the general public. The general public typically associates project effects on congestion or traffic to how long it takes to get from an origin to a destination.

## Appendix B - Literature Review



## **Mid-City Communities Plan Update Mobility Existing Conditions Report Literature Review**

### **Introduction**

Previously adopted planning studies and documents spanning the Mid-City communities were reviewed for transportation-related recommendations, issues, and themes. Reviewed documents include:

- City of San Diego General Plan 2024 (Blueprint SD) (2024)
- CIP Investments (project list) (2024)
- San Diego's City Heights Initiative (2022)
- City of San Diego Climate Action Plan (2022)
- 2021 Regional Plan (2021)
- BLVD 2020 Plan Realized (2020)
- El Cajon Boulevard Planning Study (2017)
- SR 15 Mid-City Centerline Transit Stations Fact Sheet (2015)
- Pedestrian Master Plan Volume 1 and 2A – Urban Core Communities (2015)
- Mid-City Public Facilities Financing Plan Fiscal Year 2014 (2014)
- City Heights Urban Greening Plan (2014)
- Mid-City Rapid Bus Project (2014)
- San Diego Bicycle Master Plan (2013)
- SR-15 Mid-City Station Area Planning Study Mobility Analysis Final Report (2013)
- Pedestrian Master Plan Volume 2B – Phase 4 Kensington/Talmadge Pedestrian Plan (2013)
- Safe for All 2011 Street Design Benchmark Study for the SD Region (2011)
- Chollas Triangle Master Plan (2011)
- Riding to 2050 San Diego Regional Bike Plan (2010)
- Azalea Park-Hollywood Park Revitalization Action Plan (2002)
- Chollas Creek Enhancement Plan (2002)
- Euclid Avenue Revitalization Action Program (2000)
- 1998 Mid-City Communities Plan (1998)
- The Mountain View District: A Re-building plan for Normal Heights (1985)
- North Park Mid-City Regional Bike Corridors Project (on-going)

**Table 1** summarizes the transportation infrastructure recommendations identified in the literature review documents. The table is followed by descriptions of each document and key excerpts. This literature will be used to inform issues and needs and the development of the Mid-City Community Plan Update mobility recommendations.

**Table 1: Planned Infrastructure Improvements**

<b>Road</b>	<b>Cross Street or Extent</b>	<b>Improvement Type</b>	<b>Source Document</b>	<b>Notes</b>
Chollas Creek Oak Park Trail	Federal Blvd to 54th St	Class I multi use path. These enhancements will include the construction of two bridges, informative kiosks to enrich the visitor experience, and strategically placed directional signs for ease of navigation.	CIP Investments Project List (2024)	This trail will extend from Sunshine Bernardini Park on the southwest side of the project following Chollas Creek up to the intersection of Chollas Parkway and 54th St on the northeast side.
Fairmount Avenue bridge	over Aldine Drive	Replace the existing left (southbound) Fairmount Avenue bridge over Aldine Drive with a single-span 120-foot pre-cast girder bridge to include two 12-foot lanes, an 8-foot outer shoulder with Class II bike lane, a 5-foot inner shoulder, and a barrier-separated 6-foot sidewalk that would provide pedestrian connections between Fairmount Avenue and Aldine Drive.	CIP Investments Project List (2024)	
Madison Ave	51st St	Sidewalk and roadway upgrades	CIP Investments Project List (2024)	Install pop-outs at Madison Avenue & 51st St (including ADA curb ramps, sidewalk, curb and gutter, cross gutter, signing and striping, and relocation of signs).
<i>Various recommendations with unrelated geographies</i>		Upgrade curb ramps and remove signal poles off medians, install pedestrian countdown timers, upgrade vehicle heads, and install EVPE.	CIP Investments Project List (2024)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
<i>Various recommendations with unrelated geographies</i>		N/A: streetlights at various locations	CIP Investments Project List (2024)	This project proposed to install streetlights in various locations.
<i>Various recommendations with unrelated geographies</i>		The project will overlay approximately 4.4 miles of existing roadway with asphalt concrete (AC) pavement; replace existing curb ramps with Americans with Disabilities Act (ADA) compliant curb ramps, cross gutters, and sidewalks; perform subgrade repairs; replace traffic loops, replace road humps; replace bus stop slabs; replace alley aprons; and restripe roadways	CIP Investments Project List (2024)	
Wightman St	Shiloh Rd to 54th St	Construction of new sidewalk	CIP Investments Project List (2024)	
Appleton St	Genesee Ave	Upgrade traffic signals	CIP Investments Project List (2024)	
Friars Rd	Rancho Mission Rd	Upgrade traffic signals	CIP Investments Project List (2024)	
University Ave	Swift Ave	Upgrade traffic signals	CIP Investments Project List (2024)	
College Avenue	Meridian Ave to Judy McCarty Way	Construction of new sidewalk	CIP Investments Project List (2024)	
Del Monte Ave	Bacon St to Cable St	Resurface approximately 5.03 miles of existing roadways by installing new AC pavement, ADA compliant curb ramps, sidewalk panels, curb and gutter, pedestrian push buttons and posts, pedestrian barricades, protective railings, and replacing inlet markers, roadway subgrade material for base repairs, traffic striping, and vehicular detector loops.	CIP Investments Project List (2024)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
Streamview Dr	54th St to Michael St; Gayle St to College Ave	Installation of roundabouts, new raised median, new sidewalk including curb and gutter, Class II bike lanes, and traffic circles	CIP Investments Project List (2024)	
SR-94	Euclid Avenue	Increase the capacity of the Eastbound SR-94 off-ramp and the Westbound SR-94 on-ramp. Add ADA compliant curb ramps at these locations and provide a Class II bike facility across Euclid between the on and off ramps.	CIP Investments Project List (2024)	
Jamacha Rd	Cardiff St	Installation of sidewalks, missing pedestrian curb ramps, curb and gutters, driveway aprons, retaining curb/or retaining wall and AC pavement at the intersections.	CIP Investments Project List (2024)	
College Ave	Judy McCarty Way along Livingston St to Aragon Dr	Installation of sidewalks, missing pedestrian curb ramps, curb and gutters, driveway aprons, retaining curb/or retaining wall and AC pavement at the intersections.	CIP Investments Project List (2024)	
College Ave	Meridian Ave	Installation of sidewalks, missing pedestrian curb ramps, curb and gutters, driveway aprons, retaining curb/or retaining wall and AC pavement at the intersections.	CIP Investments Project List (2024)	
El Cajon Blvd	Highland Ave to Chamoune Ave	Constructing raised medians, curb extensions, curb ramps, curb and gutter, sidewalk, bus pad, loop detectors, continental crosswalks, striping, and pavement markings, temporary traffic control	CIP Investments Project List (2024)	
58th St	University Ave	Provision of traffic signal modifications and upgrades, addressing accessibility	CIP Investments Project List (2024)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
Aragon Drive	University Ave	Provision of traffic signal modifications and upgrades, addressing accessibility	CIP Investments Project List (2024)	
College Ave	Judy McCarty Way	Provision of traffic signal modifications and upgrades, addressing accessibility	CIP Investments Project List (2024)	
Central Ave	Thorn St to the cul-de-sac of Redwood St	Improve pedestrian access. It will include, but not limited to; installing sidewalks, curb and gutter, curb ramps, driveway aprons, retaining curbs, retaining walls, two streetlights (underground services), and relocate utilities to allow citizens access to City public right-of-way, as necessary.	CIP Investments Project List (2024)	
El Cajon Blvd	Highland Ave and Chamoune Ave	N/A: streetlights at various locations	CIP Investments Project List (2024)	
El Cajon Blvd	Altadena Av	HAWK Beacon	CIP Investments Project List (2024)	
El Cajon Blvd	50th St	HAWK Beacon	CIP Investments Project List (2024)	
El Cajon Blvd	58th St	HAWK Beacon	CIP Investments Project List (2024)	
Estrella St	El Cajon Blvd	Curb ramps	CIP Investments Project List (2024)	
Orange Ave	Central Ave to 43rd St	Curb ramps	CIP Investments Project List (2024)	
Madison Ave	51st St	Pop-outs (including ADA curb ramps, sidewalk, curb and gutter, cross gutter, signing and striping, and relocation of signs).	CIP Investments Project List (2024)	
University Ave	Fairmount Ave and Euclid Ave	Three roundabouts and medians with enhanced pedestrian crossings. This will also include new pavement, wider sidewalks, and trees	CIP Investments Project List (2024)	
I-805		Interregional Corridor Managed Lanes (South Bay to Sorrento)	2021 Regional Plan (2021)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
30th St	Adams Avenue to 1-5	Next Gen Rapid (South Bay to Sorrento)	2021 Regional Plan (2021)	
<i>Not on specific roads; crosses Chollas Creek Pkwy, I-15, I-805</i>		Purple Line Potential Alignment	2021 Regional Plan (2021)	Commuter Rail 582 TL02: the South Bay to Sorrento (SB2S) Comprehensive Multimodal Corridor Plan is completing a more detailed ridership analysis of the Purple Commuter Rail alignment (Rt. 582). the analysis is studying an alignment that would include stations in City Heights and at San Diego State University (west campus).
Howard Ave	Park Blvd to 32nd St/Boundary St	North Park/Mid-City Bikeways AT005 (on street network)	2021 Regional Plan (2021)	
Robinson Avenue	Park Blvd to Alabama St	North Park/Mid-City Bikeways: AT006 (on and off-street network)	2021 Regional Plan (2021)	
47th St	Logan Ave to Mission Gorge Rd	City Heights/Fairmount Corridor AT021 (on and off-street network)	2021 Regional Plan (2021)	
Chollas Pkwy	Harbor Dr to University Ave	Chollas Creek Bikeways: North Fork – Bayshore Bikeway to University Bikeway AT152 (on and off-street network)	2021 Regional Plan (2021)	
<i>Various: unnamed, San Pasqual St, unnamed, 47th, unnamed, etc.</i>	Birch St to Euclid Ave	Chollas Creek Bikeways: South Fork – Petway Park to Market Creek Plaza AT152 (on and off-street network)	2021 Regional Plan (2021)	
<i>Various: Cable St, W Point Loma Blvd, Rosecrans St, Pacific</i>	Cable St& Orchard Avenue (OB) to Spring St (La Mesa)	Rapid 10 Phase: La Mesa to Ocean Beach via Mid-City, Hillcrest, Central Mobility Hub (Full version of Rapid)	2021 Regional Plan (2021)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
Hwy, W Washington St, University Ave				
Central Ave	Adams Ave to Landis St	Central Avenue Bikeway (On-St& Off-Street)	2021 Regional Plan (2021)	
El Cajon Blvd	Highland Ave and Euclid Ave	Raised median with left-turn pockets, bulbouts	El Cajon Complete Blvd Planning Study (2017)	
El Cajon Blvd	Euclid Ave to 50th Street	Raised median with left-turn pockets; bulbouts, eastbound buffered bicycle lane along the uphill segment	El Cajon Complete Blvd Planning Study (2017)	
El Cajon Blvd	Highland Ave to 50th St	Raised cycle track, sidewalk (contingent on expanded ROW through redevelopment)	El Cajon Complete Blvd Planning Study (2017)	
36th Street	El Cajon Boulevard	Curb extensions, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Menlo Avenue	El Cajon Boulevard	Signal improvements, curb extensions, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
41st Street	University Avenue	Signal improvements, curb extensions, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Marlborough Avenue	University Avenue	Signal improvements, bus/ped curb extensions, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
42nd Street	University Avenue	Signal improvements, curb extensions, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
47th Street	University Avenue	Curb extensions, crosswalk improvements, bus/pedestrian curb extensions	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
University Avenue	I-15 NB ramps – Van Dyke Avenue	Curb extensions, median installation	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
University Avenue	40th Street – I-15 ramps	Curb extensions, access management, pedestrian crossing treatment	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
University Avenue	44th Street – Winona Avenue	Curb extensions, signal improvements, crosswalk improvements, lane width reductions, median enhancements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Fairmount Avenue	El Cajon Boulevard	Signal improvements, curb extensions, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Fairmount Avenue	University Avenue	Signal improvements, curb extensions, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
University Avenue	43rd Street	Curb extensions, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
40th Street	El Cajon Boulevard	Implement Mid-City Rapid Bus improvements, signal improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
43rd Street	El Cajon Boulevard	Implement Mid-City Rapid Bus improvements, signal improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Fairmount Avenue	Orange Avenue	Signal improvements, curb extensions, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Euclid Avenue	University Avenue	Signal improvements, curb extensions	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
35th Street	El Cajon Boulevard	Implement Mid-City Rapid Bus improvements, bus curb extensions, signal improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Euclid Avenue	El Cajon Boulevard	Signal improvements, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Wabash Avenue	University Avenue	Crosswalk improvements, signal improvements, median upgrade, signage enhancements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Swift Avenue	University Avenue	Signal improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights



Road	Cross Street or Extent	Improvement Type	Source Document	Notes
52nd Street	University Avenue	Signal improvements, curb extensions, crosswalk improvements, bus curb extensions	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Fairmount Avenue	Redwood Street/Poplar Street	Signal improvements, curb extensions, median upgrade, turn restrictions, crosswalk improvements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
Orange Avenue	40 <sup>th</sup> Street – Central Avenue	Curb extensions	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
University Avenue	Lincoln Avenue – 40th Street	Median installation, curb extensions	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
El Cajon Boulevard	Chamoune – Estrella Avenue	Curb extensions, median installation, landscaping enhancements	Pedestrian Master Plan Phase 1 – Volumes 1 & 2A (2015)	City Heights
35th Street	Adams Avenue	Curb extensions	Pedestrian Master Plan Phase 1 – Volume 2A – Normal Heights (2015)	Normal Heights
East Mountain View Drive	Adams Avenue	Curb extensions and improved crossings	Pedestrian Master Plan Phase 1 – Volume 2A – Normal Heights (2015)	Normal Heights
Adams Avenue	Hawley Boulevard to Wilson Avenue	Curb extensions and median installations	Pedestrian Master Plan Phase 1 – Volume 2A – Normal Heights (2015)	Normal Heights
Adams Avenue	Wilson Avenue to East Mountain View Drive	Curb extensions, improved crossings, and median installations	Pedestrian Master Plan Phase 1 – Volume 2A – Normal Heights (2015)	Normal Heights
Adams Avenue	West Mountain View Drive to Hawley Boulevard	Curb extensions and median installations	Pedestrian Master Plan Phase 1 – Volume 2A – Normal Heights (2015)	Normal Heights
Aldine Dr	Van Dyke Ave to Monroe Ave	Monroe/Aldine Drive Roadway Reconfiguration: Widen, Straighten, & Level Aldine Drive  Fairmount/Aldine Drive Off Ramp Expansion: Widen the Fairmount to Aldine Off-Ramp to 2 Lanes	Mid-City Public Facilities Financing Plan FY24 (2014)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
El Cajon Boulevard	70th Street	Widening and Relocating the Raised Center Median to provide a Separate Right-Turn Lane on the west and east Legs, Dual Left-Turn Lanes on the west leg; A single Left-Turn Lane on the east leg; Class III Bicycle Lanes	Mid-City Public Facilities Financing Plan FY24 (2014)	
Euclid Ave	El Cajon Boulevard to Chollas Creek	Design and Construction of Euclid Avenue Widening to a Three-Lane Collector from El Cajon Blvd to Chollas Creek, With Class III Bike Route. Euclid Avenue will be widened from 36' to 40'. Parking will be removed at intersections to provide Left Turn Pockets.	Mid-City Public Facilities Financing Plan FY24 (2014)	
Federal Blvd	Euclid Avenue	Design and Construction of an Additional Shared Right and Through Lane for southbound Euclid Ave (Phase I) and the restriping of eastbound Federal Blvd from single Through Lane to one Through and Shared Through and Right-Turn Lane (Phase II).	Mid-City Public Facilities Financing Plan FY24 (2014)	
Home Avenue	Fairmount Avenue to Euclid Avenue	Widening of Home Ave to a Four-Lane Collector Street from Fairmount Ave to Euclid Ave. Improvements include Curbs, Sidewalks, Asphalt Paving, Drainage Facilities and Street Lighting. The Improvements of Home Ave to a Four Lane Collector will Require Widening of the Corridor within the Limits Proposed	Mid-City Public Facilities Financing Plan FY24 (2014)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
I-805 Southbound on/Off Ramps	Home Ave	Construction of an Additional Left-Turn Lane for Westbound Home Ave traffic. Improvements include the Narrowing and Relocating of the Center Median and Modification of the Traffic Signal.	Mid-City Public Facilities Financing Plan FY24 (2014)	
Fairmount Avenue	Between El Cajon Blvd to 43rd St	Change Fairmount Ave to a Two-Lane, one-way street northbound between El Cajon Blvd and the Intersection of 43rd Street and Fairmount Ave	Mid-City Public Facilities Financing Plan FY24 (2014)	
Boundary Street	University Ave to North Park Way	Widening of Boundary Street to a modified 52-Foot Curb-to-Curb, Four-Lane Collector from University Ave to North Park Way; Includes a northbound Dedicated Left- and Right- Turn and one Through Lane.	Mid-City Public Facilities Financing Plan FY24 (2014)	
University Avenue	Euclid Ave	Construction of a Right-Turn Lane for eastbound University Ave traffic. It would also provide one Left-Turn Lane and one Right-Turn Lane for Northbound Traffic on Euclid Ave	Mid-City Public Facilities Financing Plan FY24 (2014)	
40th Street	Interstate 15	Construction and/or Widening of Bridges and Other Freeway Enhancements as Part of Stage II of Freeway Construction (Completed)	Mid-City Public Facilities Financing Plan FY24 (2014)	
Euclid Avenue	Home Ave to Thorn Street	Curb, Gutter, Sidewalk, Landscaping, Paving, and Traffic Calming Installations.	Mid-City Public Facilities Financing Plan FY24 (2014)	
Euclid Avenue	Home Avenue	Traffic Signal (Complete)	Mid-City Public Facilities Financing Plan FY24 (2014)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
60th Street	University Avenue	Traffic Signal (Complete)	Mid-City Public Facilities Financing Plan FY24 (2014)	
Poplar Street	Fairmount Ave; Tulip Street	Enhanced Crosswalks and Curb Extensions and Neighborhood Identification Signs	Mid-City Public Facilities Financing Plan FY24 (2014)	
54th Street Frontage Road/	Euclid Ave	Traffic Signal	Mid-City Public Facilities Financing Plan FY24 (2014)	
54th Street	Nutmeg	Traffic Signal	Mid-City Public Facilities Financing Plan FY24 (2014)	
Fairmount Ave	Maple Street	Traffic Signal	Mid-City Public Facilities Financing Plan FY24 (2014)	
Adams Ave	Kensington Dr	Traffic Signal	Mid-City Public Facilities Financing Plan FY24 (2014)	
Adams Ave	east Mountain View Drive	Traffic Signal	Mid-City Public Facilities Financing Plan FY24 (2014)	
University Ave	Estrella Ave	Traffic Signal	Mid-City Public Facilities Financing Plan FY24 (2014)	
Euclid Ave	Landis Street	Traffic Signal	Mid-City Public Facilities Financing Plan FY24 (2014)	
El Cajon Boulevard	33rd Street; 52nd Street; 56th Street; 63rd Street; Fairmount Ave; Winona Ave	Traffic Signal Modifications: Phasing and Timing Improvements	Mid-City Public Facilities Financing Plan FY24 (2014)	
University Ave	42nd Street; 58th Street; Aragon Drive; Fairmount Ave; Rolando Boulevard; Euclid Ave	Traffic Signal Modifications: Phasing and Timing Improvements	Mid-City Public Facilities Financing Plan FY24 (2014)	
College Ave	Billman Street/Streamview Drive; Grove Shopping Center Drive	Traffic Signal Modifications: Phasing and Timing Improvements	Mid-City Public Facilities Financing Plan FY24 (2014)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
Various Sites		Curb Ramps (Estimated 2,000 In Mid-City), Audible Signals, Installation of Sidewalks, and other projects that will remove barriers	Mid-City Public Facilities Financing Plan FY24 (2014)	
Euclid Ave	300 Feet North of Redwood Street to El Cajon Boulevard	Curb, Gutter, Sidewalk, Curb Ramps, Landscaping, Roadway Restoration, Striping, and Traffic Calming Installations. A Left Turn Traffic Signal may be needed at the intersection of El Cajon Blvd and Euclid Ave going north on Euclid and west on El Cajon Blvd	Mid-City Public Facilities Financing Plan FY24 (2014)	
South 38th Street	Dwight Street North to Terminus	Curb, Gutter, Driveways, Sidewalks, Pedestrian Ramps, Pavement, Drainage Facilities, Angled on-street Parking, etc.	Mid-City Public Facilities Financing Plan FY24 (2014)	
Chollas Parkway	Lea Street	Project would either reduce width of Chollas Parkway to a Two-Lane Collector Street between 54th Street and University Ave, or consider closing all or part of Chollas Parkway between 54th Street and University, possibly using Lea Street as the connection between 54th Street and Chollas Parkway east of Lea Street	Mid-City Public Facilities Financing Plan FY24 (2014)	
College Grove Drive	54th Street to College Grove Way	Reduce the width to a Three-Lane Collector Street (one lane In Each Direction with a Continuous Center Left-Turn Lane)	Mid-City Public Facilities Financing Plan FY24 (2014)	
El Cajon Blvd	<i>Project Extents Unlisted</i>	Replace Substandard Curbs & Asphalt-Surface Raised Medians with New Curbs and Color	Mid-City Public Facilities Financing Plan FY24 (2014)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
		Stamped Concrete; Add Landscaping and Irrigation; Add Community Area Signs within the Medians; Add New Traffic Signal at the Intersection of El Cajon Boulevard and Dayton Street. Add a Traffic Signal at Fairmount and Dwight.		
Orange Ave	39 <sup>th</sup> St	Enhanced Paved Crosswalks, New Pedestrian Signals, and New Sidewalk.	Mid-City Public Facilities Financing Plan FY24 (2014)	Location defined as the vicinity of Central Elementary School
Landis St	Chamoune Ave	School Crossing Signs, Enhancing Crosswalks, Curb Pop-Outs, Raised Medians, Street Lights, Sidewalks	Mid-City Public Facilities Financing Plan FY24 (2014)	Location defined as the vicinity of Rosa Parks Elementary School
Myrtle Ave	43 <sup>rd</sup> St	New Sidewalks, Intersection Bulb-Outs to decrease the street crossing distances, Road Humps, Pedestrian Ramps, and a new Traffic Signal	Mid-City Public Facilities Financing Plan FY24 (2014)	Location defined as the vicinity of Florence Griffith Joyner Elementary School
Various Sites	Euclid-Dwight to Isla Vista Sidewalks 50th/53rd & Meade Colina Park Sidewalks Altadena/52nd Colina Park Sidewalks Alder/Vista Sidewalks 4200 Block of Madison Sidewalks Intersection of Copeland Ave &	Reconstruction and Upgrading of Street Pavement, Sidewalks, Curbs, Gutters, and Storm Drains	Mid-City Public Facilities Financing Plan FY24 (2014)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
	Copeland Pl Sidewalks Van Dyke & Burnham Sidewalks			
University Ave	54th to 68th Street	Installation of Approximately 16,000 Feet of New Concrete Sidewalk and Other Roadway and Safety/Capacity Improvements on both sides of University Ave	Mid-City Public Facilities Financing Plan FY24 (2014)	
El Cajon Blvd	45 <sup>th</sup> St	Safety Upgrades, Traffic Circles, and Traffic Calming Devices such as Electronic Speed (V-Calm) Signs, Flashing Crosswalks, Road Humps, Curb Extensions, and Flashing Beacons throughout the community:  <ol style="list-style-type: none"> <li>1. 60th Street, Vale Way, Estelle Street.</li> <li>2. 59<sup>th</sup> Street, Vale Way, Adelaide Ave.</li> <li>3. Euclid &amp; Monroe</li> <li>4. 52nd &amp; Dawson</li> <li>5. Central &amp; 43rd</li> </ol>	Mid-City Public Facilities Financing Plan FY24 (2014)	Location defined as the vicinity of Hoover High School
		Streetlights  City Heights: <ul style="list-style-type: none"> <li>• 29 Street Lights, Both Sides of University, from 54th to 68th St</li> <li>• Streetlights In the Colina Del Sol Neighborhood</li> </ul>	Mid-City Public Facilities Financing Plan FY24 (2014)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
		Eastern Area: <ul style="list-style-type: none"> <li>All Needed Locations</li> </ul> Kensington/Talmadge: <ul style="list-style-type: none"> <li>Marlborough Ave</li> <li>Edgew Are Road</li> <li>Kensington Drive</li> <li>Terrace Dr/Central Ave</li> <li>Biona Dr/Biona Pl</li> <li>Vista Street</li> <li>41stst</li> <li>42nd St</li> <li>Copeland Ave</li> <li>El Cajon Blvd</li> </ul> Normal Heights: <ul style="list-style-type: none"> <li>All Needed Locations</li> </ul>		
El Cajon Blvd	Fairmount Ave	Provide a Right Turn Lane from El Cajon Blvd westbound to Fairmount Ave northbound. The Right Turn Lane would extend from Highland Ave to Fairmount Ave	Mid-City Public Facilities Financing Plan FY24 (2014)	
El Cajon Boulevard	I-805 to 54th Street	Streetscape Improvements including Sidewalk Replacement, Curb and Gutter Replacement and the Installation of Streetlights	Mid-City Public Facilities Financing Plan FY24 (2014)	
El Cajon Blvd	State Route 15 Freeway Corridor	Streetscape Enhancements were added to the Freeway Bridge Overpass where Decks were built for future Pedestrian Plaza Areas	Mid-City Public Facilities Financing Plan FY24 (2014)	
El Cajon Blvd	State Route 15 Freeway Corridor	Median & Sidewalk Enhancements to include Trees, Ground Cover, Automatic Irrigation and Enhanced Paving & Lighting	Mid-City Public Facilities Financing Plan FY24 (2014)	



Road	Cross Street or Extent	Improvement Type	Source Document	Notes
El Cajon Blvd	Copeland Ave	Traffic Signal	Mid-City Public Facilities Financing Plan FY24 (2014)	
University Ave	State Route 15 Freeway Corridor	Streetscape Enhancements were added to the freeway bridge overpass where Decks were built for future Pedestrian Plaza Areas	Mid-City Public Facilities Financing Plan FY24 (2014)	
Various Sites		Streetscape Improvements:  Euclid/Home Ave, Includes Parkway Trees, Pedestrian Lights, Enhanced Paving at Euclid/Home Ave, and Euclid Ave/54th St Intersections, and Gateway Monuments at Home Ave/Sr-94 and Euclid Ave/Sr-94. (S-6): 43rd & Fairmount Couplet & 47th St, Includes Parkway Trees, Pedestrian Lights, Enhanced Paving at 43rd St/Fairmount Ave (South), Poplar St/Fairmount Ave and Home Ave Intersections, and Gateway Monuments at 47th St and Sr-94. (S-7): 54th Street, Includes Parkway Trees Pedestrian Lights and Enhanced Paving at 54th and College Grove Drive Intersection	Mid-City Public Facilities Financing Plan FY24 (2014)	
43rd Street	Meade Ave to Ridgeview Drive,	Class II/III Bikeway of Approximately 3.5 Miles	Mid-City Public Facilities Financing Plan FY24 (2014)	
Poplar Street	Fairmount Ave to Home Ave	Class II/III Bikeway of Approximately 2.1 Miles	Mid-City Public Facilities Financing Plan FY24 (2014)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
Home Ave	Fairmount Ave to Federal Blvd	Class II/III Bikeway of Approximately 2 Miles	Mid-City Public Facilities Financing Plan FY24 (2014)	
Federal Blvd	Home Ave to Euclid Ave	Class II/III Bikeway of Approximately 2 Miles	Mid-City Public Facilities Financing Plan FY24 (2014)	
College Avenue	Navajo Road to Lemon Grove City Limits	Class II/III Bikeway of Approximately 4.5 Miles	Mid-City Public Facilities Financing Plan FY24 (2014)	
University Ave	54th Street to La Mesa City Limits	Class II/III Bikeway of Approximately 3 Miles	Mid-City Public Facilities Financing Plan FY24 (2014)	
54th Street/Euclid Ave	Trojan Ave to Market Street	Class II/III Bikeway of Approximately 3.25 Miles	Mid-City Public Facilities Financing Plan FY24 (2014)	
College Grove Drive	54th St. to College Ave	Class II/III Bikeway of Approximately 3 Miles	Mid-City Public Facilities Financing Plan FY24 (2014)	
Chollas Creek Bike Trail	Federal Blvd to Sunshine Fields	Bike Facility (Type Unclear)	Mid-City Public Facilities Financing Plan FY24 (2014)	
Aldine Drive/Monroe Ave	Adams Ave to Collwood Drive	Class II/III Bikeway of Approximately 2 Miles.	Mid-City Public Facilities Financing Plan FY24 (2014)	
Euclid Ave	Monroe Ave to Wightman Street	Class II/III Bikeway of Approximately 1.5 Miles	Mid-City Public Facilities Financing Plan FY24 (2014)	
Meade/Monroe	Fairmount to 44th, to Monroe to Merge with Aldine Drive	Bike Facility (Type Unclear)	Mid-City Public Facilities Financing Plan FY24 (2014)	
Adams Ave	Park Blvd to Van Dyke Ave	Class III Bikeway of Approximately 2.5 Miles	Mid-City Public Facilities Financing Plan FY24 (2014)	
35th Street	Adams Ave to Wightman Street	Class II/III Bikeway of Approximately 1 Mile.	Mid-City Public Facilities Financing Plan FY24 (2014)	
40th Street	Madison Ave to Wightman Street	Class II/III Bikeway of Approximately 1 Mile	Mid-City Public Facilities Financing Plan FY24 (2014)	
Mountain View Drive	Adams Avenue toward Road	Class II/III Bikeway of Approximately 0.5 Mile	Mid-City Public Facilities Financing Plan FY24 (2014)	
Madison Ave	Ward Road to 40th Street	Class II/III Bikeway of Approximately 0.5 Mile	Mid-City Public Facilities Financing Plan FY24 (2014)	
State Route 15	Landis Street to Adams Ave	Class I Bike Route on the eastside of State Route 15	Mid-City Public Facilities Financing Plan FY24 (2014)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
Polk Ave	Central Ave to 41st St (Children's Mall) and Clock tower	Pedestrian Corridor (also known as Central Neighborhood Park)	Mid-City Public Facilities Financing Plan FY24 (2014)	
San Diego River Trail	Normal Heights to Mission Valley	Design & Construct a trail from Normal Heights to Mission Valley	Mid-City Public Facilities Financing Plan FY24 (2014)	
Ash St/Federal Blvd	1-15 to 47th St	Class I: Multipurpose Path	City Heights Urban Greening Plan (2014)	
I-94 Onramp	Ash St and Home Ave	Class I: Multipurpose Path	City Heights Urban Greening Plan (2014)	
Chollas Pkwy	I-94 to 54th St	Class I: Multipurpose Path	City Heights Urban Greening Plan (2014)	
Home Ave/ Euclid Ave (N-S)	I-94 to El Cajon Blvd	Class III: Bike Route	City Heights Urban Greening Plan (2014)	
Euclid Ave (E-W)	Home Ave to Chollas Pkwy	Class III: Bike Route	City Heights Urban Greening Plan (2014)	
Gateway Dr/ Midvale Dr/ Ralene St/Tulip St/ Pepper Dr / Violet St / Poplar Dr	Home Ave to 44th	Class III: Bike Route	City Heights Urban Greening Plan (2014)	
43rd St	Thorn St to El Cajon Blvd	Class III: Bike Route	City Heights Urban Greening Plan (2014)	
39th St	Wightman to El Cajon Blvd	Class III: Bike Route	City Heights Urban Greening Plan (2014)	
Lincoln Ave	I-805 to 34th St	Class III: Bike Route	City Heights Urban Greening Plan (2014)	
54th Pl	54th St to Trojan Ave	Class III: Bike Route	City Heights Urban Greening Plan (2014)	
Federal Ave	47th St to 54th St	Class III: Bike Route	City Heights Urban Greening Plan (2014)	
Federal Ave	Home Ave to 47th St	Class II: Bike Lane	City Heights Urban Greening Plan (2014)	
47th St	I-94 to Federal Ave	Class II: Bike Lane	City Heights Urban Greening Plan (2014)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
Fairmount Ave	Home Ave to El Cajon Blvd	Class II: Bike Lane	City Heights Urban Greening Plan (2014)	
El Cajon Blvd	I-805 to 54th St	Class II: Bike Lane	City Heights Urban Greening Plan (2014)	
University Ave	I-805 to 54th St	Class II: Bike Lane	City Heights Urban Greening Plan (2014)	
35th St	University Ave to Polk	Class II: Bike Lane	City Heights Urban Greening Plan (2014)	
Wightman St	35th St to Fairmount Ave	Class II: Bike Lane	City Heights Urban Greening Plan (2014)	
54th St	Chollas Pkwy to El Cajon Blvd	Class II: Bike Lane	City Heights Urban Greening Plan (2014)	
Orange Ave	I-805 to 54th St	Bicycle Blvd	City Heights Urban Greening Plan (2014)	
Various Locations		Green streets designations including Commercial Focus Green Street, Transit Focus Green Street, and Pedestrian/Bicycle Focus Green Street are recommended throughout the City Heights neighborhood.	City Heights Urban Greening Plan (2014)	
I-15	Camino del Rio South to Landis St	Interstate 15 Bikeway (Class I)	Mid-City Rapid Bus Project (2014)	
54th St	Montezuma Rd to El Cajon Blvd	Upgrading the existing Class III bicycle facilities to Class II facilities	San Diego Bicycle Master Plan (2013)	
Collwood Blvd	Monroe Avenue to 54th St	Upgrading the existing Class III bicycle facilities to Class II facilities	San Diego Bicycle Master Plan (2013)	
El Cajon Blvd	43rd St Montezuma Rd	Class II bike facilities	San Diego Bicycle Master Plan (2013)	
El Cajon Blvd	Utah St 43rd St	Class II bike facilities	San Diego Bicycle Master Plan (2013)	
43rd Street	Meade Avenue to El Cajon Blvd	Class III: Bike Route	San Diego Bicycle Master Plan (2013)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
University Ave	Utah St to Fairmount Ave	Class II bike facilities	San Diego Bicycle Master Plan (2013)	
University Ave	Fairmount Ave to La Mesa City Limits	Class II bike facilities	San Diego Bicycle Master Plan (2013)	
Federal Ave	I-15 to Kelton Rd	Class I bike path	San Diego Bicycle Master Plan (2013)	
Meade Ave	Maryland St to Fairmount Ave	Class I bike path	San Diego Bicycle Master Plan (2013)	
I-15	I-805 to I-8	creation of a Complete Corridor: ML / Goods Movement	San Diego Bicycle Master Plan (2013)	
I-15	Escondido to Downtown San Diego via I-15 (DAR stations)	N/a: non-infrastructure	San Diego Bicycle Master Plan (2013)	Rapid 235
41st St	University Avenue	Northbound – provide a dedicated left-turn lane (90 ft)	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	
41st St	University Avenue	Westbound - narrow the left-turn pocket and provide one thru lane and one shared thru right turn lane	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	
Marlborough Ave	University Avenue	Northbound – provide a dedicated left-turn lane (90 feet).	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	
SR-15		NA: non-infrastructure	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	SR-15 BRT: Addition of Routes 610, 680 to existing routes 210 and 960
El Cajon Blvd		Conversion of BRT to LRT	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	El Cajon Blvd Trolley: Conversion of Mid-City Rapid to LRT between downtown and SR-15 with interim terminal at the Blvd Transit Plaza (Route 560) (phase 1); and from the transit plaza to SDSU (phase 2)

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
El Cajon Blvd	Transit Stops: 37th Street, 38th Street, Marlborough Avenue, and Copeland Avenue.	Improvements to stops include widened sidewalks, enhanced shelters and benches using a community design theme (as available), trash cans, variable message signs, and bus pads.	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	
SR-15		SR-15 Trolley: LRT service between San Ysidro Station and UTC area (Route 562)	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	
University Ave	Transit Stops: City Heights Transit Plaza, 35th St, Fairmount Avenue	N/a: non-infrastructure	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	Route 10 Rapid: This service will provide service levels similar to the Mid-City Rapid in connecting Mid-City with North Park, Hillcrest, Mission Hills, and the Pacific Highway corridor.
University Ave	Transit Stops: 37th Street, 39th Street, and Marlborough Ave	Widened sidewalks, bus pads, and variable message signs	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	
Mid-City Rapid (Route 15)	El Cajon Blvd; University Avenue	Freeway level stations	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	SR-15 BRT: This project will provide freeway level stations at El Cajon Blvd and University Avenue. the routes serving these stations will provide connections to regional destinations both north and south of Mid-City, greatly expanding the transit travel options for the Mid-City community. (precursor to trolley version)

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
El Cajon Blvd	SR-15 NB + SB Ramp intersection	Various pedestrian improvements: countdown pedestrian crossing heads, yield to ped signage, improve crossing definition, incorporate ADA curb and accessible pedestrian signal	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	
38th St	Orange Ave	Flashing warning signal actuated by pedestrian	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	
39th St	Orange Ave	New signal with additional crosswalk	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	
Wightman St	Swift Ave to Fairmount Ave	Class II: Bike Lane	SR-15 Mid-City Station Area Planning Study Mobility Analysis (2013)	
Adams Ave	Edgeware Rd	add ADA-compliant curb extensions on all four curbs	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
Adams Ave	Edgeware Rd	Evaluate feasibility of implementing highly reflective cross walk paint and in pavement flashers on east leg of intersection	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
Adams Ave	Malborough Dr	Add ADA-compliant curb extensions on all four curbs	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
Adams Ave	Kensington Dr	Add ADA-compliant curb extensions on all four curbs	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
Adams Ave	Kensington Dr	Evaluate feasibility of implementing highly reflective cross walk paint and in pavement flashers on west leg of intersection	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
El Cajon Blvd	Euclid Ave	Replace pedestrian heads with countdown timers	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
El Cajon Blvd	Euclid Ave	Add ADA-compliant curb extensions on NE and SW corners	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
El Cajon Blvd	Euclid Ave	Evaluate feasibility of installing a protected left turn phase on all approaches	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
El Cajon Blvd	50th St	Evaluate feasibility of eliminating westbound left turn at 50th to accommodate a pedestrian refuge with enhanced marked crosswalk on the east leg. Continue median to the west with a left turn pocket on the west leg	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
El Cajon Blvd	50th St	Add ADA-compliant curb extensions on all four curbs	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
El Cajon Blvd	Central Ave	Add ADA-compliant curb extensions on NE corner	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
El Cajon Blvd	Central Ave	Implement median island south of barrier wall; on the west side of St	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
El Cajon Blvd	Central Ave	Extend existing median to crosswalk	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
Fairmount Ave	Aldine Dr	Evaluate feasibility of enhancing crosswalk on Aldine Dr on-ramp with pedestrian signal	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
Fairmount Ave	Aldine Dr	Evaluate feasibility of extending the proposed multiuse path on Aldine Dr north along the onramp to the existing sidewalk on Fairmount Ave	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
Monroe Ave	Euclid Ave	Realign intersection to reduce crossing distance	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
Monroe Ave	Euclid Ave	Implement curb extensions on NE and SW corners with ADA-compliant curb ramps	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
Monroe Ave	Euclid Ave	restripe to align with proposed improvements	Pedestrian Master Plan Phase 4 – Volume 2B (2013)	Kensington/Talmadge
Orange Ave	Park Blvd to La Mesa City Limits	Bicycle Blvd	Riding to 2050 San Diego Regional Bike Plan (2010)	
Meade Ave	Maryland St to Fairmount Ave	Class I bike path	Riding to 2050 San Diego Regional Bike Plan (2010)	



Road	Cross Street or Extent	Improvement Type	Source Document	Notes
Landis St	Park Blvd to Utah St	Class I bike path	Riding to 2050 San Diego Regional Bike Plan (2010)	
Landis St/ Wightman St	Utah St to I-15	Enhanced Class II	Riding to 2050 San Diego Regional Bike Plan (2010)	
I-15	I-8 to Wightman St	Class I bike path	Riding to 2050 San Diego Regional Bike Plan (2010)	
Fairmount Ave	I-8 to I-94	Enhanced Class II	Riding to 2050 San Diego Regional Bike Plan (2010)	
Poplar St	Columbine St	Install curb extensions and crosswalks on all four corners	Azalea Park-Hollywood Park Revitalization Action Plan (2002)	
Glenfield St	Manzanita Dr	Install two-way stop signs	Azalea Park-Hollywood Park Revitalization Action Plan (2002)	
Dahlia St	Poplar St	Install two-way stop signs	Azalea Park-Hollywood Park Revitalization Action Plan (2002)	
Arbor Vitae	Manzanita Dr	Install two-way stop signs	Azalea Park-Hollywood Park Revitalization Action Plan (2002)	
Violet St	Manzanita Dr	Install two-way stop signs	Azalea Park-Hollywood Park Revitalization Action Plan (2002)	
Tulip St	Pepper St	Install two-way stop signs	Azalea Park-Hollywood Park Revitalization Action Plan (2002)	
Columbine St	Manzanita Dr	Install two-way stop signs	Azalea Park-Hollywood Park Revitalization Action Plan (2002)	
Manzanita Pl	Fairmount Ave	Close vehicular access to Manzanita Pl from Fairmount Ave by installing bollards	Azalea Park-Hollywood Park Revitalization Action Plan (2002)	
Manzanita Canyon (sewer/fire road)	Marlborough Ave	Create bike/pedestrian/skate pathway along sewer/fire road in canyon with access from Marlborough Avenue	Azalea Park-Hollywood Park Revitalization Action Plan (2002)	
Georgia (Robinson to Howard); Florida (Howard to Meade); Meade (Maryland St to Fairmount Ave)		Georgia Meade Bikeway (Class II)	North Park Mid-City Regional Bike Corridors Project (on-going)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
Robinson Ave	Park Ave to Mississippi St	Robinson Bikeway (buffered Class II and elevated pathway)	North Park Mid-City Regional Bike Corridors Project (on-going)	
Howard Ave	Park Ave to I-805	Howard Bikeway (buffered Class II, neighborhood traffic circles, curb extensions, and traffic calming measures)	North Park Mid-City Regional Bike Corridors Project (on-going)	
Orange Ave	I-805 to Estrella Ave	Orange Bikeway (buffered bike lanes, median island traffic diverters, neighborhood traffic circles, curb extensions, and traffic calming measures)	North Park Mid-City Regional Bike Corridors Project (on-going)	
Landis Ave	Mississippi St to Chamoune Ave	Landis Bikeway (buffered bike lanes, raised crosswalks, reverse angle parking, and traffic calming features)	North Park Mid-City Regional Bike Corridors Project (on-going)	
Estrella Ave; University Ave	(Orange Ave to University Ave); (Estrella Ave to 70th St)	University Bikeway (separated bikeways, buffered bike lanes, high-visibility treatments, and protected intersections)	North Park Mid-City Regional Bike Corridors Project (on-going)	
SR-15	I-8 to Adams Ave	SR 15 Commuter Bikeway (12-foot wide, paved, and striped to provide two-way travel. It is separated from the freeway shoulder by a concrete barrier)	North Park Mid-City Regional Bike Corridors Project (on-going)	
54th St	University Ave	Lea St will connect 54th St to University Avenue to form the fourth leg of the controlled intersection near Promise Drive	Mid-City Communities Plan (1998)	
54th St	University Ave	Intersection is envisioned as an enhanced transit plaza. Amenities should include, bus shelters, seating, trash cans, bicycle parking and transit information	Mid-City Communities Plan (1998)	

Road	Cross Street or Extent	Improvement Type	Source Document	Notes
55th St	University Ave	Elimination of the channelized right turns on the westbound and southbound approaches of this intersection	Mid-City Communities Plan (1998)	
Chollas Pkwy	Lea St	Vacation of Chollas Parkway and the realignment of Lea St to a two-lane collector St that connects University Avenue and 54th St to reduce cut-through traffic	Mid-City Communities Plan (1998)	
Federal Blvd	Euclid Ave	Widen southbound Euclid Ave to provide one left-turn, two through, and a shared right and through lane. Widen eastbound Federal Blvd to provide two left-turn, one through, and one shared right and through lane.	Mid-City Communities Plan (1998)	
I-805 Southbound On-Off Ramps	Home Ave	Widen westbound approach (Home Avenue) by narrowing and relocating the median, to provide two left-turn and two existing through lanes.	Mid-City Communities Plan (1998)	
El Cajon Blvd	70th St	Widen El Cajon Blvd to provide two eastbound left-turn lanes. Widen eastbound University Avenue to provide one left-turn, two through, and one right turn lane as redevelopment occurs.	Mid-City Communities Plan (1998)	
University Ave	Boundary St	Widen the northbound Boundary St to provide one left-turn lane, one through lane and one right-turn lane.	Mid-City Communities Plan (1998)	

## **City of San Diego General Plan (Blueprint SD) (2024)**

Blueprint SD is a proactive effort to create an equitable and sustainable framework for growth to support current and future San Diegans. Blueprint SD identifies areas for more homes and jobs that are connected to convenient and affordable options to walk, bike, and ride transit to meet daily needs, such as going to work, school, or the grocery store. This approach helps meet the needs of our growing city while making progress towards our climate goals.

the stated purpose of the Mobility Element is “to improve mobility through the development and operation of a balanced, well connected, safe, sustainable, and equitable multimodal transportation system for people to safely, conveniently, and enjoyably move around.”

the Mobility Element provides goals and policies related to Walkable Communities, Bicycling, Shared Use Mobility, Transit, Complete Streets, Intelligent Transportation Systems, Transportation Demand Management, Parking and Curb Space Management, Airports, Goods Movement/Freight, Regional Coordination and Financing, and Emerging Technologies.

## **San Diego’s City Heights Initiative (2022)**

This study uses a new analytic technique, the synthetic control method, to understand one of the nation’s largest, longest standing, and most prominent comprehensive community initiatives: San Diego’s City Heights Initiative. the study’s research questions are whether the initiative caused observable changes to its target area in terms of population levels, racial and ethnic composition, incomes, poverty rates, college degree holding, housing tenure, and property values.

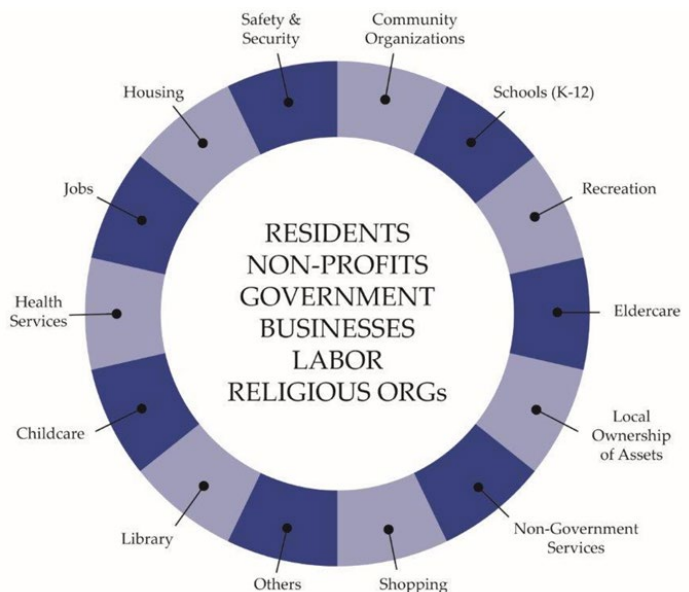
### Recommendations

- the City Heights Initiative’s current priorities are broad and include such elements as housing and commercial development, education, safety and crime prevention, food security, and health. the initiative has directly created or funded projects in each of these areas. In structuring the initiative’s approach, its instigator, Sol Price, articulated a desire for a holistic, multipronged effort. He depicted the factors present in a healthy community as “the Wheel” (figure 1).

### Issues

- There are reports of increasing rents and home prices that local media is likening to gentrification pressures. These trends may be accelerated because the census tract containing the Urban Village and four adjacent tracts were selected as Opportunity Zones.

### Themes



- Are the results observed in this study encouraging or disappointing? There are elements of both. The City Heights Initiative caused significant population increases. The neighborhood’s economic standing, whether measured by incomes, poverty rates, home values, or rents, was little changed relative to the counterfactual. It is evident that, on one hand, the intervention has little by way of neighborhood change to show for more than 25 years of place-based investments. On the other hand, the initiative may indeed be a compelling success story of making people-centric investments, especially in children and youth, and building community facilities and amenities that improve quality of life while not pricing out the residents it hopes to benefit. It is possible that the City Heights community functioned as a “launchpad” neighborhood (Coulton, Theodos, and Turner 2012) with successive waves of new residents joining the neighborhood, benefiting from it, and moving away, leaving the economics of the place unchanged as they are replaced by newcomers.

### **City of San Diego Climate Action Plan (2022)**

the City of San Diego’s Climate Action Plan (2022) is the City’s comprehensive roadmap that outlines the specific activities the City will take to reach carbon neutrality by 2035. This roadmap contains six core strategies: Decarbonization of the Built Environment; Access to Clean and Renewable Energy; Mobility and Land Use; Circular Economy and Clean Communities; Resilient Infrastructure and Healthy Ecosystems; and Emerging Climate Action. Each target has quantifiable measures that include actions, policies, or programs that the City will take to achieve the goals of this plan. Relevant to this Literature Review is Strategy 3, Mobility and Land Use.

### **Recommendations**

- Measure 3.1: Safe and Enjoyable Routes for Pedestrians and Cyclists
  - Develop Safe Routes to Schools safety plans; start a San Diego Safe Routes to Schools program focusing on Communities of Concern and underperforming schools.
  - Implement the City’s Bicycle Master Plan and community plan bicycle networks with a Class IV First approach.
  - Review and improve flexible fleets and micro-mobility policies/shared use mobility programs, especially focused in Communities of Concern and first mile/last mile applications.
  - Partner with micromobility operators to optimize the number of scooters available in mobility hubs and/or near transit. regional connections. Also describing existing constraints, opportunities, and implementation strategies.
  - Develop a Mobility Master Plan to reduce mobile sources emissions and further a shift in mode.
  - The city will evaluate existing and future fee structures to increase the priority of active transportation project implementation, especially within Communities of Concern, and the City will increase its efforts to identify and pursue grant funds for the planning and implementation of active transportation projects.
- Measure 3.2: Increase Safe, Convenient, and Enjoyable Transit Use

- Implement projects and update the Placemaking Ordinance, including a street furniture program that reduces heat exposure, prioritizes natural shade solutions, provides cool transit stops, and improves access to nearby restrooms in high transit use areas and pedestrian corridors, prioritizing Communities of Concern. Core Benefits: Actions
- Advocate for a permanent, regional, Youth Opportunity Pass and support the expansion of the program to include college students and residents in Communities of Concern.
- Create a quick build policy and design guidelines to facilitate repurposing of the right-of-way or installation of interim or pilot transit projects.
- Develop dedicated bus lanes or shared bus and bike lanes to increase transit efficiency and on-time performance, focusing on routes supporting residents within underserved communities and high-frequency connections for riders going to schools, universities and jobs.
- Ensure every high-volume transit stop has access to transit shelters, which include shade structures and benches; work with MTS to establish standard for the provision of bus shelters in the city (e.g., minimum accommodations) with a priority in Communities of Concern.
- Measure 3.4: Reduce Traffic Congestion to Improve Air Quality
  - Install traffic circles and roundabouts.
  - Retime traffic signals to reduce vehicle fuel consumption through improving the flow of traffic.
- Measure 3.6: Vehicle Management
  - Optimize use of curb space including management of on-street parking in TPAs.
  - Amend the land development code to eliminate parking minimum requirements.
  - Amend the land development code to establish parking maximum requirements for use types and locations where appropriate.
  - Amend the land development code to prohibit new auto-oriented land uses that would create conflicts with walking and bicycling within TPAs.

### **2021 Regional Plan (2021)**

the approved 2021 Regional Plan provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources. the plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies.

the plan combines the Regional Transportation Plan, Sustainable Communities Strategy (SCS), and Regional Comprehensive Plan. As such, the 2021 Regional Plan must comply with specific state and federal mandates, including an SCS, per Senate Bill 375 (Steinberg, 2008), that achieves greenhouse gas emission reduction targets set by the California Air Resources Board; compliance with federal civil rights requirements (Title VI); and environmental justice considerations, air quality conformity, and a public participation process.

# Recommendations

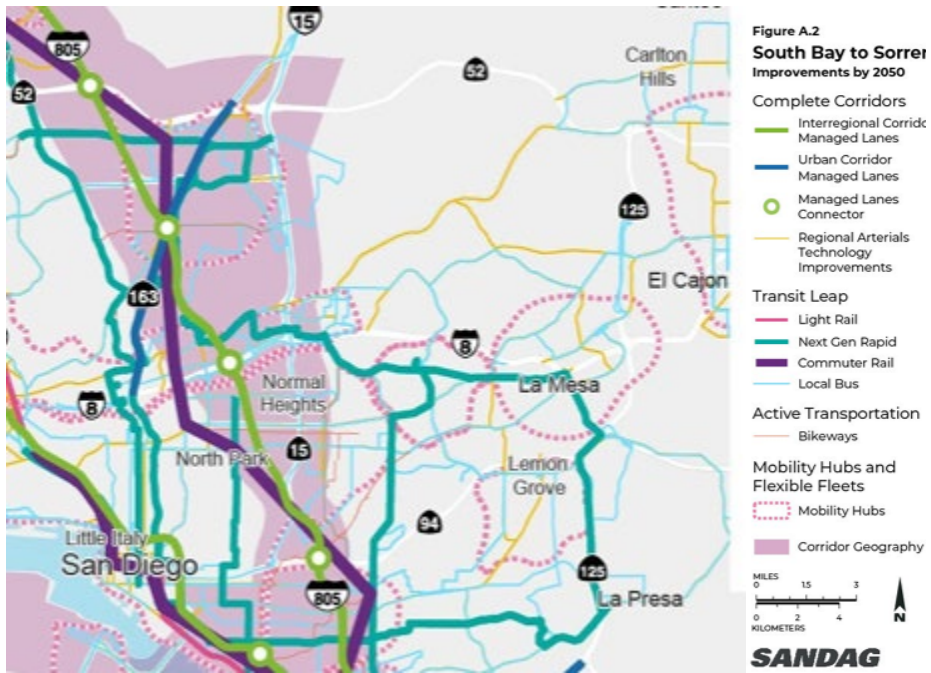


Figure A.8

I-8

Improvements by 2050

Complete Corridors

- Managed Lanes Connector
- Regional Arterials Technology Improvements
- Interregional Corridor Managed Lanes

Transit Leap

- Commuter Rail
- Light Rail
- Next Gen Rapid
- Local Bus

Active Transportation

- Bikeways

Mobility Hubs and Flexible Fleets

- Mobility Hub
- Corridor Geography



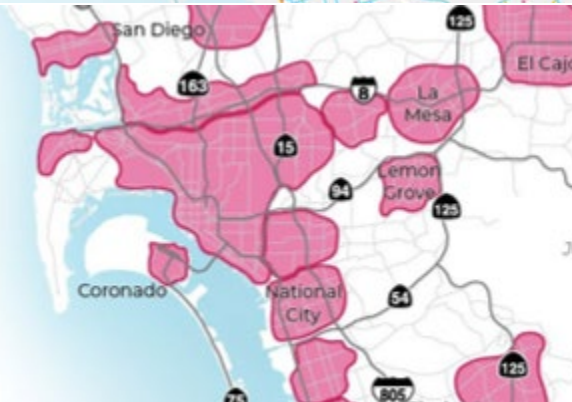
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Figure A.14

Regional Mobility Hub Network

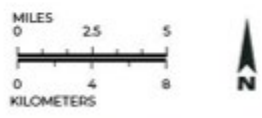
- Regional Mobility Hub Network





**Figure A.25**  
**2025 Regional**  
**Bike Network**

- On-Street
- Off-Street
- On-Street & Off-Street

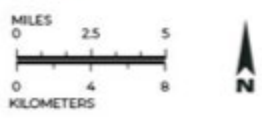


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**Figure A.27**  
**2050 Regional**  
**Bike Network**

- On-Street
- Off-Street
- On-Street & Off-Street



**Figure A.17**  
**2025 Transit Network**

-  Commuter Rail
-  Light Rail
-  Next Gen *Rapid*
-  Local Bus
-  San Diego-Coronado Ferry



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**Figure A.18**  
**2035 Transit Network**

-  Commuter Rail
-  Light Rail
-  Next Gen *Rapid*
-  Automated People Mover
-  Local Bus
-  San Diego-Coronado Ferry
-  Central Mobility Hub
-  San Ysidro Mobility Hub



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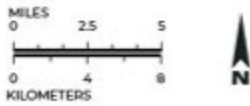


Figure A.19

### 2050 Transit Network

- Commuter Rail
- Light Rail
- Next Gen Rapid
- Automated People Mover
- California High Speed Rail\*
- Local Bus
- San Diego-Coronado Ferry
- Central Mobility Hub
- San Ysidro Mobility Hub

\*Project would be implemented and funded by the California High Speed Rail Authority.



**SANDAG**



### Riding to 2050 San Diego Regional Bike Plan

#### Recommendations



## BLVD 2020 Plan Realized (2020)

the El Cajon Boulevard Business Improvement Association is a non-profit organization supported by local business owners committed to improving the physical and economic conditions of the Boulevard and the surrounding neighborhoods. It includes portions of North Park, University Heights, Normal Heights, Kensington, Talmadge, and City Heights.



## Recommendations

- the Hub Strategy: Each one of the business hubs along the district's four mile stretch will be centered by a bus rapid transit station that incorporates a culturally-distinct mix of businesses, tree-lined walkable hubs, public gathering spaces, educational resources, and a significant number of residents living, working, shopping, dining and commuting throughout the Boulevard. the success of each hub will be transformed block by block through innovative mixed-use projects; small business activity; a host of transportation options; and streetscapes that exemplify safe, activated, vibrant public spaces in and around all seven hubs.
- Similar to the role the ECBBIA has played in creating POPUP15, Fair@44 and the BLVD Court; it is important that we support the activation of vacant lots as a strategy for informing and catalyzing development projects that stimulate a greater vision and sense of place, along with creating business incubation opportunities.
- the association will advocate for an update to the Mid-City Communities Plan. Updates to outdated zoning will allow for more density along the corridor and increased public improvements. This will promote new catalyst mixed-use projects that will help define hubs around the 15 freeway and Fairmount Ave. and further ensure the success, permanency and expansion of the Blvd Busway.
- In 2019, the six-lane section of El Cajon Boulevard was reduced to four lanes through a pilot dedicated bus/ bike lane known as the Blvd Busway. In 5 years, the Blvd Busway will be fully realized with a permanent dedicated bus and bike lane from Park Blvd to 54th St., with a connection to San Diego State University
- Along with reducing travel lanes and enhancing mobility, the Boulevard is seeking to incorporate tactical transit designs as a means of traffic calming and enhanced branding in each of our business hubs. By applying painted artistic bulb-outs and crosswalks and

colorful pedestrian infrastructure, traffic calming will be realized and create a well-defined sense of place at each hub. Tactical transit is designed to be a quicker, cheaper, lighter strategy for creating multi-modal, safer streetscapes.

- In three years, the Boulevard is seeking a decrease in automobile speeds by 10 MPH; and adding more crosswalks within our hubs, making each hub more vibrant, visible, and allows our neighbors north and south to cross from business to business and community to community

#### Issues

- Recently completed and projects under construction will add over 1,200 new units of housing to the district.
- El Cajon Boulevard is currently the second most deadly corridor in the City of San Diego based on pedestrian fatalities. This is due to the high speed of cars, a wide street, and a lack of safe pedestrian crossings. This is why the Boulevard BIA is dedicated to incorporating traffic calming measures to ensure a safe 'Complete Boulevard', where all modes of transportation including bus, bicycle and walking are prioritized alongside car travel.

#### Themes

- Improvements in mobility is at the heart of the Blvd's 2020 plan. They will enhance the pedestrian environment, engage the community in enjoying vibrant business hubs, move them along the Boulevard at a more human pace along a multimodal streetscape, including a dedicated transit lane for bus, bike, and other low speed vehicles. An increased number of safe pedestrian crossings will also be added.
- the first element embraces Transit Oriented Development (TOD) by promoting higher density on the Boulevard while preserving the current surrounding neighborhoods.
- the plan will be implemented through our hub strategy and is guided by a set of principles rooting the Boulevard as the spine of the community. It connects the surrounding neighborhoods and provides the capacity for connectivity, density, and economic vitality.

### **El Cajon Complete Blvd Planning Study (2017)**

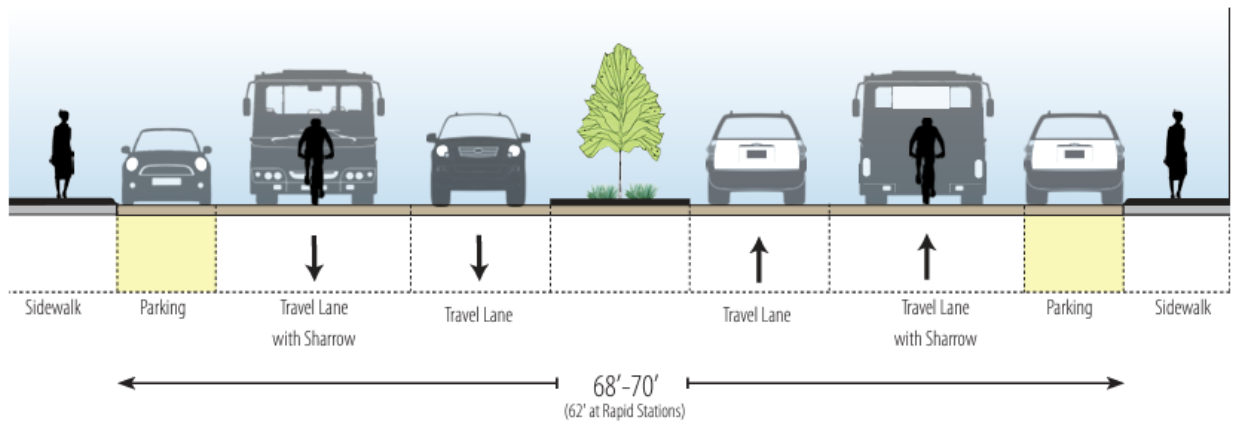
the Complete Boulevard Planning Study ("the Plan") focused on an approximately three-quarter mile segment of El Cajon Boulevard between Highland Avenue and 50th Street, encompassing the Little Saigon Cultural and Commercial District. This portion of El Cajon Boulevard is located at the convergence of the Mid-City communities of City Heights and Talmadge. the purpose of this planning effort was to provide mobility and urban design recommendations that ultimately would catalyze meaningful and transformative investments on El Cajon Boulevard to facilitate a beautiful, vibrant and welcoming area for shopping, eating, neighborhood services, and pedestrian activity for residents and visitors.

the City of San Diego adopted the Vision Zero policy in 2015 as a strategy to create safer roadways in our neighborhoods. the main goal of this policy is to reduce all traffic fatalities to zero by the Year 2025 ("Vision Zero"). El Cajon Boulevard is named as a Vision Zero high priority corridor. It serves as a major connector between urban and suburban neighborhoods poised to see significant growth and development pressure in the next 10-20 years in the City of San Diego.

## Recommendations

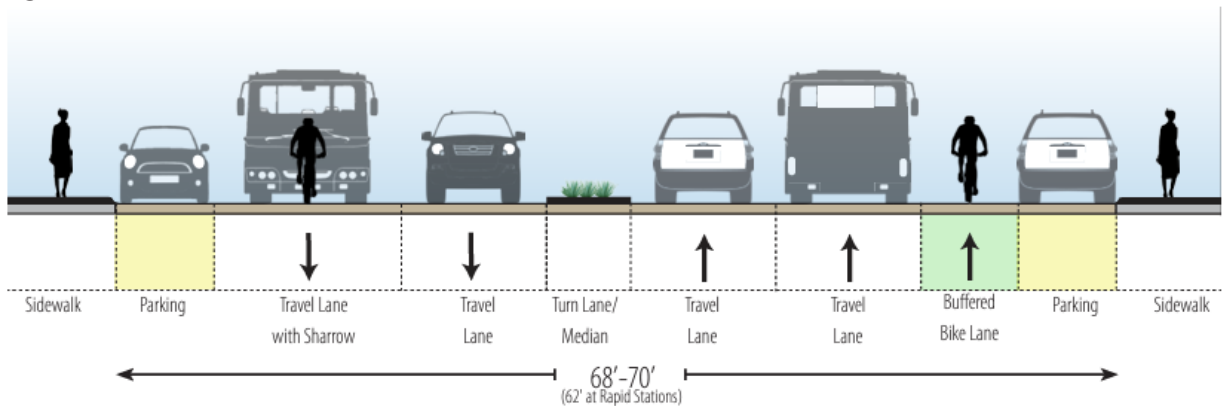
- the Plan identifies a raised median with left-turn pockets at select intersections along El Cajon Boulevard, with a variation in the design east of Euclid Avenue to accommodate an eastbound buffered bicycle lane along the uphill segment. the segment of El Cajon Boulevard between Highland Avenue and Euclid Avenue maintains four travel lanes and parking while including urban design and pedestrian emphasis areas as well as shared bike facilities with sharrow pavement markings. the median and bulb-outs improve crosswalks by narrowing the crossing distance along with pedestrian refuge islands, which enhance safety for pedestrians (Figure 2).
- Highland Avenue to Euclid Avenue

Figure 2: Highland Avenue to Euclid Avenue Recommendations



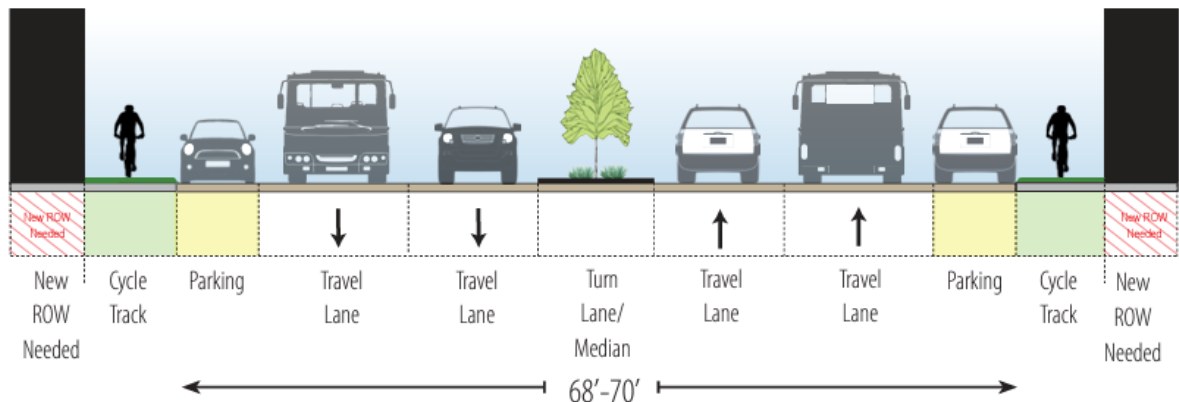
- Euclid Avenue to 50th Street

Figure 3: Euclid Avenue to 50th Street Recommendations



- a long-term recommendation for the corridor emerged which includes maintaining four travel lanes, parking on both sides of the street, raised cycle track, sidewalk, and a raised and planted median which transitions to a turn pocket at specific locations. This requires additional right-of-way that could be acquired during the redevelopment process (Figure 6). It is recommended that this long-term recommendation be vetted for inclusion in the next update of the Mid-City Communities Plan.

Figure 6: Long Term Corridor Vision



### Issues

- El Cajon Boulevard is currently a four-lane roadway with a two-way left turn lane that accommodates on-street parallel parking on both sides. the paved width of El Cajon Boulevard ranges between 68 feet and 70 feet, with one section near Winona Avenue narrowing to 62 feet (Figure 1) for the Rapid Bus Stops. Daily traffic volumes range from 24,000-27,000 ADT and are projected to increase to 28,000-34,000 ADT by 2035.
- MTS currently operates Local Bus Route 1 and the Mid-City Rapid Transit Bus Route 215 along El Cajon Boulevard within the project area. Rapid Bus Route 215 is provided seven days a week with service from 4:30 AM to 1:39 AM on weekdays, with predominately 15-minute headways. Local Bus Route 1 service is provided seven days a week with service from 4:49 AM to 12:28 AM, with 15-minute headways during the day and 20-30-minute headways during off-peak hours (2016 schedule). the corridor experiences high levels of transit ridership. However, many bus stops lack amenities such as benches or shade structures.
- There is a continuous sidewalk along both sides of El Cajon Boulevard ranging from 8 feet to 15 feet in width. the sidewalk area lacks a unified design, adequate lighting, and has utilities and other street furniture that impedes the pedestrian travel way. In most locations, parked cars provide a buffer between traffic and pedestrians on the sidewalk. the crosswalks across El Cajon Boulevard span wide distances with no pedestrian refuge area in the middle of the street. Only 5 out of 26 intersections along the corridor have traffic signals for pedestrians crossing El Cajon Boulevard. There are 72 curb ramps along the corridor, and 44 were identified as non-ADA conforming or missing curb ramps altogether.
- There is a bicycle route along El Cajon Boulevard with appropriate pavement markings to raise awareness that people on bicycles may share the lane with vehicles and buses. Many cyclists avoid the area or choose to ride on the sidewalk due to a stressful riding environment on the roadway.

### Themes

- the Metropolitan Transit System (MTS) recently made significant investments in Rapid Bus Service along this corridor, and the recommendations described in this Plan are intended to capitalize on these transit improvements for the community.

## **SR-15 Mid-City Centerline Transit Stations Fact Sheet (2015)**

### Recommendations

- Rapid 235 began service on the freeway-level platforms at the University Avenue and El Cajon Boulevard stops on March 11, 2018.
- Construction is now complete on the SR 15 Mid-City Centerline Rapid Transit Stations project, San Diego's first freeway-level transit stations along State Route 15 (SR 15) at University Avenue and El Cajon Boulevard. the project also constructed transit-only lanes within the existing median from just north of I-805 to just south of I-8. This will help improve on-time performance between the existing *Rapid* and local transit routes.
- In conjunction with the transit stations project, SANDAG and Caltrans constructed a \$15.6 million bike project along the SR 15 corridor. the SR 15 Commuter Bikeway is a safe and direct bike route connecting Mid-City communities with the major retail, commercial, education, and entertainment destinations in the city's Mission Valley community. the bike path opened in August 2017. View more information on this project.

## **Pedestrian Master Plan Volume 1 and 2A – Urban Core Communities (2015)**

the Pedestrian Master Plan is intended to help the City enhance neighborhood quality and mobility options by developing pedestrian improvement concepts, prioritizing the pedestrian improvement concepts, and improving the City's ability to compete for grant funding to support implementation.

Two of the neighborhoods covered in Volume 2A include City Heights and Normal Heights. For each neighborhood, an inventory of missing sidewalks and curbs was documented, pedestrian routes types were identified, Focus Areas were defined with potential pedestrian improvement measures, and high-priority Improvement Areas selected within the Focus Areas. Recommendations were made within the Improvement Areas with accompanying project sheets documenting the location, issues, improvements, and cost estimates. the following tables summarize the recommendations for the two Mid-City communities.



**Table CH-2: City Heights High-Priority Improvement Areas**

Number	Improvement Area	Recommendations	Ranking
CH1	Fairmount Ave and El Cajon Blvd	Signal improvements, curb extensions, crosswalk improvements	5
CH2	Fairmount Ave and University Ave	Signal improvements, curb extensions, crosswalk improvements	2
CH3	University Ave at 43rd St	Curb extensions, crosswalk improvements	3
CH4	40th St and El Cajon Blvd	Implement Mid-City Rapid Bus improvements, signal improvements	7
CH5	43rd St and El Cajon Blvd	Implement Mid-City Rapid Bus improvements, signal improvements, median extension	13
CH6	Fairmount Ave and Orange Ave	Signal improvements, curb extensions, crosswalk improvements	34
CH7	Euclid Ave and University Ave	Signal improvements, curb extensions	6
CH8	35th St and El Cajon Blvd	Implement Mid-City Rapid Bus improvements, bus curb extensions, signal improvements	30
CH9	Euclid Ave and El Cajon Blvd	Signal improvements, crosswalk improvements	33
CH10	Wabash Ave and University Ave	Crosswalk improvements, signal improvements, median upgrade, signage enhancements	31
CH11	Swift Ave and University Ave	Signal improvements	32
CH12	52nd St and University Ave	Signal improvements, curb extensions, crosswalk improvements, bus curb extensions	35
CH13	Fairmount Ave and Redwood St/ Poplar St	Signal improvements, curb extensions, median upgrade, turn restrictions, crosswalk improvements	45

**Table CH-2: City Heights High-Priority Improvement Areas (continued)**

Number	Improvement Area	Recommendations	Ranking
CH14	36th St and El Cajon Blvd	Curb extensions, crosswalk improvements	12
CH15	Menlo Ave and El Cajon Blvd	Signal improvements, curb extensions, crosswalk improvements	14
CH16	41st St and University Ave	Signal improvements, curb extensions, crosswalk improvements	15
CH17	Marlborough Ave and University Ave	Signal improvements, bus/ped curb extensions, crosswalk improvements	16
CH18	42nd St and University Ave	Signal improvements, curb extensions, crosswalk improvements	17
CH19	47th St and University Ave	Curb extensions, crosswalk improvements, bus/pedestrian curb extensions	18
CH20	University Ave (I-15 NB ramps - Van Dyke Ave)	Curb extensions, median installation	2C
CH21	University Ave (Van Dyke Ave - 44th St)	Curb extensions, access management, pedestrian crossing treatment	4C
CH22	University Ave (40th St - I-15 ramps)	Curb extensions, signal improvements, crosswalk improvements, lane width reductions, median enhancements	6C
CH23	University Ave (44th St - Winona Ave)	Access management, curb extensions, crosswalk improvements	8C
CH24	Orange Ave (40th St - Central Ave)	Curb extensions	19C
CH25	University Ave (Lincoln Ave - 40th St)	Median installation, curb extensions	13C
CH26	El Cajon Blvd (Chamoune - Estrella Ave)	Curb extensions, median installation, landscaping enhancements	16C

**Table NH-2: Normal Heights High-Priority Improvement Areas**

Number	Improvement Area	Recommendations	Ranking
NH1	35th Street at Adams Avenue	Curb extensions	11
NH2	East Mountain View Drive at Adams Avenue	Curb extensions and improved crossings	29
NH3	Adams Avenue from Hawley Blvd to Wilson Avenue	Curb extensions and median installations	7C
NH4	Adams Avenue from Wilson Avenue to East Mountain View Drive	Curb extensions, improved crossings, and median installations	12C
NH5	Adams Avenue from West Mt. View Drive to Hawley Blvd (Normal Heights)	Curb extensions and median installations	14C

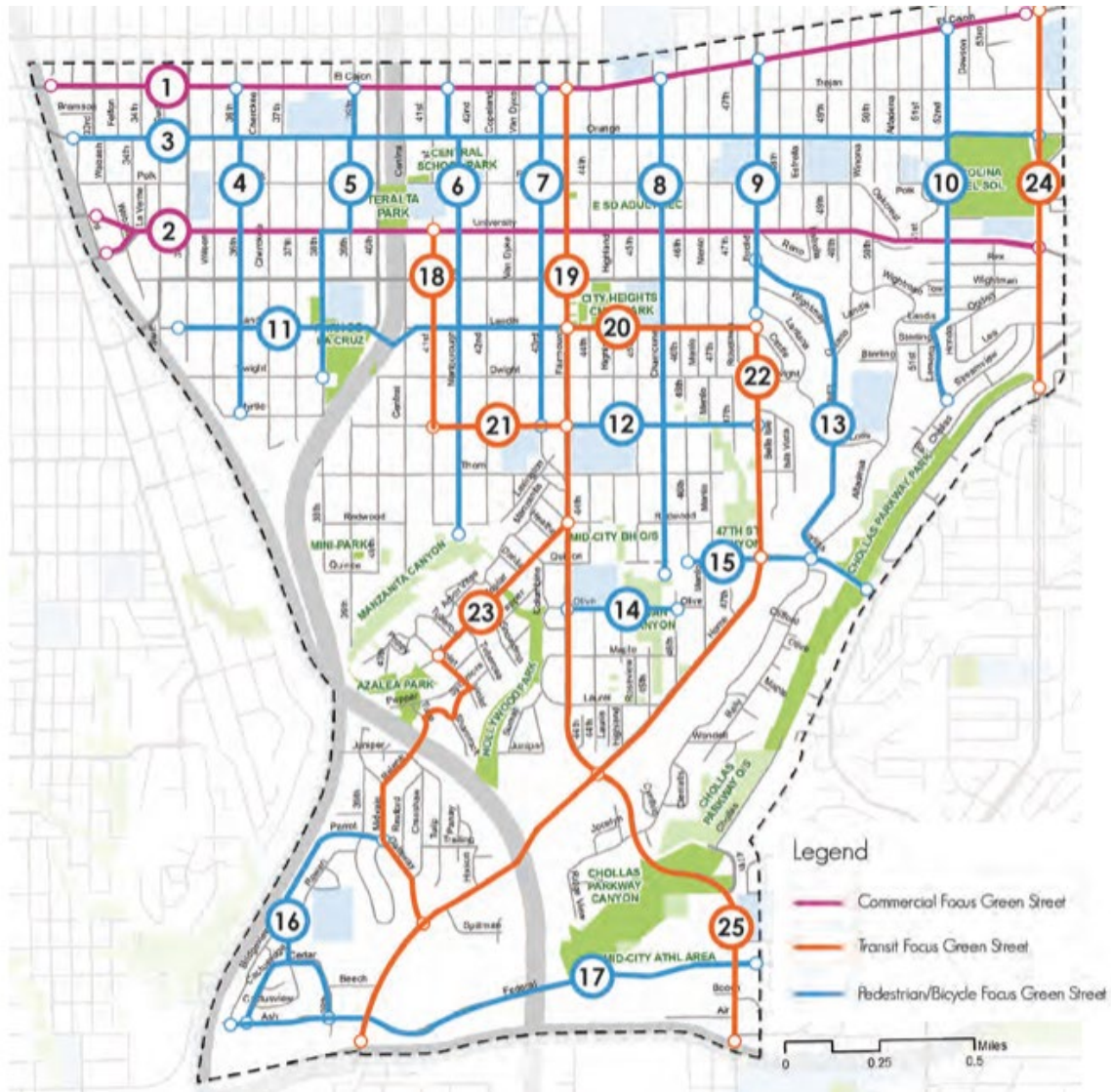
**City Heights Urban Greening Plan (2014)**

This Urban Greening Plan recognizes the importance of street design in providing connectivity for pedestrians, bicyclists, drivers, and transit riders. The plan highlights four design elements: Urban Forestry, Urban Runoff, Multi-Modal Connectivity, and Urban Open Space. These elements can be combined to create streets with comfortable, shaded walkways, efficient use of water, improved water quality, and connections for walking, biking, transit, and driving.

**Recommendations**

- **Goals and Actions**
  - Primary Goal: Increase walking, bicycling, and transit use through physical street changes incorporating the elements of complete street design.
  - Secondary Goal: Create safe physical and social connections by incorporating lighting and signage.
  - Action 1: Establish a guide for pedestrian focused street design.
  - Action 2: Establish a guide for bicycle focused street design.
  - Action 3: Establish a safe routes plan that builds on Circulate San Diego’s safe routes to schools, but also adds safe routes to businesses, employment centers, parks, and transit.
  
- **Street Types and Where to Put Them**
  - **Commercial Focus Green Street:** Emphasizes specific branding to establish a strong retail presence. The street includes coordinated streetscape furnishings. Surrounding buildings are typically mixed-use with ground floor retail.

- Transit Focus Green Street: Highlights the transit stops on specific streets. These streets focus on creating safe, attractive pedestrian and/or bicycle connections as a priority to allow optimized access to transit stops.
- Pedestrian/Bike Focus Green Street: Creates a comfortable and safe walking environment which includes a minimum bicycle facility of a Class 3 bike route. the street design focuses on walking, biking, and connecting major origins and destinations.



- Commercial Focus Green Street
  - 1 El Cajon Boulevard
  - 2 University Avenue
- Transit Focus Green Street
  - 18 41st Street (University to Myrtle Avenue)
  - 19 Fairmount Avenue
  - 20 Landis St. east of Fairmount Avenue (Fairmount to Euclid Avenue)

- 21 Myrtle Ave west of Fairmount Avenue (41st to Fairmount Avenue)
- 22 Euclid Ave to Home Avenue (South of Landis Street)
- 23 Poplar to Violet to Ralene to Gateway
- 24 54th Street
- 25 47th Street (Home Avenue to SR-94)
- Ped/Bike Focus Green Street
  - 3 Orange Avenue
  - 4 36th Street
  - 5 38th/39th Street
  - 6 Marlborough Avenue
  - 7 43rd Street
  - 8 Chamoune Avenue
  - 9 Euclid Ave (El Cajon Boulevard to Landis Street)
  - 10 52nd Street
  - 11 Landis Avenue west of Fairmount Avenue
  - 12 Myrtle Avenue east of Fairmount Avenue
  - 13 Wightman Avenue to Auburn Drive to Corliss Avenue
  - 14 Olive Street
  - 15 Quince Avenue connecting Euclid Avenue
  - 16 Parrot Avenue to Cactus Ridge Avenue
  - 17 Federal Boulevard

Figure 5-1: Pilot Projects



Themes

- This plan integrates the concept of “complete streets,” designing streets for both motorized and non-motorized modes of transportation, into Green Street design. By providing safe environments for pedestrians and bicyclists, Green Streets encourage residents to walk and bike, ultimately helping to reduce air pollution, lowering vehicle miles traveled, and contributing to improved public health



Figure 1-1: Commonly traveled commercial routes  
Figures 1-1 to 1-4 reflect community input from workshops. This input helped to inform subsequent chapters.



Figure 1-2: Commonly traveled transit routes



Figure 1-3: Commonly traveled pedestrian routes



Figure 1-4: Commonly traveled bike routes

### **Mid-City Public Facilities Financing Plan Fiscal Year 2014 (2014)**

The Mid-City Public Facilities Financing Plan Fiscal Year (2014) is the City of San Diego-generated financing plan that outlines the planned physical infrastructure improvements in the Mid-City Community Planning Area. Eighty projects are identified and described, and funding estimates, schedules, and strategies are defined. The four planning committees in Mid-City---Normal Heights, Kensington-Talmadge, City Heights, and Eastern Area---then prioritized these identified projects based on community needs and preferences.

### **Mid-City Rapid Bus Project (2014)**

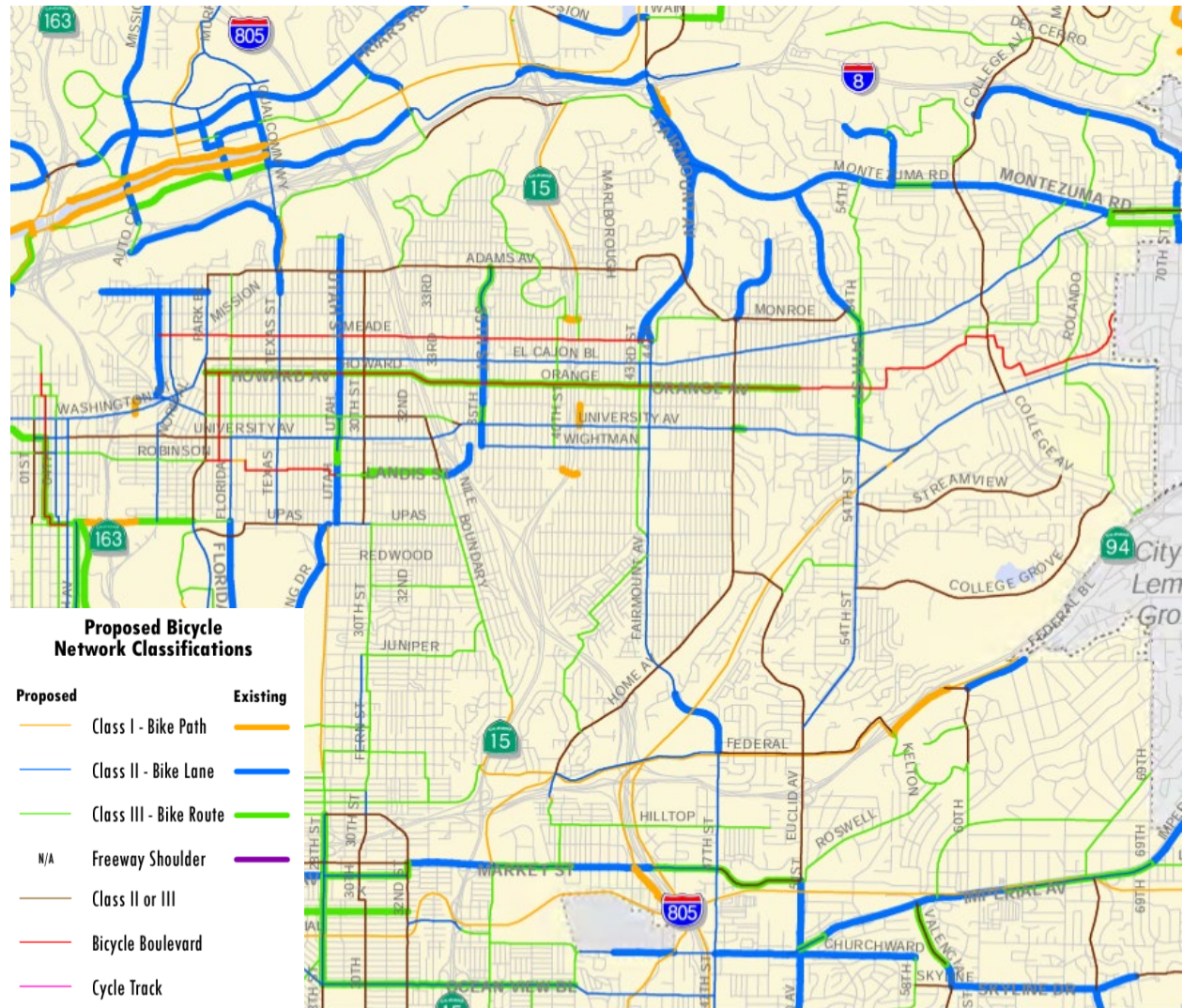
Mid-City *Rapid* is a limited-stop transit service between San Diego State University and Downtown San Diego along El Cajon and Park boulevards. the ten-mile project provides North Park, City Heights, and College area residents, students, and workers with a fast and reliable way to get around in one of this region's key transportation corridors.

After about a year of construction to build new shelters and street improvements, the new service launched as *Rapid* 215 on Sunday, October 12, 2014.

## City of San Diego Bicycle Master Plan (2013)

a vision statement of the Mid-City Communities Plan is to “encourage and enhance pedestrian and bicycling as effective modes of personal transportation.” the approved bicycle system identifies primarily Class II Bike Lanes along the major roadways including Fairmont Avenue, 54th Street, Chollas Parkway, College Grove, Federal Boulevard, and Monroe Avenue. At present, none of these roadways have Bike Lanes.

### Recommendations





**Project 8 – 54<sup>th</sup> Street: Montezuma Road to El Cajon Boulevard  
and Collwood Boulevard: Monroe Avenue to 54<sup>th</sup> Street**



**Project Description**

This project serves bicycle demands between the College Area, City Heights, and Talmadge by providing Class III bicycle facilities along 54<sup>th</sup> St. from Montezuma Road to Collwood Blvd, by upgrading the existing Class III bicycle facilities to Class II facilities along 54<sup>th</sup> St. from Collwood Blvd to El Cajon Blvd, and by upgrading the existing Class III bicycle facilities to Class II facilities along Collwood Blvd from Monroe Ave. to 54<sup>th</sup> St. This high priority project is over a mile long and connects the College and Mid-City communities to key land uses including San Diego State University. This project provides connections to local bus Routes 1, 11, 15, and 955.

In order to implement this project, it would be necessary to restripe travel lanes on the segment from Collwood Blvd to El Cajon Blvd to provide the necessary space for Class II bike facilities. There are no anticipated parking impacts associated with this project.

Bicycling issues along this project corridor include three reported bike crashes from 2002-2007, posted traffic speeds of 25 mph and volumes of approximately 3,000 to 3,200 ADTs along 54<sup>th</sup> Street. However, as 54<sup>th</sup> merges with Collwood Blvd south to El Cajon Blvd, posted traffic speeds increase to 35 mph and volumes increase to approximately 21,800 to 26,900 ADTs, creating difficult intersections at 54<sup>th</sup> St with Collwood Blvd and El Cajon Blvd. The gradient along portions of 54<sup>th</sup> Street is also quite steep for bicycle travel.

This high priority project ranked 8<sup>th</sup> with an average weighted prioritization score of 31.6 points.

**Proposed Improvements**

Remove traffic striping along 54 <sup>th</sup> St to accommodate Class II Bike Facility	\$2,760
Roadside signage on post	\$3,750
Class II paint and traffic stripe	\$3,588
Class II & III pavement markings	\$7,500
Bicycle Loop Detector	\$2,400
Other construction related costs	\$26,967

**Cost**  
**\$46,965**

**Project 10 – El Cajon Boulevard: 43<sup>rd</sup> Street to Montezuma Road**



**Project Description**

This project serves travel demands through the Mid-City neighborhoods of Kensington, Talmadge, Teralta East, Colina Del Sol, El Cerrito, and Rolando by providing Class II bicycle facilities along El Cajon Boulevard from 43<sup>rd</sup> Street to Montezuma Road. This high priority project is nearly three miles long and connects the residential neighborhoods of Mid-City and College Area with existing and proposed bicycle lanes west to North Park and Uptown, local bus routes (1, 13, 15, 856, 936, 955), and north to San Diego State University. In conjunction with multiple other high priority projects, this project will greatly enhance the connectivity of the bicycle network between the Mid-City and College area communities.

In order to implement this project, it would be necessary to restripe the roadway throughout the entire project extent to provide the necessary space for Class II bike facilities in each direction. The segment between Fairmount and Highland Avenues would require the removal of 17 parking spaces.

Issues along this project area include high traffic speeds (45-55 mph), high traffic volumes along the western leg near Fairmount Avenue, and thirty-eight bicycle crashes from 2002-2007.

This high priority project ranked 10<sup>th</sup> with an average weighted prioritization score of 31.4 points.

**Proposed Improvements**

Remove traffic stripe to accommodate Class II bike facilities	\$91,098
Roadside signage on post	\$17,000
Class II traffic striping	\$59,214
Class II pavement markings	\$27,000
Bicycle loops detector	\$19,200
Other construction related costs	\$263,260
Remove parking spaces between Fairmount Avenue and Highland Avenue	17 spaces

**Cost**

\$476,772

**Project 11 – El Cajon Boulevard: Utah Street to 43<sup>rd</sup> Street and  
43<sup>rd</sup> Street: Meade Avenue to El Cajon Boulevard**



**Project Description**

This project serves bicycle demands through North Park, City Heights, Normal Heights, and Kensington by providing a Class II bicycle facility on El Cajon Boulevard from Utah Street to 43<sup>rd</sup> Street and a Class III bicycle facility along 43<sup>rd</sup> Street from Meade Avenue to El Cajon Boulevard. This high priority project is nearly two miles long and connects the residential and commercial districts of North Park to those in Kensington and to key land use destinations including San Diego State University. This bike facility follows portions of local bus Routes 1, 6, 13, 15, and 966, and provides connections to local bus Route 2 and express bus Routes 210 and 960.

In order to implement this project, it would be necessary to restripe the roadway along El Cajon Boulevard between Utah Street and 43<sup>rd</sup> Street to provide the necessary space for Class II bike facilities. There are no anticipated parking impacts associated with this project.

Bicycling issues along El Cajon Boulevard include high travel speeds of 30 to 40 mph and high traffic volumes from 23,000 to 36,000 ADTs. 43<sup>rd</sup> Street also has a high posted travel speed of 30 mph and traffic volumes of approximately 23,500 ADTs. This segment had 38 total reported bike crashes between 2002 and 2007.

This high priority project ranked 11<sup>th</sup> with an average weighted prioritization score of 31.3 points.

**Proposed Improvements**

Remove traffic striping to accommodate Class II bike facilities	\$112,020
Roadside signage on post	\$13,500
Class II traffic striping	\$48,087
Class II & III pavement markings	\$27,000
Bicycle loops detector	\$15,600
Other construction related costs	\$266,583

**Cost**

**\$482,790**

**Project 22 – University Avenue: Utah Street to Fairmount Avenue**



**Project Description**

This project serves bicycle demands between the communities of North Park, Normal Heights, and City Heights by providing Class II bicycle facilities along University Avenue from Utah Street to Fairmount Avenue. This high priority project is nearly two miles long and connects the dense residential neighborhoods of North Park, Normal Heights, and City Heights to key land uses including Balboa Park to the southwest, Mission Valley to the northwest, and San Diego State University to the northeast. This project provides access to local bus routes (Routes 2, 6, 7, 10, 13, 965, and 966) and express bus routes (Routes 210 and 900).

In order to implement this project, it would be necessary to restripe University Avenue throughout the entire project extent for two-lane in each direction with a two-way left turn lane, parking on one side, and Class II bike facilities in each direction. Additionally, it would be necessary to remove a total of 158 parking spaces along University Avenue between Utah Street and 41<sup>st</sup> Street.

Bicycling issues along this project corridor include moderate travel speeds of approximately 25 to 35 mph, two difficult freeway crossings at I-805 and SR 15, and traffic volumes between 16,200 and 30,800 ADTs. This segment had forty-two reported bike crashes from 2002-2007.

This high priority project ranked 22<sup>nd</sup> with an average weighted prioritization score of 28.4 points.

**Proposed Improvements**

Remove traffic striping along University Avenue to accommodate Class II bike Facilities	\$85,770
Roadside Signage on post	\$33,750
Class II and traffic striping	\$33,202
Class II pavement markings	\$34,000
Bicycle loop detectors	\$21,600
Other construction related costs	\$256,861
Remove parking spaces along University Avenue	158 spaces

**Cost**

**\$465,183**

**Project 27 – University Avenue: Fairmount Avenue to La Mesa City Limits**



**Project Description**

This project serves travel demands between the City Heights and Eastern Area communities by providing Class II bicycle facilities along University Avenue from Fairmount Avenue to the La Mesa city limit. This high priority project is over three miles long and connects the Mid-City residential neighborhoods along the University Avenue mixed use corridor, improving access to employment and shopping opportunities, as well as bus transit. This project corridor also provides connections to local bus Routes 7, 10, 13, 856, 936, and 955.

In order to implement this project, it will be necessary to restripe University Avenue throughout the entire project extent for two lanes in each direction with a two-way left turn lane and parking lanes to provide the necessary space for Class II bike facilities in each direction. In addition, it would be necessary to remove the existing raised median along some segments of the project between Winona Ave and La Mesa City Limits to maintain the roadway configuration described above.

Bicycling issues along the proposed project include thirty-four bicycle accidents between 2002 and 2007, travel speeds of 35 to 40 mph and traffic volumes between 15,700 and 27,000 ADTs.

This high priority project ranked 27<sup>th</sup> with an average weighted prioritization score of 27.5 points.

**Proposed Improvements**

Remove traffic striping along University Ave to accommodate Class II bike facilities	\$101,007	Class II pavement markings	\$15,000
Install asphalt pavement (6")	\$74,616	Bicycle loop detectors	\$10,800
Roadside signage on post	\$18,250	High Conflict Area Treatment*	\$7,500
Class II and traffic striping	\$46,045	Other construction related costs	\$429,403

**Cost**

**\$702,621**

**Project 30 – Wightman Street: Swift Avenue to Fairmount Avenue**



**Project Description**

This project serves bicycle demand between the communities of Normal Heights and City Heights by providing Class II bicycle facilities along Wightman Street from Swift Avenue to Fairmount Avenue. This project also closes a Class II gap between Swift Avenue and 35<sup>th</sup> Street. This high priority project is approximately one mile long and connects Normal Heights and City Heights residential neighborhoods to the existing Class II bicycle lanes along 35<sup>th</sup> Street and Swift Avenue. It also provides connections between key land uses including employment, commercial, and recreational areas. This project provides access to local bus Routes 13, 965, and 966, and express bus Routes 210 and 960.

In order to implement this project, it will be necessary to restripe Wightman St and remove 155 parking spaces throughout the entire project extent to provide the necessary space for Class II bike facilities.

Bicycling issues along this project corridor include a difficult freeway crossing at I-15 and volumes of 5,600 to 8,300 ADT. Posted traffic speeds are 25 mph. This segment had six reported bike crashes from 2002-2007.

This high priority project ranked 30<sup>th</sup> with an average weighted prioritization score of 26.5 points.

**Proposed Improvements**

Remove traffic striping along Wightman St to accommodate Class II bike facilities	\$63,720
New roadside signage along Wightman St.	\$7,000
Class II and traffic striping	\$17,258
Class II pavement marking	\$25,000
Bicycle loop detectors	\$2,400
Other construction related costs	\$142,260
Remove parking spaces along Wightman St	155 spaces

**Cost**

\$257,638

**Issues**

- Some areas of the city have numerous bikeway facilities and others have very few. Generally, older sections of the city have less bikeway infrastructure than newer areas. For example, Downtown, Southeastern San Diego, the Mid-City communities, and Paradise Hills all have minimal bikeway facilities. One reason for the lack of facilities in older areas of the city is the narrow curb-to-curb street widths that would require reengineering to include Bike Lanes or to provide adequate room for bicycles in a wide curb lane. Most of the streets in these areas also have curbside parking, which can be an obstacle to the implementation of bikeways.

**Themes**

- the many hilly areas of the city can be a hindrance to commuting and recreational cyclists, and the narrow canyons can create chokepoints where automobile traffic becomes concentrated such as at the I-5/I-805 merge or in the I-15 corridor north of Mira Mesa. Many of these chokepoints have bikeway alternatives. parallel to I-5. Bicycles have been permitted use of the freeway shoulders in some areas, such as along I-5 between Sorrento Valley and Genesee Avenue where a parallel facility for cyclists is not conveniently available. In addition, many arterial streets are not continuous through an area where the freeway has been designated the primary automobile route. Examples include Murphy Canyon Road along I-15 near Friars Road, along SR-94 east of Kelton Avenue, and near the interchange of SR-94 and Home Avenue. In Murphy Canyon and along SR-94 near Kelton, Class I paths have been built to provide vital bicycle linkages, however near SR-94 and Home Avenue, no such linkage exists.

### **SR-15 Mid-City Station Area Planning Study Mobility Analysis Final Report (2013)**

Funded by a Smart Growth grant from SANDAG, the study aims to develop a vision and identify implementation actions to foster transit-oriented development in the study area on both sides of SR15. the study includes a planning analysis of land use, mobility, and economic considerations to develop plans and policies to support development that makes the most of the increased travel options the BRT will bring.

#### Recommendations

- University Avenue at 41st Street (AM Peak, LOS F and PM Peak, LOS E)
  - Northbound – provide a dedicated left-turn lane (90 feet). This would result in the removal of some on-street unmarked parallel parking on 41st Street on the east side (approximately 40 feet or 2 parking spaces). These spaces are likely used by the Church of Nazarene located on the southeast corner of University Avenue and 41st Street. This facility also provides off-street parking in a lot directly behind the building.
  - Westbound – Currently, the westbound approach has one left-turn pocket and one through lane with on-street parking. In order to improve traffic operations at this intersection, it is recommended to narrow the left-turn pocket and provide one through lane and one shared through right turn lane. In order to provide the additional through lane, the intersection striping would need to be changed to line up with the receiving lanes on University Avenue. This would also result in the removal of on-street unmarked parallel parking on University Avenue on the north side (approximately 110 feet or 5 parking spaces). These parking spaces are most likely utilized by the commercial building northeast of University Avenue and 41st Street. This facility also provides off-street parking in a lot directly behind the building.
  - Implementation of these improvements would result in a reduction in delay by 79.3 seconds for the AM and 37.5 seconds for the PM.
- University Avenue at Marlborough Avenue (PM Peak, LOS E)

- Northbound – provide a dedicated left-turn lane (90 feet). This would result in the removal of some on-street unmarked parallel parking on Marlborough Avenue on the east side (approximately 80 feet or 4 parking spaces). These spaces are likely used by the strip commercial businesses on the southeast corner of University Avenue and Marlborough Avenue. the shopping plaza facility has minimal off-street parking in a lot directly behind the building, but there are 10 diagonal parking spaces on the west side of the street directly across from the area proposed for parking removal and additional diagonal parking spaces on the block further south.

**Table 10 RTP Study Area Transit Improvements**

<b>Facility/Service</b>	<b>Improvement</b>	<b>Status</b>
Local Transit Routes	Frequency improvement for Routes 7 and 956 routes in the University Avenue corridor. Also, extension of existing local routes 6 and 11 to the City Heights Transit Plaza with increased frequency.	Included in revenue constrained RTP network for implementation in 2035 decade.
Mid-City Rapid (Route 15)	Construction bids due 2/20/2013	Scheduled to be in operation in 2014-15.
SR-15 BRT	Addition of Routes 610 and 680 to existing Routes 210 and 960	Design of BRT lanes and stations underway now, scheduled for completion by end of 2013. Facility scheduled to open in late 2015/early 2016.
Route 10 Rapid	Conversion of existing Route 10 into rapid service	Included in revenue constrained RTP network for implementation in 2020 decade.
El Cajon Boulevard Trolley (Route 560) Phase 1	Conversion of Mid-City Rapid to LRT between Downtown and SR-15 with interim terminal at the Boulevard Transit Plaza.	Included in revenue constrained RTP network for implementation by 2035.
El Cajon Boulevard Trolley (Route 560) Phase 2	Extension of Route 560 LRT from SR-15 to SDSU	Included in revenue constrained RTP network for implementation by 2050.
SR-15 Trolley	LRT service between San Ysidro Station and UTC area (Route 562)	Included in revenue constrained RTP network for completion by 2050

- Route 10 Rapid: This service will provide service levels similar to the Mid-City Rapid in connecting Mid-City with North Park, Hillcrest, Mission Hills, and the Pacific Highway corridor.
- Longer Term Projects: the RTP include converting the Mid-City Rapid to Trolley service in phases. the first phase would extend as far as SR-15 by 2035. This project is included in the revenue constrained RTP. the revenue constrained program of projects also includes the extension of Trolley service to SDSU and the provision of Trolley service on SR-15 by 2050.



**Pedestrian Master Plan Volume 2B – Phase 4 Kensington/Talmadge Pedestrian Plan (2013)**

Recommendations

**Table KT-1: Adams Avenue Walkability Improvements (Terrace Drive to 42<sup>nd</sup> Street)**

Location	Description	Goal <sup>(1)</sup>	Objective	Est. Cost
Adams Avenue (Terrace Drive to 42 <sup>nd</sup> Street)	1) Develop Comprehensive Mobility Plan to consider streetscape, landscape, roundabouts and walkability improvements.	S,W	Encourage more pedestrian trips by enhancing the walking environment	\$350,000
Adams Ave / Edgeware Road	2) Implement curb extensions at all four corners of intersection with ADA compliant curb ramps	S, W	Improve pedestrian visibility and decrease vehicle turning speeds	\$80,000
	3) Evaluate the feasibility of implementing enhanced marked crosswalk including highly reflective paint and in pavement flashers on east leg of intersection	A, S	Improve visibility of pedestrians and connectivity to bus stop on north side of street	\$18,250
Adams Ave / Marlborough Drive	4) Implement curb extensions at all four corners of intersection with ADA compliant curb ramps	S, W	Reduce pedestrian crossing distance and decrease vehicle turning speeds	\$80,000
Adams Avenue / Kensington Drive	5) Implement curb extensions at all four corners of intersection with ADA compliant curb ramps	A, S	Reduce pedestrian crossing distance and decrease vehicle turning speeds	\$30,000
	6) Evaluate the feasibility of implementing enhanced marked crosswalk including highly reflective paint and in-pavement flashers on west leg of intersection	A, S	Improve visibility of pedestrians and connectivity to bus stop on north side of street	\$12,100
<b>TOTAL ESTIMATED COST</b>				<b>\$590,900</b>

<sup>(1)</sup> A = Access                      S = Safety  
 C = Connectivity              W = Walkability

**Table KT-2: El Cajon Boulevard Corridor Mobility Study (41<sup>st</sup> Street to Marcellena Road)**

Location	Description	Goal <sup>(1)</sup>	Objective	Est. Cost
El Cajon Boulevard (41 <sup>st</sup> Street to Marcellena Road)	1) Conduct Corridor Mobility Study	W, A, S, C	Address multimodal issues along the corridor	\$350,000
<b>Intersection Improvements:</b>				
El Cajon Boulevard / Euclid Avenue	2) Replace existing pedestrian heads with countdown timers	S	Discourage pedestrians from crossing at end of phase	\$24,000
	3) Implement curb extensions on northeast and southwest corner of intersection on Euclid Avenue with ADA compliant curb ramps	S,W	Decrease vehicle turning speed, improve pedestrian visibility, and reduce crossing distance	\$57,000
	4) Evaluate the feasibility of installing a protected left turn phase on all approaches	S, W	Reduce pedestrian-vehicle conflicts and reduce cut-through traffic on Aldine Dr.	\$2,500
El Cajon Boulevard / 50 <sup>th</sup> Street	5) Evaluate feasibility of eliminating westbound left turn at 50 <sup>th</sup> to accommodate a pedestrian refuge with an enhanced marked crosswalk on the east leg. Continue median to the west with a left turn pocket on west leg.	A, S	Reduce pedestrian-vehicle conflicts and create safe access to transit across El Cajon Blvd	\$50,000
	6) Implement curb extensions at all corners of intersection on El Cajon Blvd with ADA compliant curb ramps	S, W	Decrease pedestrian crossing distance and improve pedestrian visibility	\$57,000
<b>TOTAL ESTIMATED COST</b>				<b>\$548,500</b>

<sup>(1)</sup> A = Access      S = Safety  
C = Connectivity      W = Walkability

Location	Description	Goal <sup>(1)</sup>	Objective	Est. Cost
El Cajon Boulevard at Central Avenue	1) Implement curb extension on northeast corner of intersection with ADA compliant curb ramps	S	Decrease vehicle turning speed and discourage cut-through traffic	\$21,000
	2) Implement median island south of barrier wall on west side of street	S	Create better buffer from freeway on-ramp and decrease vehicle turning speed	\$8,000
	3) Paint crosswalk on west leg of intersection and extend existing median to crosswalk (Included in the Mid-City BRT improvement)	A, W	Provide access to and from future BRT Station per I-15 BRT Project recommended improvements	\$9,000
<b>TOTAL ESTIMATED COST</b>				<b>\$38,000</b>

<sup>(1)</sup> A = Access      S = Safety  
C = Connectivity      W = Walkability

**Table KT-4: Aldine Drive Connectivity Improvements**

Location	Description	Goal <sup>(1)</sup>	Objective	Est. Cost
Aldine Drive (Long Term)	1) Assess feasibility of implementing multi-use path along the east side of the corridor	C	Provide missing sidewalk link to connect from Monroe Avenue	\$350,000
Aldine Drive (Short Term)	2) Conduct speed survey	S	Determine existing travel speed	\$7,500
	3) Install additional street lights along the corridor	S	Improve visibility of pedestrians	\$36,000
	4) Develop traffic calming plan to reduce traffic speeds	S,W	Identify measures (horizontal or vertical) to maintain 25 mph travel speed	\$20,000
<b>TOTAL ESTIMATED COST</b>				<b>\$413,500</b>

<sup>(1)</sup> A = Access      S = Safety  
 C = Connectivity      W = Walkability

**Table KT-5: Fairmount Avenue Connectivity Improvements**

Location	Description	Goal <sup>(1)</sup>	Objective	Est. Cost
Fairmount Avenue	1) Evaluate the feasibility of implementing a 5' sidewalk on east side of corridor from Meade Avenue to Aldine Drive	C	Provide pedestrian connection	\$350,000
	2) Install street lighting along new sidewalk	S, W	Provide for safe walking environment	\$60,000
	3) Install ADA compliant curb ramps at all intersections	A, W	Provide access for all users	\$6,000
Fairmount Avenue / Aldine Drive	4) Assess feasibility of implementing an enhanced crosswalk across Aldine Drive on-ramp with pedestrian signal	C, S	Provide connection between proposed sidewalk and Aldine Drive	\$18,250
	5) Evaluate the feasibility of extending the proposed multiuse path on Aldine Drive north along the on-ramp to the existing sidewalk on Fairmount Avenue	C, W	Provide connection between Aldine Drive and the bus stop on Fairmount Avenue	\$50,000
<b>TOTAL ESTIMATED COST</b>				<b>\$484,250</b>

<sup>(1)</sup> A = Access      S = Safety  
 C = Connectivity      W = Walkability

**Table KT-6: Monroe Avenue / Euclid Avenue Intersection Improvements**

Location	Description	Goal <sup>(1)</sup>	Objective	Est. Cost
Monroe Avenue / Euclid Avenue	1) Evaluate opportunities to realign intersection to reduce crossing distance	A, S	Reduce crossing distances at this skewed intersection	\$50,000
	2) Implement curb extensions on northeast and southwest corners with ADA compliant curb ramps	S	Reduce pedestrian crossing distance, improve visibility of pedestrians and reduce vehicle turning speeds	\$54,000
	3) Restripe marked crosswalks to align with legs of intersections and proposed curb extensions	S, W	Straighten to reduce crossing distances and improve visibility	\$3,000
<b>TOTAL ESTIMATED COST</b>				<b>\$107,000</b>

<sup>(1)</sup> A = Access      S = Safety  
C = Connectivity      W = Walkability

**Safe for All 2011 Street Design Benchmark Study for the SD Region (2011)**

Recommendations

- **RECOMMENDATIONS FOR LOCAL JURISDICTIONS:** the complete street case studies and best implementation practices presented in this report point to seven primary recommendations applicable to local jurisdictions in the San Diego region:
  1. In designing roadway improvements, utilize the 2010 Highway Capacity Manual’s Multi-Modal LOS methodology, or other suitable metrics, for examining the tradeoffs between vehicle capacity and accommodations for transit, bicyclists, and pedestrians.
  2. Amend the General Plan or other policy documents as needed to allow the City to accept LOS E or F in corridors where additional safety and access via biking and walking is a priority.
  3. Assess corridors where travel speeds exceed 35 mph for potential complete street improvements, especially near schools, mixed-use corridors, and transit routes.
  4. Conduct a comprehensive assessment of streets with excess capacity where a road diet would make room available within the right of way for bike/pedestrian safety improvements.
  5. Combine pedestrian, bike, and Americans with Disabilities Act (ADA) transition plans with specific transportation goals into a 5-year comprehensive Transportation Action Plan and update it regularly with citizen involvement.
  6. Revise traffic impact study guidelines to reflect Complete Streets goals and requirements (AB 1358) and the 2010 CEQA Guidelines (SB 97).
  7. Adopt a city-wide Complete Streets Ordinance to establish the goal of designing and implementing streets that accommodate all users.

**REGIONAL RECOMMENDATIONS FOR SANDAG**

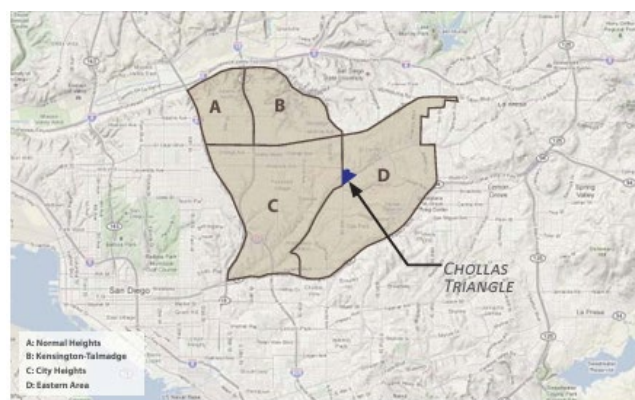
- Adopt a comprehensive Complete Streets policy to integrate the Regional Bike Plan, the Model Pedestrian Design Guidelines, and the Smart Growth Design Guidelines into all relevant SANDAG transportation planning documents.

- For funding of all bicycle and pedestrian improvement projects, prioritize existing Smart Growth Areas, Smart Growth Opportunity Areas, and school access routes.
- Require project applicants for SANDAG funding to utilize the 2010 revisions to the CEQA Guidelines, including completion of a multi-modal LOS analysis.
- Encourage and reward innovation in street design.
  - Establish an evaluation, monitoring and reporting system for active transportation projects.

Issues implementing recommendations in this report:

- Limited funding for street retrofit projects. Cities interviewed reported that the long list of improvements they would like to make far exceeds available funding.
- Insufficient training for staff in complete street concepts. There is interest in new street design concepts among some engineers, but several are only comfortable with existing techniques.
- a culture of risk avoidance. Unless solutions are firmly spelled out in approved engineering standards, engineers are afraid to test slightly new techniques for fear of liability and potential lawsuits. This could be overcome with political leadership for the changes discussed in this report. Changes in design manuals such as the Highway Capacity Manual are critical to give cities the ‘cover’ they desire to implement change.
- Lack of strategic, comprehensive transportation plans with measurable objectives. Cities usually adopt an annual capital improvement program and list of street retrofit projects according to a detailed pavement management plan. Proposed bike and pedestrian facilities are detailed in separate plans and there is little accountability for implementation. a strategic plan could streamline funding and produce greater results by integrating completion of improvements.
- the false perception that traffic congestion is a primary public concern. WalkSanDiego’s extensive experience working with neighborhoods all over the region, as well as SANDAG phone surveys, show that residents’ primary traffic concern is having safe streets, including accessible walking and bicycling routes for them and their children. When asked, residents consistently state they would prefer safer streets to fewer traffic delays. With this in mind, city officials and staff should seek and learn from citizen input on traffic planning decisions, and provide the appropriate balance accommodating all users of the street

### **Chollas Triangle Master Plan (2011)**



*Mid-City Communities*

In 2010, the City of San Diego was awarded a Smart Growth Incentive Program Grant by the San Diego Association of Governments (SANDAG) for the Chollas Triangle Master Plan. The intent of the plan is to provide specific land use and mobility recommendations to encourage a mixed-use, transit-oriented village supported by public/civic park space, open space and creek enhancements for the Chollas Triangle Site.

#### Themes

- Mid-City Communities can be thought of as a medium-size city that is residential in character with commercial activity located along transportation corridors.
- Chollas Triangle's size and central geographic location among Mid-City Communities makes it an ideal location for a multi-functional Community Village Center.
- the communities that surround Chollas Triangle represent a significant base of spending and economic activity.
- the existing zoning designation makes it difficult to create the mixed-use communities center envisioned by the Mid-City Community Plan.
- the site is at the intersection of several planned bicycle network improvements.
- 54th Street & University Avenue is an important component of the transportation network for all modes of transit. It includes the highest number of peak period pedestrians, bicyclists, daily transit boarding and drop-offs in the mobility study area, suggesting that this site is ripe for transit-oriented development pattern.
- topography is an important and challenging component of this site

#### **Azalea Park-Hollywood Park Revitalization Action Plan (2002)**

the Azalea Park and Hollywood Park Revitalization Action Plan (RAP) started in October 2000 with the goal of creating a holistic approach to address revitalization efforts within the neighborhoods of Azalea Park and Hollywood Park in City Heights. Many issues addressed in the Plan are based on the creation of a village-like atmosphere in both neighborhoods.

This document is the beginning of a long and arduous process to revitalize two significant neighborhoods in City Heights. Let this document be used, changed, and shaped to continually provide the elements needed to make these two neighborhoods in City Heights a part of the greatest community in San Diego

#### Recommendations

- 1) Four-way stop signs were requested at Poplar Street and Sycamore as well as Violet Streets to enhance both pedestrian and vehicular safety. Staff analysis determined that these locations do not meet established warrants and policies for stop signs. Traffic engineering staff recommend an increase in enforcement to address safety concerns.
- 2) Two-way stop signs were requested at Dahlia Street and Poplar Street as well as Tulip Street and Pepper Street to enhance both pedestrian and vehicular safety. Staff analysis determined that these locations do not meet established warrants and policies for stop signs. Traffic engineering staff recommend an increase in enforcement to address safety concerns.

- 3) Speed humps were requested at Manzanita Drive from Marlborough Avenue to Columbine Street to enhance both pedestrian and vehicular safety. Staff analysis determined that speed humps do not meet established warrants and policies. Traffic engineering staff recommend an increase in enforcement to address safety concerns.
- 4) a turn-about at the intersection of Poplar Street and Columbine Street was requested to enhance both pedestrian and vehicular safety. Staff analysis determined that a turn-about does not meet established warrants and policies. Traffic engineering staff recommend an increase in enforcement to address safety concerns.

## TRAFFIC/CIRCULATION IMPROVEMENTS: PRIORITIZED RECOMMENDATIONS

#	Recommendation	Implementation	Lead	Sched.	Status	Cost
1	Enhance pedestrian safety at the intersection of Poplar Street and Columbine Street.	Install curb extensions and crosswalks on all four corners of the intersection of Poplar Street and Columbine Street.	City	FY 2002- FY 2003	Under review by Engineering.	To be determined.
2	Improve pedestrian safety and reduce speeding through the area.	Install two-way stop signs at: Glenfield Street and Manzanita Drive; Dahlia Street and Poplar Street; Arbor Vitae and Manzanita Drive; Violet Street and Manzanita Drive; Tulip Street and Pepper Street; and Columbine Street and Manzanita Drive.	City	FY 2002	Traffic engineering determined that Glenfield Street and Manzanita Drive; Arbor Vitae and Manzanita Drive; Violet Street and Manzanita Drive; and Columbine Street and Manzanita Drive meet the criteria for stop signs.	Costs are anticipated to be borne by the affected department.
3	Prevent cut through traffic on Manzanita Place.	Close vehicular access to Manzanita Place from Fairmount Avenue by installing bollards.	City	FY 2002	Initiate a traffic study quantifying impacts.	Costs are anticipated to be borne by the affected department.
4	Alleviate intermittent flooding to surrounding residences.	1) Repair storm drains on Glenfield Street and Fairmount Avenue. 2) Reconstruct damaged storm drain inlets. 3) Create annual program to clean storm drains.	City	FY 2002- FY 2006	Refer to Streets Division.	Costs are anticipated to be borne by the affected department.
5	Reduce speeding throughout the study area.	1) Reduce speeds on Poplar Street through education, signage, and physical traffic calming measures.	City	FY 2001- FY 2006	Reduced speed signage was installed. Physical traffic calming measures are under review & education will be an on-going process.	Costs dependent on measures implemented.
		2) Increase traffic enforcement efforts.		FY 2001- FY 2006	Referred to Police.	Budgeted.
6	Enhance pedestrian and disabled access along Poplar Street.	1) Repair/install curb, gutter and sidewalks consistent with standards established by the Americans with Disabilities Act where sidewalks currently exist. 2) Inform property owners and residents of City's 75/25 sidewalk replacement program.	Property Owner	FY 2002- FY 2006	Utilize City's 75/25 sidewalk replacement program to repair and replace curb, gutter and sidewalks.	It is anticipated that 25% of the costs would be borne by the property owner or resident and the other 75% by the City.

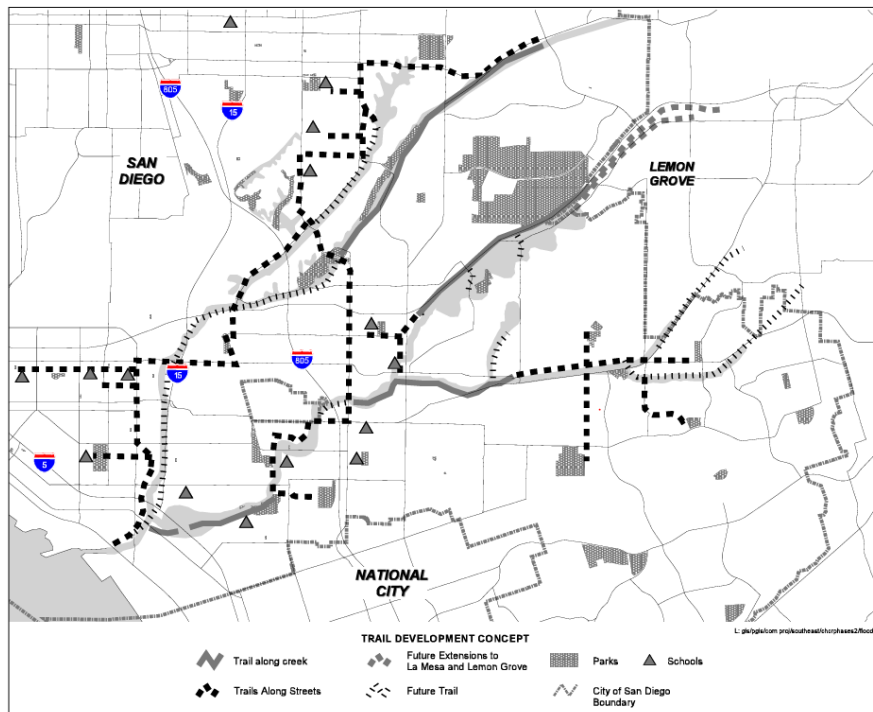
## **Chollas Creek Enhancement Plan (2002)**

Chollas Creek is a natural drainage system that traverses inner-city neighborhoods within the Greater Mid-City (City Heights, Eastern), Encanto Neighborhoods, Southeastern San Diego, and Barrio Logan communities, from its headwaters in La Mesa and Lemon Grove to San Diego Bay.

the Community Vision for Development envisions a Linear Park encompassing the multiple branches of Chollas Creek, with possible natural and urban treatments give existing conditions and design/development opportunities. the vision for the Chollas Creek area is multi-faceted including: maintaining the natural areas in an undisturbed fashion, promoting cohesive new development that integrates buildings, open space, and the creek into successful and useable areas for the community, and restoring channeled creeks in urbanized areas to more natural and safe conditions. **Finally, the vision creates useable linkages throughout the Chollas Creek and the community to San Diego Bay.**

### Recommendations

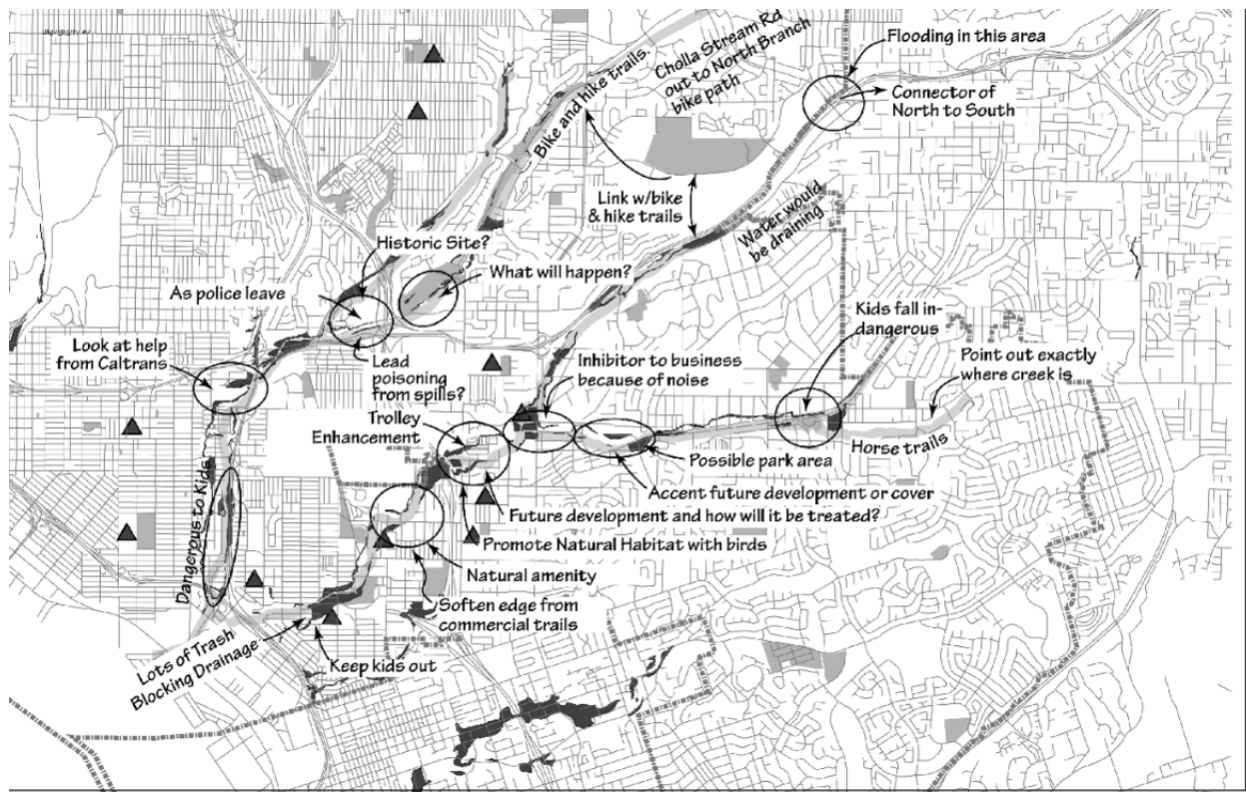
- the trail system will encompass not only the creek-bed and edges, but adjacent streets and open spaces. Some trails will be rural in appearance to complement natural restoration areas, while other trails will be of an urban character linking the creek to various urban areas. Trails will also have an important phasing component related to timing and phasing of public improvements and creek enhancements. For example, trails will not be incorporated in the creek bed until such incorporation is carefully designed and safe.
- “the remaining natural portions of Chollas Creek should be planned as a linear park with bicycle and pedestrian paths along a naturalized or landscaped creek bottom.” (Source: Southeastern San Diego Community Plan page 78)
- a buffer of at least 20 feet should be provided to accommodate a planting strip and shade trees between the creek and the public trail.





## Issues

- In the past 50 years the creek has lost some of its natural geographic features due to freeways and other urban development that have segmented the creek so that in some areas it is barely recognizable as an open space system. the historic channel and floodplain of Chollas Creek has been altered substantially as a result of decades of development and human activity. today, the Chollas Creek-bed is an urban creek with little native vegetation and much of the channel is armored or is concrete channel and culverts. the U.S. Environmental Protection Agency has identified it as an “impaired” water body due to high levels of cadmium, copper, lead, zinc, and other toxicity found in the storm water collected. the creek’s primary environmental value is its contribution to improved downstream water quality as a result of the filtering action of water flow through the channel. Enhancement of the remaining natural or soft bottom sections of the creek-bed will contribute to this overall environmental benefit.



COMMUNITY WORKSHOP ISSUES

L: gis/bgis/com pra/koutheast/chorphases2/rc

## **Euclid Avenue Revitalization Action Program (2000)**

the purpose of the Euclid Avenue Revitalization Action Program (“RAP”) is to identify revitalization strategies for Euclid Avenue and surrounding neighborhoods located between El Cajon Boulevard and Home Avenue. the RAP provides a strategy and action program designed to implement goals and recommendations of the Mid-City Communities Plan based on the objectives identified by residents and business owners during meetings held in the community during 1999.

### Recommendations

- Do not widen Euclid Avenue, except at key intersections where traffic volume requires additional space for turning lanes.
- Limit parking at major intersections to improve sight lines for cross traffic and provide turning lanes as needed.
- Establish “Keep Clear” zones at intersections where gridlock is a chronic problem in order to allow even traffic flow.
- Provide a visual delineation of parking and travel lanes.
- Construct landscaped “curb extensions” to protect parking areas and “bulb-outs” at intersections to shorten the crossing distances for pedestrians.
- Install all-way stops at key intersections to permit cross-traffic movement and to establish a rhythmic traffic movement.
- Establish pedestrian cross walks at all-way stops and traffic lights.
- Relocate the traffic signals at Euclid Avenue and Wightman Street to better control traffic at the off-set intersection.
- Construct dual auto-oriented and pedestrian oriented streetlights to provide adequate lighting for all users of the right-of-way.
- Modify Euclid Avenue / Home Avenue by realigning the east leg of the intersection, to establish a ninety-degree intersection. Landscape the surplus area to create a “gateway” to the Euclid Avenue corridor and establish an entrance into the neighborhood.
- Provide continuous sidewalks throughout the area.

### Themes

- a central recommendation of this program is that the existing roadway not be widened as recommended by the Mid-City Communities Plan (Roadway Improvement Alternatives are illustrated on page 2). While acknowledging the consequences associated with congestion at key intersections, participants in the Revitalization Program felt strongly that the proposed widening of Euclid Avenue would not substantially benefit area residents.
- Euclid Avenue is located in the City Heights portion of the Mid-City Community Planning Area. the neighborhoods surrounding Euclid Avenue are predominantly residential, with multi-family development prevalent north of University Avenue and single-family detached development south of University Avenue. Euclid Avenue between El Cajon Boulevard and University Avenue is predominantly residential, containing a mix of single-family homes, apartment courts and apartment buildings.



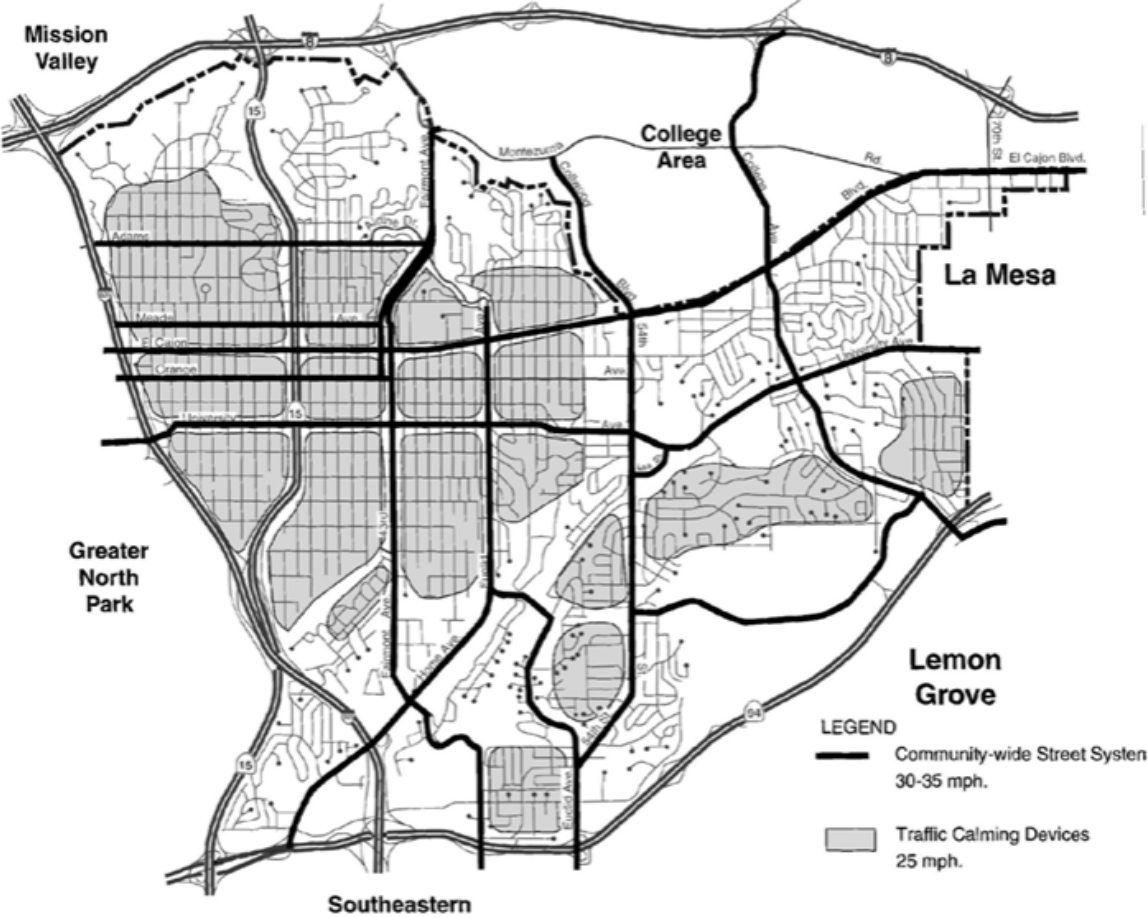
### **Mid-City Communities Plan (1998)**

the Mid-City Communities Plan (Plan) represents the second update to one of the first community plans in San Diego: the 1965 “Mid-City Development Plan.” This update was prepared by the City of San Diego Community and Economic Development staff who were hired by the four Mid-City Communities Planning Groups as their technical consultants. With this update, the Plan has taken on a look quite different from its predecessors, and in fact quite different from all other City of San Diego community plans.

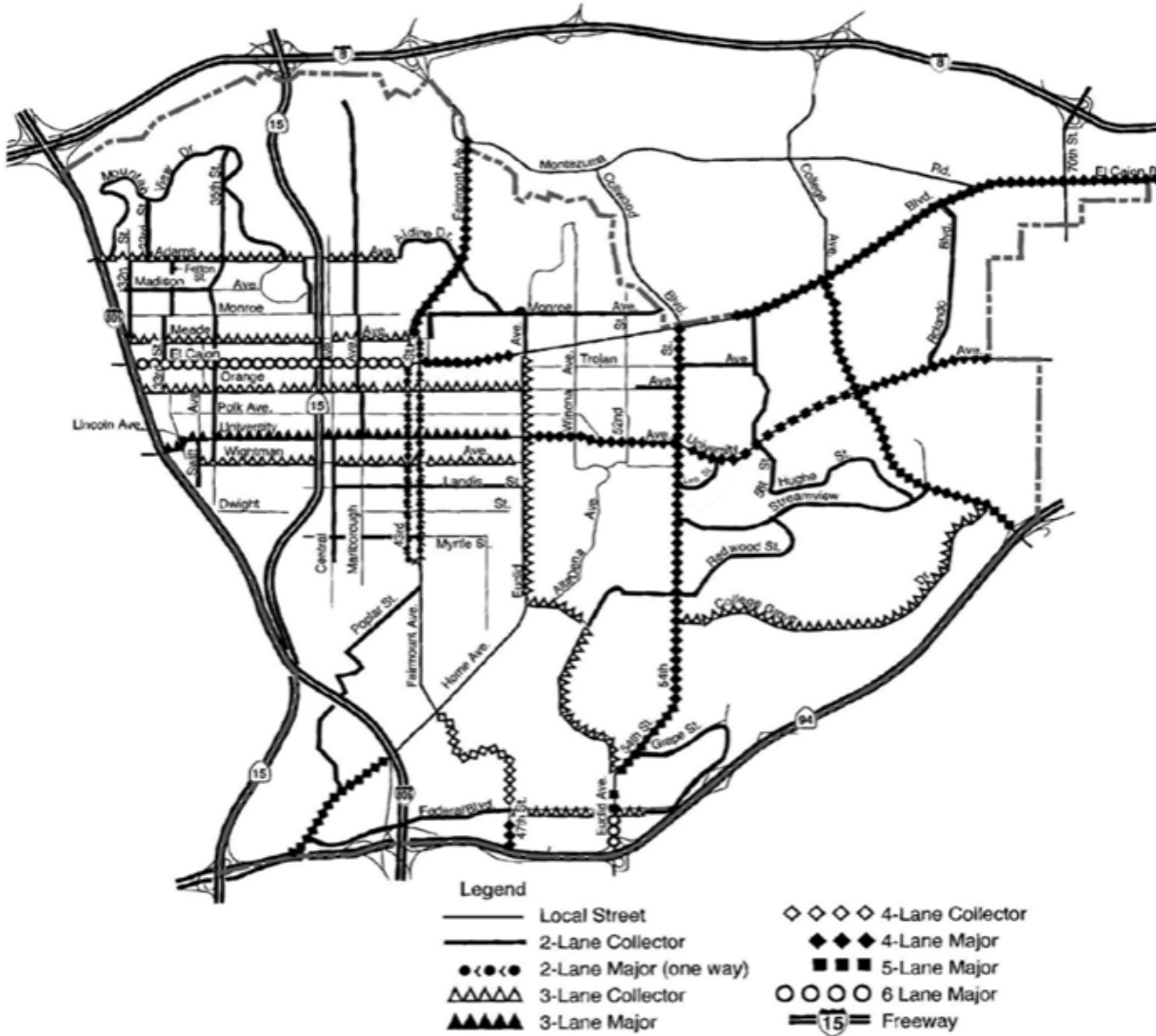
#### Recommendations

- Lea Street will connect 54th Street to University Avenue to form the fourth leg of the controlled intersection near Promise Drive. the specific location and design of the intersection alignment of Lea Street and University Avenue would be subject to further engineering analysis to the satisfaction of the City Engineer. This alignment forms the northern edge of the park, creating a highly visible and accessible open space. Buildings should front Lea Street to take advantage of creek and park views and provide informal observation of the park.
- Development within the site should capitalize on the regional bus connectivity, particularly at the intersection of University Avenue & 54th Street. the southeast corner of this intersection is envisioned as an enhanced transit plaza with ample room and comfortable waiting areas for transit patrons. Amenities should include bus shelters, seating, trash cans, bicycle parking and transit information. Improvements to the University Avenue and 54th Street intersection will enhance pedestrian safety and connect the project site to adjacent neighborhoods, businesses, and open space.
- the University Avenue Mobility Study has identified elimination of the channelized right turns on the westbound and southbound approaches of this intersection. This will improve safety by shortening pedestrian crossing distances, improving visibility, and reducing conflicts between all modes of transportation.
- the plan envisions the vacation of Chollas Parkway and the realignment of Lea Street to a two-lane collector street that connects University Avenue and 54th Street to reduce cut-through traffic, improving the pedestrian environment and overall livability for residents. a new signalized intersection will be located along University Avenue, eliminating the need for the existing complicated intersection at University Avenue and Chollas Parkway. Non-contiguous sidewalks with ample landscape zones should be provided to create a safe and pleasant pedestrian environment should be provided on all internal development streets as well as any public streets that interface with the CPIOZ area. On-street parking will provide an additional buffer between traffic lanes and pedestrians.
- the Chollas Triangle design principles promote an active and pedestrian scale street environment that encourages street activity and walkability. the existing, expansive parking lots will be replaced by dispersed surface lots behind buildings, on street parking, or in parking structures. Ample bike parking should be provided near bus stops, commercial areas, and multifamily development.
- Improved connectivity to adjacent neighborhoods will make cycling more convenient and encourage transit use. Consideration should be given to designating bicycle parking areas for short and long-term use at commercial and residential locations.

FIGURE 15. NEIGHBORHOOD STREETS



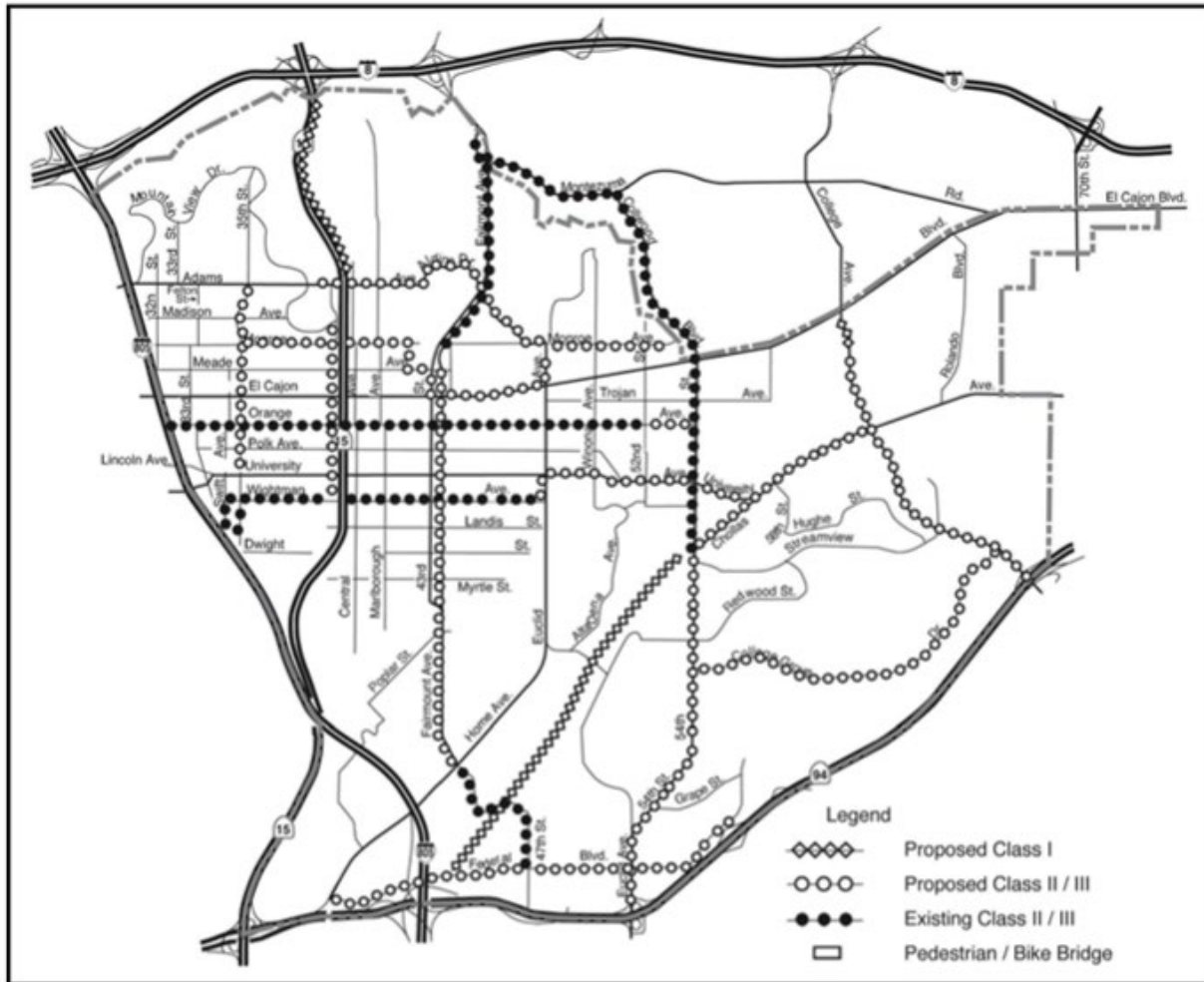
**FIGURE 24. FUTURE RECOMMENDED STREET NETWORK**



- Required intersection improvements to bring intersection levels of service to D or better are as follows:
- Federal Boulevard/Euclid Avenue
  - Widen southbound Euclid Avenue to provide one left-turn, two through, and a shared right and through lane. Widen eastbound Federal Boulevard to provide two left-turns, one through, and one shared right and through lane.
- I-805 Southbound On-Off Ramps/Home Avenue
  - Widen westbound approach (Home Avenue) by narrowing and relocating the median, to provide two left-turn and two existing through lanes.
- El Cajon Boulevard/70th Street
  - Widen El Cajon Boulevard to provide two eastbound left-turn lanes.
  - Widen eastbound University Avenue to provide one left-turn, two through, and one right turn lane as redevelopment occurs.

- There should be no narrowing of sidewalks. Widen northbound Euclid Avenue to provide one left-turn, one through, and one right-turn lane.
- University Avenue/Boundary Street
  - Widen the northbound Boundary Street to provide one left-turn lane, one through lane and one right-turn lane.

**Figure 29  
Bikeways**



**Issues**

- Normal Heights Issues
  - Public facilities are seriously deficient.
  - Adams School is seriously overcrowded.
  - the community is deficient in the number of parks and park space needed.
  - There is no library in this community.
  - the construction of SR-15 has presented problems to address, such as noise, visual impact, and traffic circulation. Opportunities are also presented, such as for new parks, freeway and transit access, and a new “Mid-City Center” at the SR-15 and El Cajon Boulevard interchange.

- Some residential properties are deteriorating, and commercial properties need further revitalization.
- Speeding and cut-through traffic is disrupting residential neighborhoods.
- Commercial parking is deficient with on-street parking overflowing into the neighborhoods.
- the Mission Valley slopes are both an asset to be preserved in their natural passive state, and a potential fire hazard.
- Water and sewer lines are deteriorating.
- Street trees and streetlights are inadequate.
- Sidewalks, curbs, and gutters are in need of repair.
- a combined pedestrian and bicycle linkage over SR-15 at Monroe Street is needed, with a minimum 12-foot width
- KENSINGTON-TALMADGE ISSUES
  - Schools are overcrowded and park space is deficient.
  - the library does not meet General Plan standards, but maintenance of the existing library site and the surrounding park is preferred.
  - the construction of SR-15 has presented both problems to address, such as noise, visual impact, and traffic circulation; and opportunities, such as developing new parking areas, freeway and transit access, and a new “Mid-City Center” at the SR-15 and El Cajon Boulevard interchange.
  - Some residential properties south of Monroe Avenue are deteriorating, and commercial properties on El Cajon Boulevard are in need of revitalization.
  - Speeding and cut-through traffic is disrupting portions of residential neighborhood streets.
  - Commercial parking is deficient with on-street parking overflowing into the neighborhoods.
  - the slopes surrounding Kensington-Talmadge are both an asset to be preserved in their natural passive state without intrusion, and a potential fire hazard.
  - Sidewalks and water and sewer lines are deteriorated.
  - Street trees and streetlights are inadequate.
- City Heights Issues
  - In spite of the addition of new facilities, schools remain severely overcrowded and parks are deficient.
  - While presenting some problems, the construction of SR-15 presents the opportunity for new business development surrounding the University Avenue interchange.
  - the very high demand for public transit outstrips the available service.
  - Residential rehabilitation and commercial revitalization are needed.
  - Commercial parking is deficient with on-street parking overflowing into the neighborhoods.
  - Sidewalks and water and sewer lines are deteriorated.
  - Street trees are lacking.
  - the social and cultural needs of the culturally diverse sectors of the population need to be addressed.

## **The Mountain View District: a Re-building plan for Normal Heights (1985)**

The Mountain View District Re-building Plan is a result of a three-day design charrette community workshop which provided an excellent opportunity for CDAT to assist in identifying appropriate objectives, goals, and priorities for your neighborhood, residence, and canyon areas.

The Normal Heights neighborhood was ravaged by the most destructive fire in San Diego's history on Sunday, June 30, 1985. Within 24 hours of the incident, literally while the site continued to smolder, efforts to rebuild began. The San Diego Chapter of the American Institute of Architects contacted community leaders, offering assistance, and received an immediate invitation to bring the resources of the institute to bear.

## **North Park Mid-City Regional Bike Corridors Project (on-going)**

During the planning phase, SANDAG worked closely with community stakeholders and the City of San Diego to establish the project goals, define the recommended alignments, and develop preliminary design concepts for select locations along the bikeways. The schedules for the seven North Park | Mid-City Bikeway segments vary depending on design progress for each segment. The Georgia — Meade and Landis Bikeways are currently in the construction phase and are expected to open to the public in 2022. The Howard, Robinson, and University Bikeway segments are currently in final design, which will extend through 2020. The Orange Bikeway project received environmental clearance in mid-2019, advancing the project into the final design phase. The Monroe Bikeway is currently in the planning phase.





## Appendix C - Count Sheets

2) Adams Ave & W Mountain View Dr

City of San Diego  
 N/S: W Mountain View Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 02\_SDG\_Mtn V\_Adams AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	W Mountain View Drive Southbound			Adams Avenue Westbound			Adams Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	3	9	12	43	3	46	18	109	127	185
07:15 AM	13	14	27	62	2	64	10	109	119	210
07:30 AM	11	12	23	64	4	68	10	132	142	233
07:45 AM	8	18	26	101	3	104	12	166	178	308
Total	35	53	88	270	12	282	50	516	566	936
08:00 AM	7	16	23	68	7	75	15	165	180	278
08:15 AM	12	14	26	77	1	78	9	131	140	244
08:30 AM	10	10	20	68	7	75	17	133	150	245
08:45 AM	8	10	18	95	2	97	11	133	144	259
Total	37	50	87	308	17	325	52	562	614	1026
Grand Total	72	103	175	578	29	607	102	1078	1180	1962
Apprch %	41.1	58.9		95.2	4.8		8.6	91.4		
Total %	3.7	5.2	8.9	29.5	1.5	30.9	5.2	54.9	60.1	

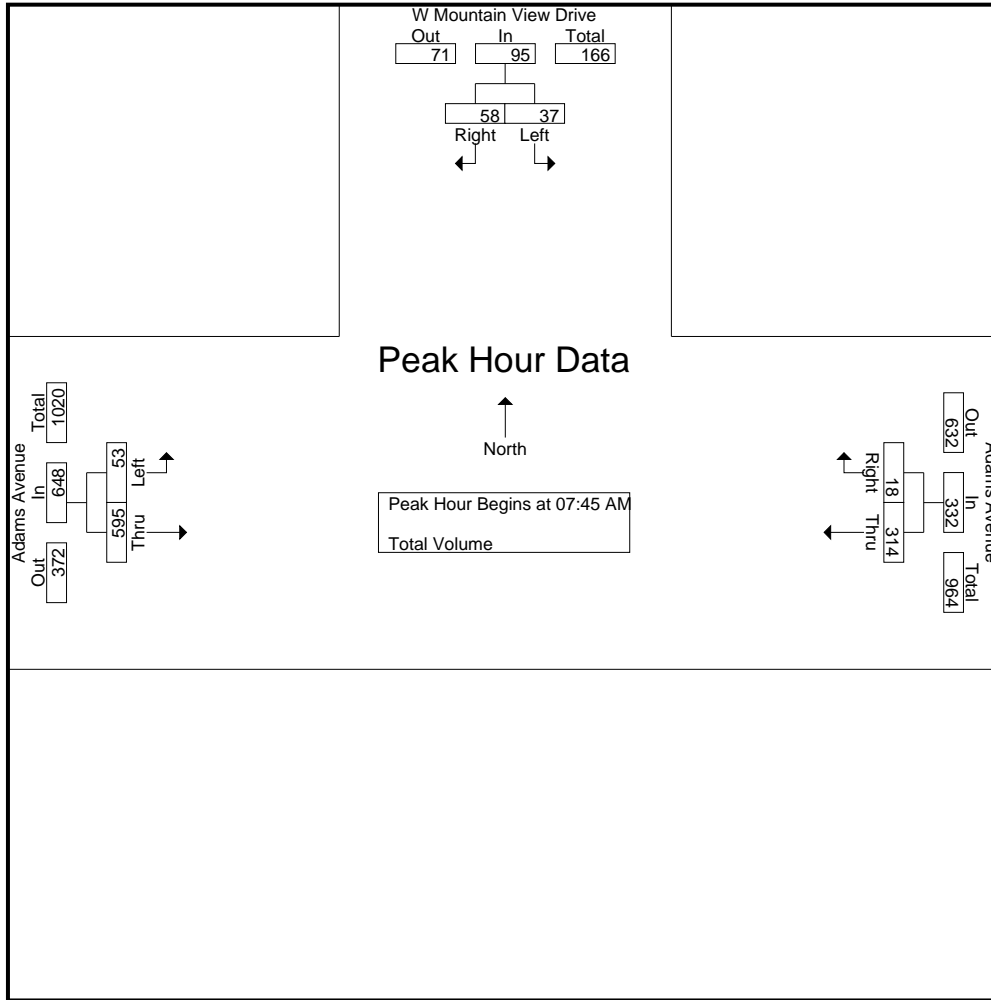
Start Time	W Mountain View Drive Southbound			Adams Avenue Westbound			Adams Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:45 AM	8	<b>18</b>	<b>26</b>	<b>101</b>	3	<b>104</b>	12	<b>166</b>	178	<b>308</b>
08:00 AM	7	16	23	68	7	75	15	165	180	278
08:15 AM	12	14	26	77	1	78	9	131	140	244
08:30 AM	10	10	20	68	7	75	17	133	150	245
Total Volume	37	58	95	314	18	332	53	595	648	1075
% App. Total	38.9	61.1		94.6	5.4		8.2	91.8		
PHF	.771	.806	.913	.777	.643	.798	.779	.896	.900	.873

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of San Diego  
 N/S: W Mountain View Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 02\_SDG\_Mtn V\_Adams AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:15 AM			07:45 AM			07:45 AM		
+0 mins.	<b>13</b>	14	<b>27</b>	<b>101</b>	3	<b>104</b>	12	<b>166</b>	178
+15 mins.	11	12	23	68	<b>7</b>	75	15	165	<b>180</b>
+30 mins.	8	<b>18</b>	26	77	1	78	9	131	140
+45 mins.	7	16	23	68	7	75	<b>17</b>	133	150
Total Volume	39	60	99	314	18	332	53	595	648
% App. Total	39.4	60.6		94.6	5.4		8.2	91.8	
PHF	.750	.833	.917	.777	.643	.798	.779	.896	.900

City of San Diego  
 N/S: W Mountain View Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 02\_SDG\_Mtn V\_Adams MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

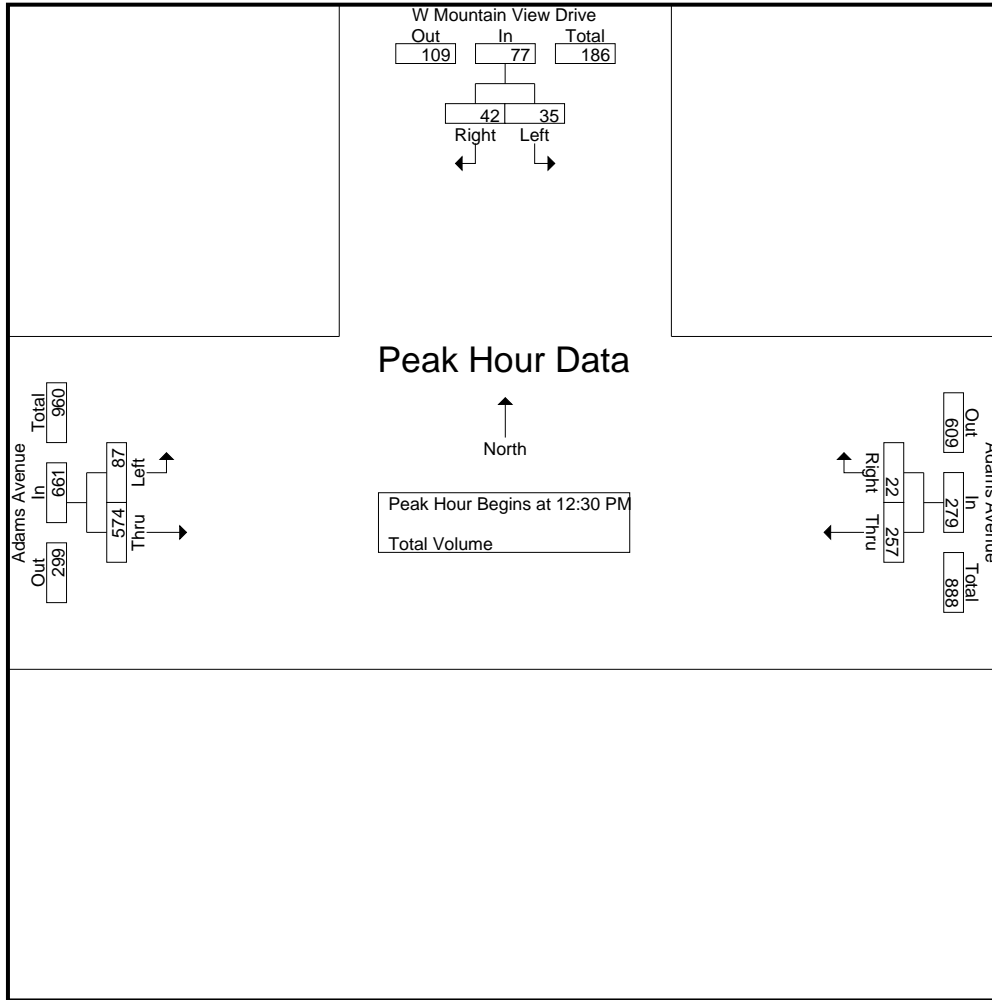
Start Time	W Mountain View Drive Southbound			Adams Avenue Westbound			Adams Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
11:30 AM	5	11	16	58	10	68	19	128	147	231
11:45 AM	3	7	10	49	3	52	13	149	162	224
Total	8	18	26	107	13	120	32	277	309	455
12:00 PM	3	11	14	61	4	65	18	148	166	245
12:15 PM	10	10	20	57	7	64	22	128	150	234
12:30 PM	12	12	24	69	2	71	22	132	154	249
12:45 PM	7	13	20	48	7	55	19	163	182	257
Total	32	46	78	235	20	255	81	571	652	985
01:00 PM	8	4	12	74	8	82	23	142	165	259
01:15 PM	8	13	21	66	5	71	23	137	160	252
Grand Total	56	81	137	482	46	528	159	1127	1286	1951
Apprch %	40.9	59.1		91.3	8.7		12.4	87.6		
Total %	2.9	4.2	7	24.7	2.4	27.1	8.1	57.8	65.9	

Start Time	W Mountain View Drive Southbound			Adams Avenue Westbound			Adams Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
12:30 PM	12	12	24	69	2	71	22	132	154	249
12:45 PM	7	13	20	48	7	55	19	163	182	257
01:00 PM	8	4	12	74	8	82	23	142	165	259
01:15 PM	8	13	21	66	5	71	23	137	160	252
Total Volume	35	42	77	257	22	279	87	574	661	1017
% App. Total	45.5	54.5		92.1	7.9		13.2	86.8		
PHF	.729	.808	.802	.868	.688	.851	.946	.880	.908	.982

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:30 PM

City of San Diego  
 N/S: W Mountain View Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 02\_SDG\_Mtn V\_Adams MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:00 PM			12:30 PM			12:30 PM		
+0 mins.	3	11	14	69	2	71	22	132	154
+15 mins.	10	10	20	48	7	55	19	<b>163</b>	<b>182</b>
+30 mins.	<b>12</b>	12	<b>24</b>	<b>74</b>	<b>8</b>	<b>82</b>	<b>23</b>	142	165
+45 mins.	7	<b>13</b>	20	66	5	71	23	137	160
Total Volume	32	46	78	257	22	279	87	574	661
% App. Total	41	59		92.1	7.9		13.2	86.8	
PHF	.667	.885	.813	.868	.688	.851	.946	.880	.908

City of San Diego  
 N/S: W Mountain View Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 02\_SDG\_Mtn V\_Adams PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

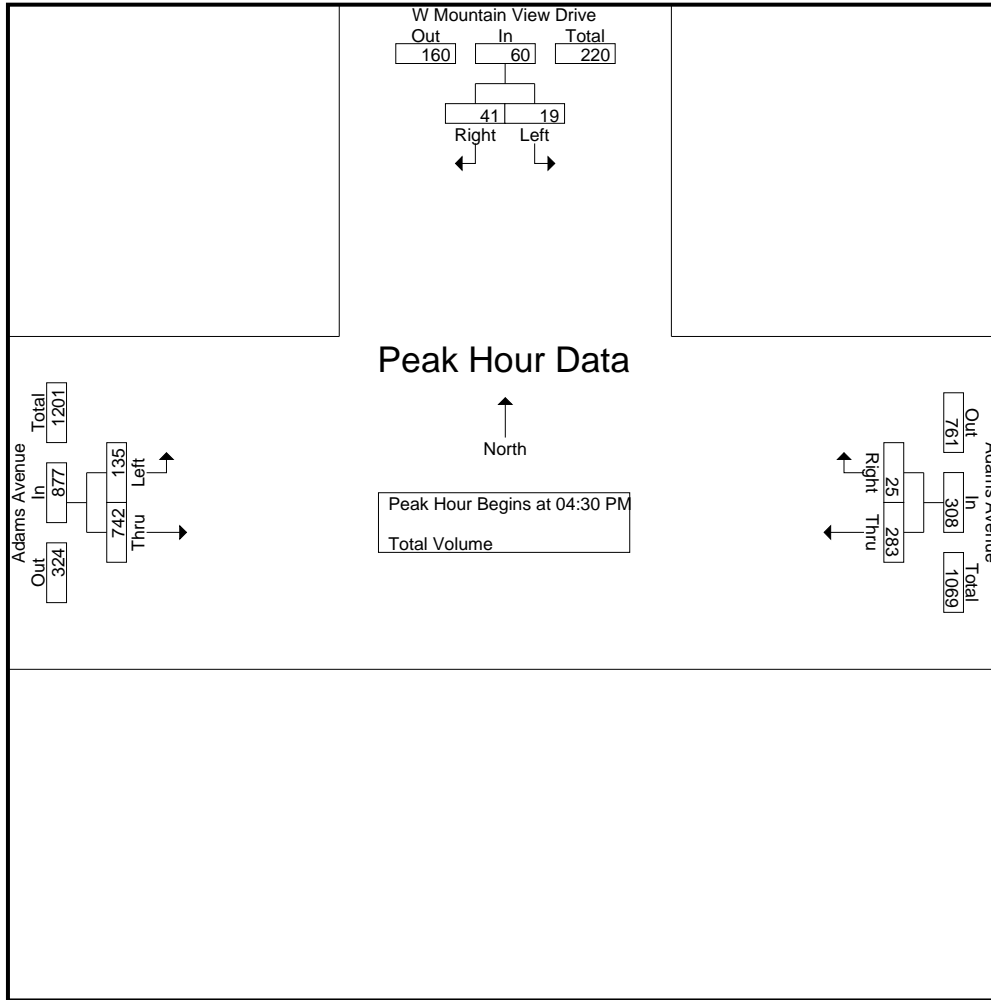
Start Time	W Mountain View Drive Southbound			Adams Avenue Westbound			Adams Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	5	13	18	67	6	73	28	182	210	301
04:15 PM	5	6	11	60	2	62	25	171	196	269
04:30 PM	5	11	16	77	9	86	26	188	214	316
04:45 PM	6	13	19	84	8	92	28	183	211	322
Total	21	43	64	288	25	313	107	724	831	1208
05:00 PM	3	10	13	67	5	72	41	199	240	325
05:15 PM	5	7	12	55	3	58	40	172	212	282
05:30 PM	9	15	24	61	5	66	37	173	210	300
05:45 PM	1	8	9	63	6	69	37	174	211	289
Total	18	40	58	246	19	265	155	718	873	1196
Grand Total	39	83	122	534	44	578	262	1442	1704	2404
Apprch %	32	68		92.4	7.6		15.4	84.6		
Total %	1.6	3.5	5.1	22.2	1.8	24	10.9	60	70.9	

Start Time	W Mountain View Drive Southbound			Adams Avenue Westbound			Adams Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	5	11	16	77	9	86	26	188	214	316
04:45 PM	6	13	19	84	8	92	28	183	211	322
05:00 PM	3	10	13	67	5	72	41	199	240	325
05:15 PM	5	7	12	55	3	58	40	172	212	282
Total Volume	19	41	60	283	25	308	135	742	877	1245
% App. Total	31.7	68.3		91.9	8.1		15.4	84.6		
PHF	.792	.788	.789	.842	.694	.837	.823	.932	.914	.958

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of San Diego  
 N/S: W Mountain View Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 02\_SDG\_Mtn V\_Adams PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:00 PM			04:30 PM		
+0 mins.	6	13	19	67	6	73	26	188	214
+15 mins.	3	10	13	60	2	62	28	183	211
+30 mins.	5	7	12	77	9	86	41	199	240
+45 mins.	9	15	24	84	8	92	40	172	212
Total Volume	23	45	68	288	25	313	135	742	877
% App. Total	33.8	66.2		92	8		15.4	84.6	
PHF	.639	.750	.708	.857	.694	.851	.823	.932	.914



Location: San Diego  
 N/S: W Mountain View Drive  
 E/W: Adams Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg W Mountain View Drive	East Leg Adams Avenue	South Leg Dead End	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	3	0	0	0	3
7:15 AM	4	0	0	1	5
7:30 AM	5	0	0	0	5
7:45 AM	7	0	0	0	7
8:00 AM	4	2	0	0	6
8:15 AM	5	0	0	0	5
8:30 AM	2	0	0	0	2
8:45 AM	3	0	0	0	3
TOTAL VOLUMES:	33	2	0	1	36

	North Leg W Mountain View Drive	East Leg Adams Avenue	South Leg Dead End	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	1	0	0	0	1
11:45 AM	4	0	0	0	4
12:00 PM	7	0	0	0	7
12:15 PM	6	0	0	0	6
12:30 PM	1	0	0	0	1
12:45 PM	3	0	0	0	3
1:00 PM	2	0	0	0	2
1:15 PM	4	0	0	0	4
TOTAL VOLUMES:	28	0	0	0	28

	North Leg W Mountain View Drive	East Leg Adams Avenue	South Leg Dead End	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	12	0	0	0	12
4:15 PM	10	0	0	0	10
4:30 PM	3	0	0	0	3
4:45 PM	17	0	0	0	17
5:00 PM	7	0	0	1	8
5:15 PM	9	0	0	1	10
5:30 PM	7	1	0	0	8
5:45 PM	10	0	0	0	10
TOTAL VOLUMES:	75	1	0	2	78

Location: San Diego  
 N/S: W Mountain View Drive  
 E/W: Adams Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

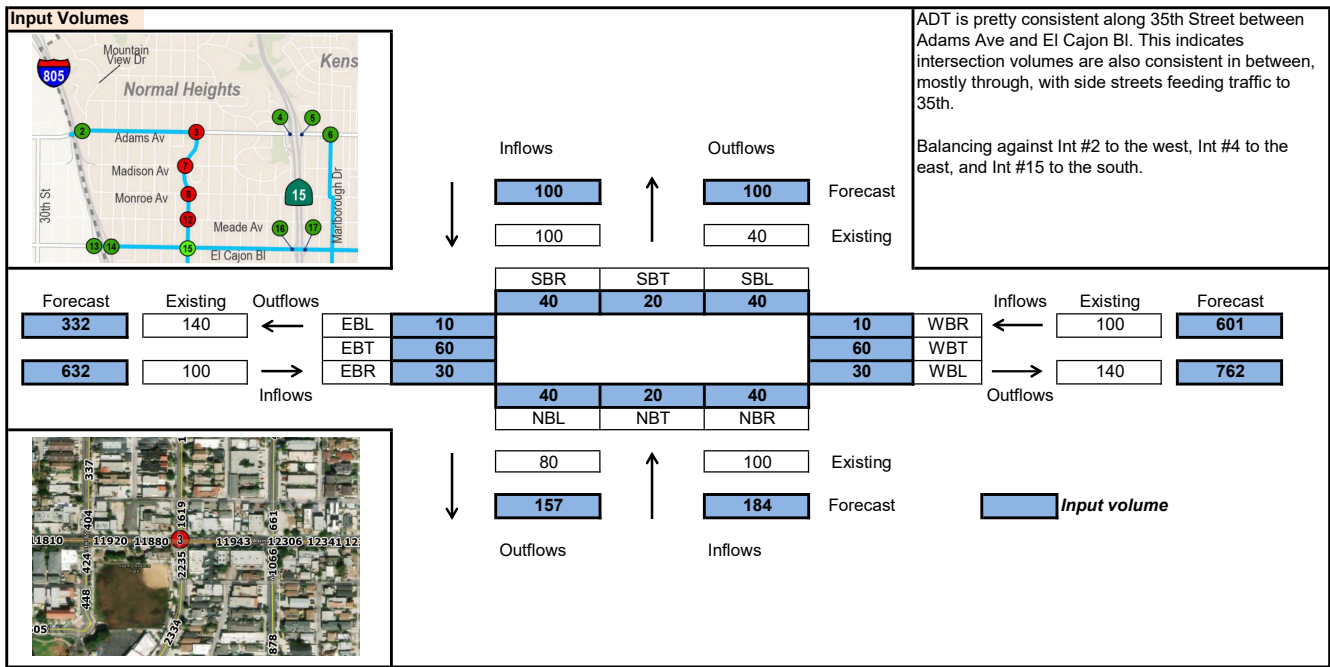
	Southbound W Mountain View Drive			Westbound Adams Avenue			Northbound Dead End			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
7:15 AM	0	0	3	0	2	0	0	0	0	0	0	0	5
7:30 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	1	0	0	0	0	1	1	0	3
8:00 AM	0	0	1	0	0	0	0	0	0	0	2	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	3
8:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	2
8:45 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
TOTAL VOLUMES:	0	0	5	0	8	0	0	0	0	5	6	0	24

	Southbound W Mountain View Drive			Westbound Adams Avenue			Northbound Dead End			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	1	0	1	0	4	0	0	0	0	0	0	0	6
11:45 AM	0	0	0	0	2	0	0	0	0	0	2	0	4
12:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
12:15 PM	0	0	0	0	3	0	0	0	0	0	1	0	4
12:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	2	0	0	0	0	0	3	0	5
1:00 PM	0	0	1	0	2	0	0	0	0	0	2	0	5
1:15 PM	0	0	1	0	0	0	0	0	0	0	3	0	4
TOTAL VOLUMES:	1	0	4	0	15	0	0	0	0	0	12	0	32

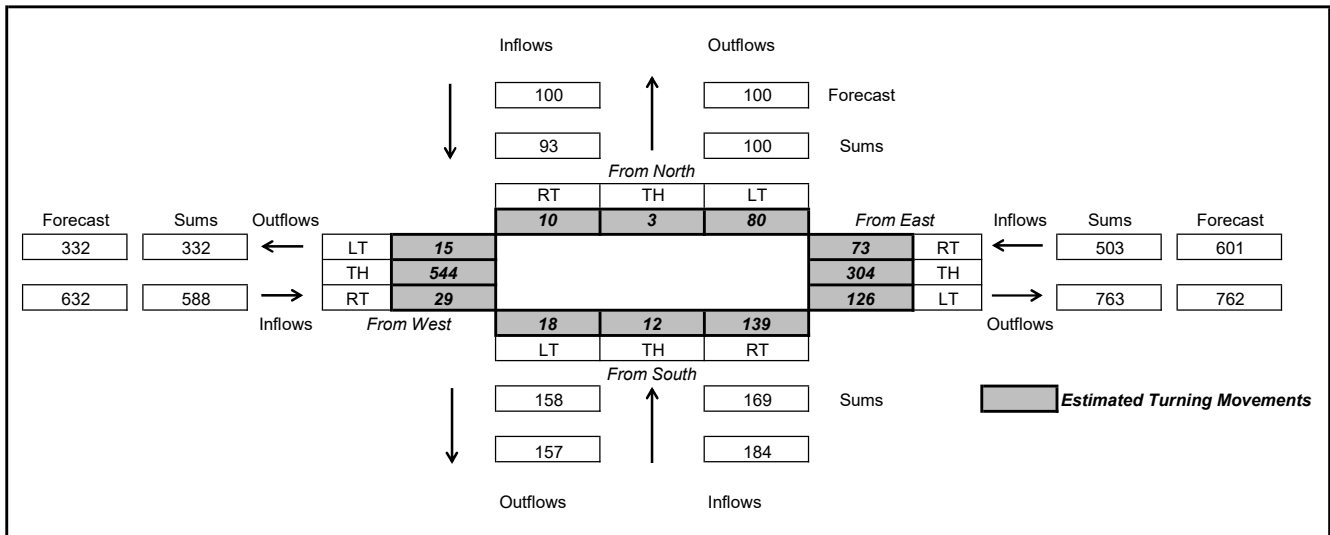
	Southbound W Mountain View Drive			Westbound Adams Avenue			Northbound Dead End			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	2	0	2	0	0	0	0	0	2	0	6
4:15 PM	0	0	0	0	4	0	0	0	0	2	4	0	10
4:30 PM	0	0	1	0	1	0	0	0	0	1	3	0	6
4:45 PM	0	0	1	0	2	0	0	0	0	1	5	0	9
5:00 PM	0	0	2	0	2	0	0	0	0	2	2	0	8
5:15 PM	0	0	0	0	2	0	0	0	0	0	3	0	5
5:30 PM	0	0	0	0	7	0	0	0	0	0	6	0	13
5:45 PM	0	0	0	0	1	0	0	0	0	0	3	0	4
TOTAL VOLUMES:	0	0	6	0	21	0	0	0	0	6	28	0	61

3) 35th St & Adams Ave

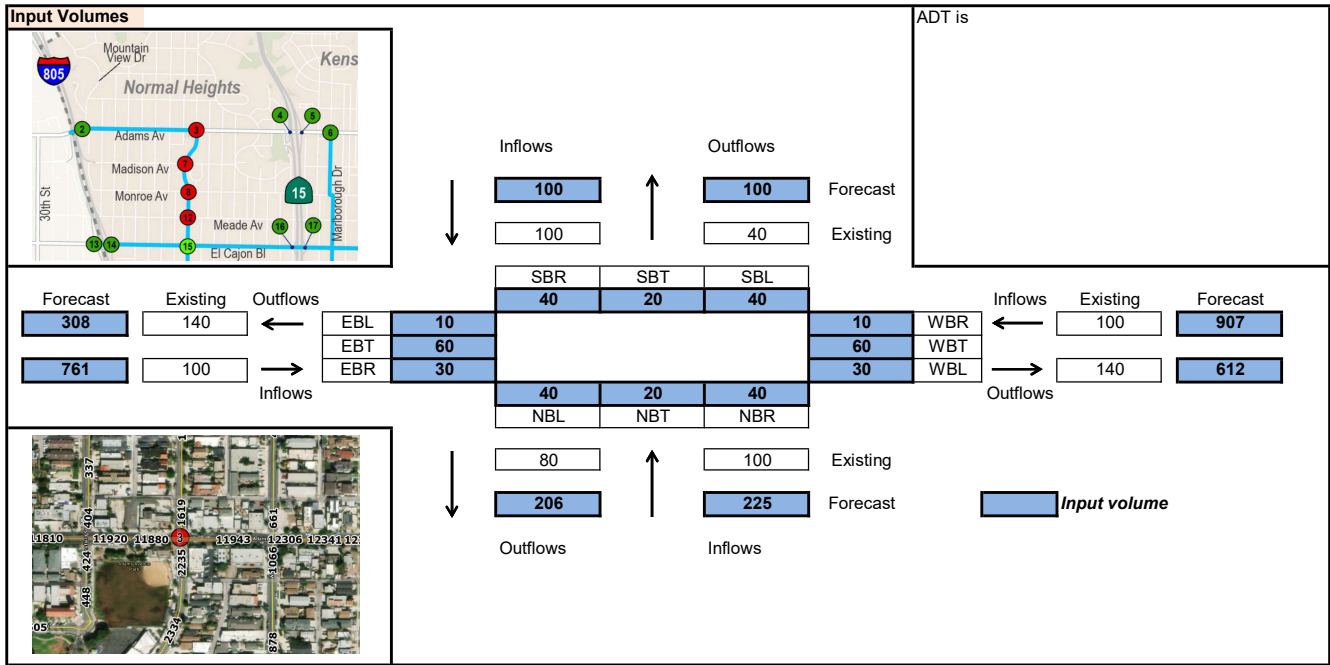
### Iterative Method Estimated Turning Movements



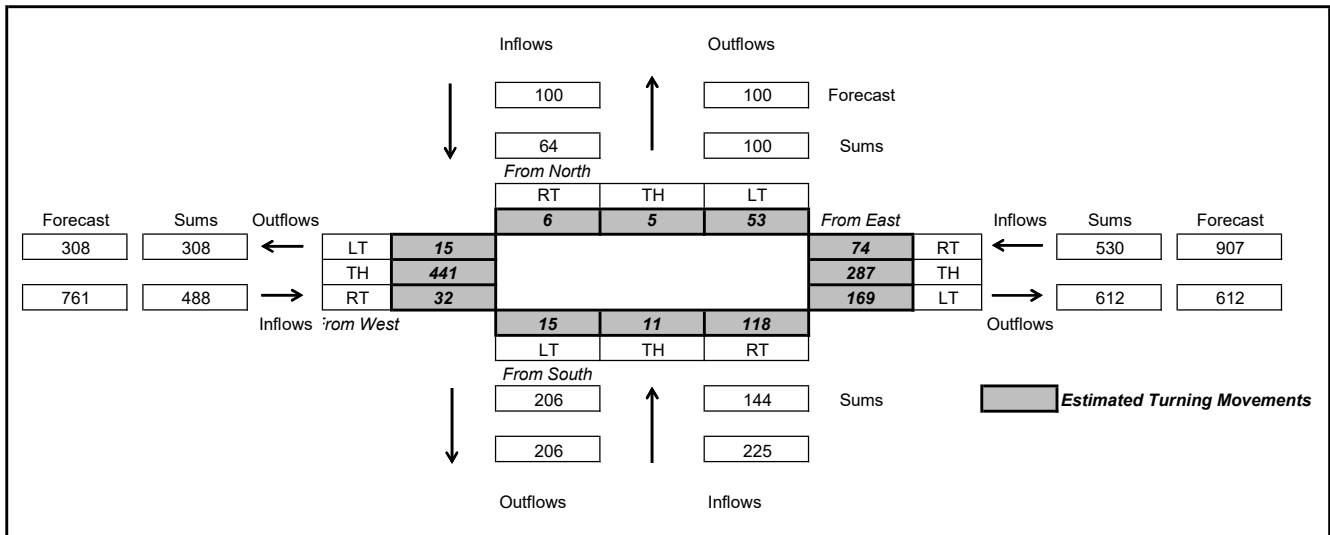
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



### Estimated Turning Movements



4) 40th St & Adams Ave

City of San Diego  
 N/S: Bonnie Ct/40th Street  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 03\_SDG\_40th\_Adams AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Bonnie Court Southbound				Adams Avenue Westbound				40th Street Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	20	50	0	70	32	0	21	53	0	68	32	100	223
07:15 AM	0	0	0	0	25	82	0	107	51	0	28	79	0	88	58	146	332
07:30 AM	0	0	0	0	51	87	0	138	41	0	25	66	0	118	93	211	415
07:45 AM	0	0	0	0	37	130	0	167	73	0	34	107	0	121	82	203	477
Total	0	0	0	0	133	349	0	482	197	0	108	305	0	395	265	660	1447
08:00 AM	0	0	0	0	36	85	0	121	52	0	46	98	1	113	72	186	405
08:15 AM	0	0	0	0	33	79	0	112	54	0	40	94	0	101	61	162	368
08:30 AM	0	0	0	0	24	104	0	128	64	0	49	113	0	72	41	113	354
08:45 AM	0	0	0	0	28	114	0	142	59	0	61	120	0	113	62	175	437
Total	0	0	0	0	121	382	0	503	229	0	196	425	1	399	236	636	1564
Grand Total	0	0	0	0	254	731	0	985	426	0	304	730	1	794	501	1296	3011
Apprch %	0	0	0		25.8	74.2	0		58.4	0	41.6		0.1	61.3	38.7		
Total %	0	0	0		8.4	24.3	0	32.7	14.1	0	10.1	24.2	0	26.4	16.6	43	

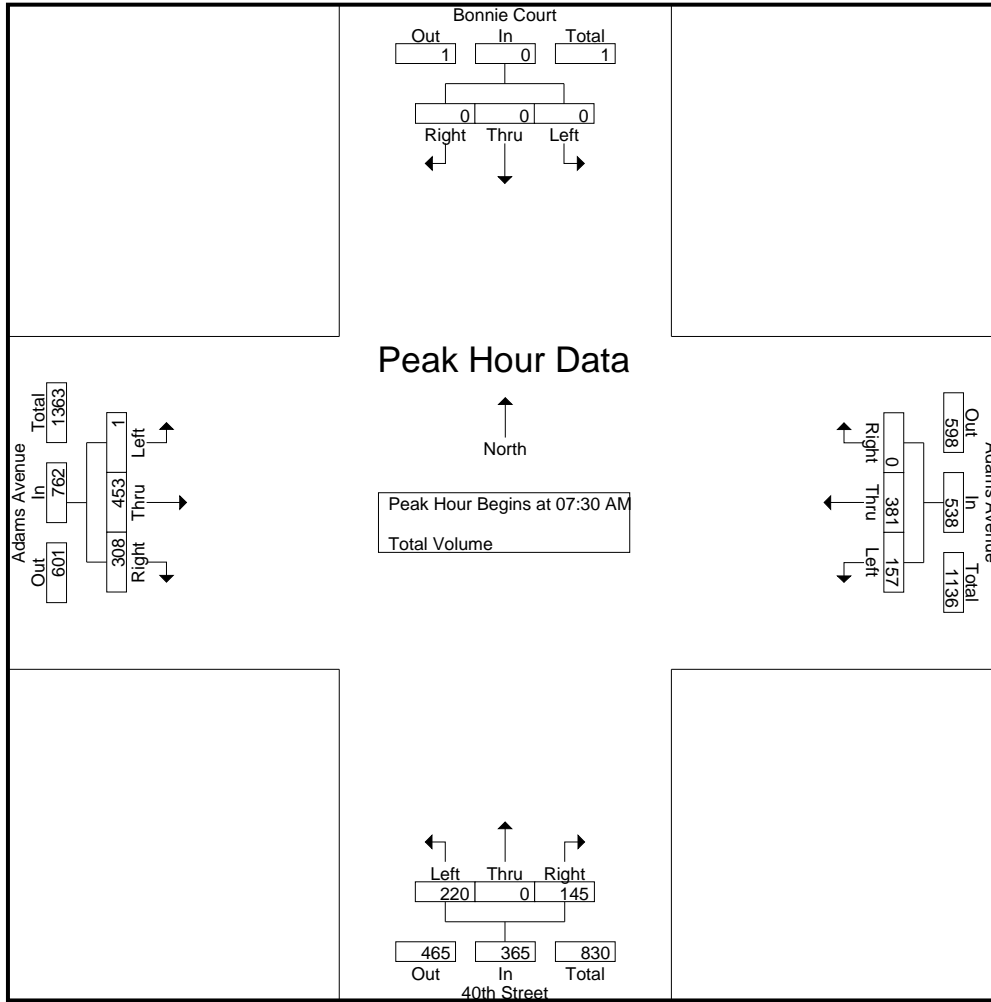
Start Time	Bonnie Court Southbound				Adams Avenue Westbound				40th Street Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	<b>51</b>	87	0	138	41	0	25	66	0	118	<b>93</b>	<b>211</b>	415
07:45 AM	0	0	0	0	37	<b>130</b>	0	<b>167</b>	<b>73</b>	0	34	<b>107</b>	0	<b>121</b>	82	203	<b>477</b>
08:00 AM	0	0	0	0	36	85	0	121	52	0	<b>46</b>	98	<b>1</b>	113	72	186	405
08:15 AM	0	0	0	0	33	79	0	112	54	0	40	94	0	101	61	162	368
Total Volume	0	0	0	0	157	381	0	538	220	0	145	365	1	453	308	762	1665
% App. Total	0	0	0		29.2	70.8	0		60.3	0	39.7		0.1	59.4	40.4		
PHF	.000	.000	.000	.000	.770	.733	.000	.805	.753	.000	.788	.853	.250	.936	.828	.903	.873

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM

City of San Diego  
 N/S: Bonnie Ct/40th Street  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 03\_SDG\_40th\_Adams AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				08:00 AM				07:30 AM			
+0 mins.	0	0	0	0	<b>51</b>	87	0	138	52	0	46	98	0	118	<b>93</b>	<b>211</b>
+15 mins.	0	0	0	0	37	<b>130</b>	0	<b>167</b>	54	0	40	94	0	<b>121</b>	82	203
+30 mins.	0	0	0	0	36	85	0	121	<b>64</b>	0	49	113	<b>1</b>	113	72	186
+45 mins.	0	0	0	0	33	79	0	112	59	0	<b>61</b>	<b>120</b>	0	101	61	162
Total Volume	0	0	0	0	157	381	0	538	229	0	196	425	1	453	308	762
% App. Total	0	0	0	0	29.2	70.8	0		53.9	0	46.1		0.1	59.4	40.4	
PHF	.000	.000	.000	.000	.770	.733	.000	.805	.895	.000	.803	.885	.250	.936	.828	.903



City of San Diego  
 N/S: Bonnie Ct/40th Street  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 03\_SDG\_40th\_Adams MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

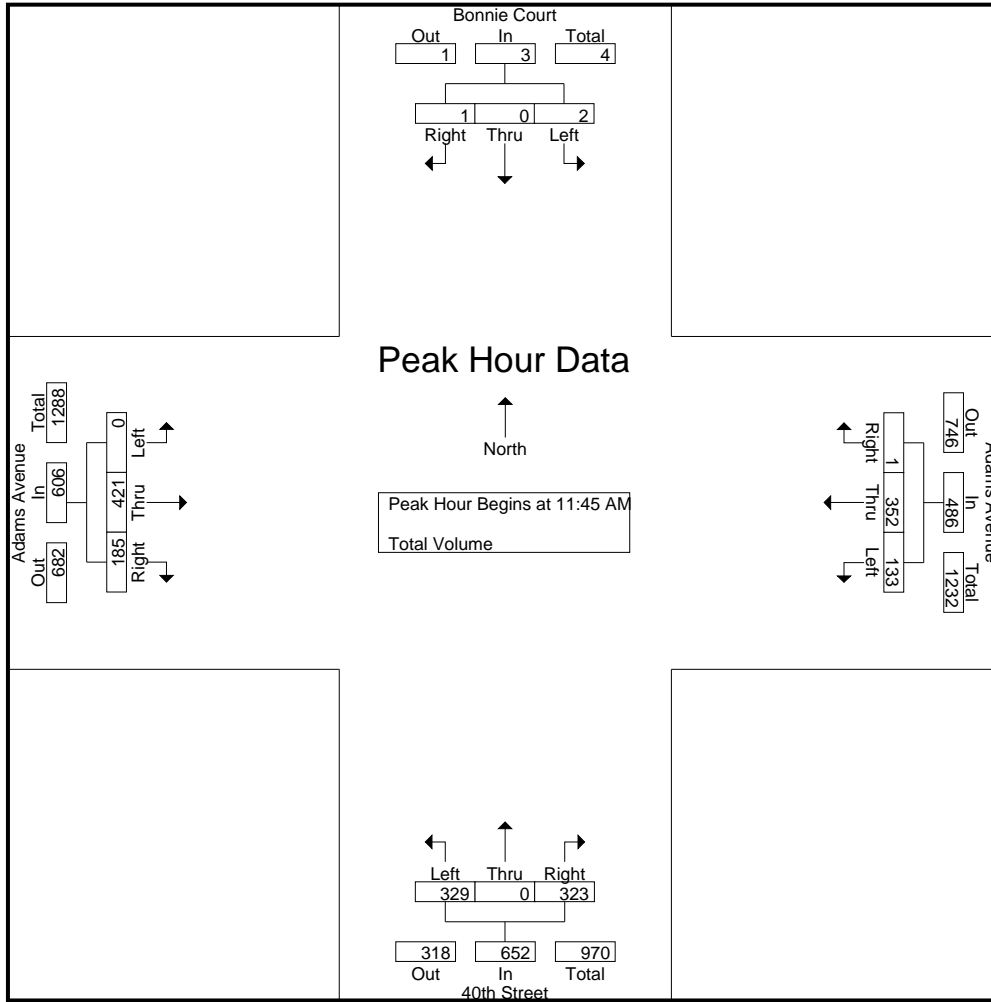
Start Time	Bonnie Court Southbound				Adams Avenue Westbound				40th Street Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	1	0	0	1	24	106	0	130	65	1	76	142	0	80	46	126	399
11:45 AM	1	0	0	1	35	91	0	126	89	0	83	172	0	102	41	143	442
Total	2	0	0	2	59	197	0	256	154	1	159	314	0	182	87	269	841
12:00 PM	0	0	1	1	34	85	1	120	73	0	82	155	0	113	58	171	447
12:15 PM	1	0	0	1	34	102	0	136	92	0	84	176	0	91	46	137	450
12:30 PM	0	0	0	0	30	74	0	104	75	0	74	149	0	115	40	155	408
12:45 PM	0	0	0	0	33	95	0	128	71	0	69	140	0	96	66	162	430
Total	1	0	1	2	131	356	1	488	311	0	309	620	0	415	210	625	1735
01:00 PM	0	0	0	0	25	84	0	109	85	0	75	160	1	110	67	178	447
01:15 PM	0	0	0	0	24	92	0	116	94	0	74	168	0	109	55	164	448
Grand Total	3	0	1	4	239	729	1	969	644	1	617	1262	1	816	419	1236	3471
Apprch %	75	0	25		24.7	75.2	0.1		51	0.1	48.9		0.1	66	33.9		
Total %	0.1	0	0	0.1	6.9	21	0	27.9	18.6	0	17.8	36.4	0	23.5	12.1	35.6	

Start Time	Bonnie Court Southbound				Adams Avenue Westbound				40th Street Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:45 AM	1	0	0	1	35	91	0	126	89	0	83	172	0	102	41	143	442
12:00 PM	0	0	1	1	34	85	1	120	73	0	82	155	0	113	58	171	447
12:15 PM	1	0	0	1	34	102	0	136	92	0	84	176	0	91	46	137	450
12:30 PM	0	0	0	0	30	74	0	104	75	0	74	149	0	115	40	155	408
Total Volume	2	0	1	3	133	352	1	486	329	0	323	652	0	421	185	606	1747
% App. Total	66.7	0	33.3		27.4	72.4	0.2		50.5	0	49.5		0	69.5	30.5		
PHF	.500	.000	.250	.750	.950	.863	.250	.893	.894	.000	.961	.926	.000	.915	.797	.886	.971

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 11:45 AM

City of San Diego  
 N/S: Bonnie Ct/40th Street  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 03\_SDG\_40th\_Adams MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	11:30 AM				11:30 AM				11:45 AM				12:30 PM			
+0 mins.	1	0	0	1	24	106	0	130	89	0	83	172	0	115	40	155
+15 mins.	1	0	0	1	35	91	0	126	73	0	82	155	0	96	66	162
+30 mins.	0	0	1	1	34	85	1	120	92	0	84	176	1	110	67	178
+45 mins.	1	0	0	1	34	102	0	136	75	0	74	149	0	109	55	164
Total Volume	3	0	1	4	127	384	1	512	329	0	323	652	1	430	228	659
% App. Total	75	0	25		24.8	75	0.2		50.5	0	49.5		0.2	65.3	34.6	
PHF	.750	.000	.250	1.000	.907	.906	.250	.941	.894	.000	.961	.926	.250	.935	.851	.926

City of San Diego  
 N/S: Bonnie Ct/40th Street  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 03\_SDG\_40th\_Adams PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

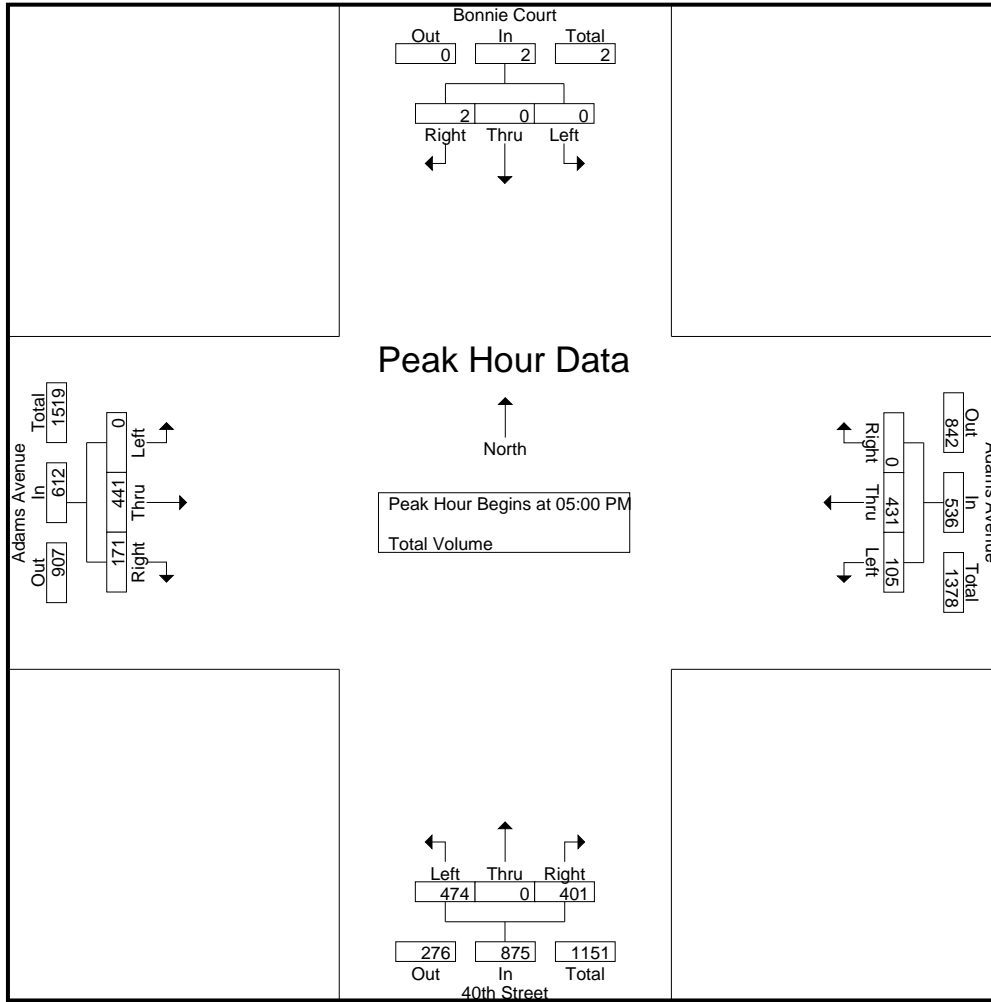
Start Time	Bonnie Court Southbound				Adams Avenue Westbound				40th Street Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	36	106	0	142	115	1	82	198	0	103	35	138	478
04:15 PM	0	0	0	0	22	117	0	139	132	0	85	217	0	124	39	163	519
04:30 PM	0	0	0	0	27	137	0	164	140	0	85	225	0	109	47	156	545
04:45 PM	0	0	0	0	21	106	0	127	119	1	67	187	0	117	34	151	465
Total	0	0	0	0	106	466	0	572	506	2	319	827	0	453	155	608	2007
05:00 PM	0	0	1	1	36	99	0	135	116	0	94	210	0	105	40	145	491
05:15 PM	0	0	0	0	18	110	0	128	124	0	110	234	0	106	44	150	512
05:30 PM	0	0	0	0	27	111	0	138	116	0	108	224	0	112	47	159	521
05:45 PM	0	0	1	1	24	111	0	135	118	0	89	207	0	118	40	158	501
Total	0	0	2	2	105	431	0	536	474	0	401	875	0	441	171	612	2025
Grand Total	0	0	2	2	211	897	0	1108	980	2	720	1702	0	894	326	1220	4032
Apprch %	0	0	100		19	81	0		57.6	0.1	42.3		0	73.3	26.7		
Total %	0	0	0	0	5.2	22.2	0	27.5	24.3	0	17.9	42.2	0	22.2	8.1	30.3	

Start Time	Bonnie Court Southbound				Adams Avenue Westbound				40th Street Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	0	0	1	1	36	99	0	135	116	0	94	210	0	105	40	145	491
05:15 PM	0	0	0	0	18	110	0	128	124	0	110	234	0	106	44	150	512
05:30 PM	0	0	0	0	27	111	0	138	116	0	108	224	0	112	47	159	521
05:45 PM	0	0	1	1	24	111	0	135	118	0	89	207	0	118	40	158	501
Total Volume	0	0	2	2	105	431	0	536	474	0	401	875	0	441	171	612	2025
% App. Total	0	0	100		19.6	80.4	0		54.2	0	45.8		0	72.1	27.9		
PHF	.000	.000	.500	.500	.729	.971	.000	.971	.956	.000	.911	.935	.000	.934	.910	.962	.972

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 05:00 PM

City of San Diego  
 N/S: Bonnie Ct/40th Street  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 03\_SDG\_40th\_Adams PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				05:00 PM				04:15 PM			
+0 mins.	0	0	1	1	36	106	0	142	116	0	94	210	0	124	39	163
+15 mins.	0	0	0	0	22	117	0	139	124	0	110	234	0	109	47	156
+30 mins.	0	0	0	0	27	137	0	164	116	0	108	224	0	117	34	151
+45 mins.	0	0	1	1	21	106	0	127	118	0	89	207	0	105	40	145
Total Volume	0	0	2	2	106	466	0	572	474	0	401	875	0	455	160	615
% App. Total	0	0	100		18.5	81.5	0		54.2	0	45.8		0	74	26	
PHF	.000	.000	.500	.500	.736	.850	.000	.872	.956	.000	.911	.935	.000	.917	.851	.943

Location: San Diego  
 N/S: Bonnie Ct/40th Street  
 E/W: Adams Avenue



Date: 3/13/2024  
 Day: Wednesday

**PEDESTRIANS**

	North Leg Bonnie Court	East Leg Adams Avenue	South Leg 40th Street	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	3	0	6	0	9
7:15 AM	3	0	0	0	3
7:30 AM	1	0	2	0	3
7:45 AM	6	0	2	0	8
8:00 AM	5	0	2	0	7
8:15 AM	3	0	3	0	6
8:30 AM	1	0	2	0	3
8:45 AM	8	1	3	0	12
<b>TOTAL VOLUMES:</b>	30	1	20	0	51

	North Leg Bonnie Court	East Leg Adams Avenue	South Leg 40th Street	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	4	2	8	0	14
11:45 AM	7	0	8	0	15
12:00 PM	2	0	3	0	5
12:15 PM	6	0	1	0	7
12:30 PM	4	0	5	0	9
12:45 PM	5	0	7	0	12
1:00 PM	3	0	3	0	6
1:15 PM	7	0	1	0	8
<b>TOTAL VOLUMES:</b>	38	2	36	0	76

	North Leg Bonnie Court	East Leg Adams Avenue	South Leg 40th Street	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	11	3	9	0	23
4:15 PM	7	0	5	0	12
4:30 PM	9	0	6	0	15
4:45 PM	8	0	15	0	23
5:00 PM	7	0	6	0	13
5:15 PM	8	0	6	0	14
5:30 PM	1	0	17	0	18
5:45 PM	10	0	9	0	19
<b>TOTAL VOLUMES:</b>	61	3	73	0	137

Location: San Diego  
 N/S: Bonnie Ct/40th Street  
 E/W: Adams Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Bonnie Court			Westbound Adams Avenue			Northbound 40th Street			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	1	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	5	1	8

	Southbound Bonnie Court			Westbound Adams Avenue			Northbound 40th Street			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	1	0	0	0	0	0	3	0	4
12:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	1	0	0	0	0	0	1	1	3
12:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	0	0	0	5	0	0	0	0	0	7	1	13

	Southbound Bonnie Court			Westbound Adams Avenue			Northbound 40th Street			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
4:30 PM	0	0	0	0	1	0	0	0	0	0	3	0	4
4:45 PM	0	0	0	0	1	0	0	0	0	0	3	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	4	0	0	0	0	0	1	0	5
5:30 PM	0	0	0	0	2	0	0	0	0	0	2	0	4
5:45 PM	0	0	0	0	2	0	0	0	0	0	3	0	5
TOTAL VOLUMES:	0	0	0	0	12	0	0	0	0	0	15	0	27

5) I-15 NB Ramps & Adams Ave

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 04\_SDG\_15N\_Adams AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

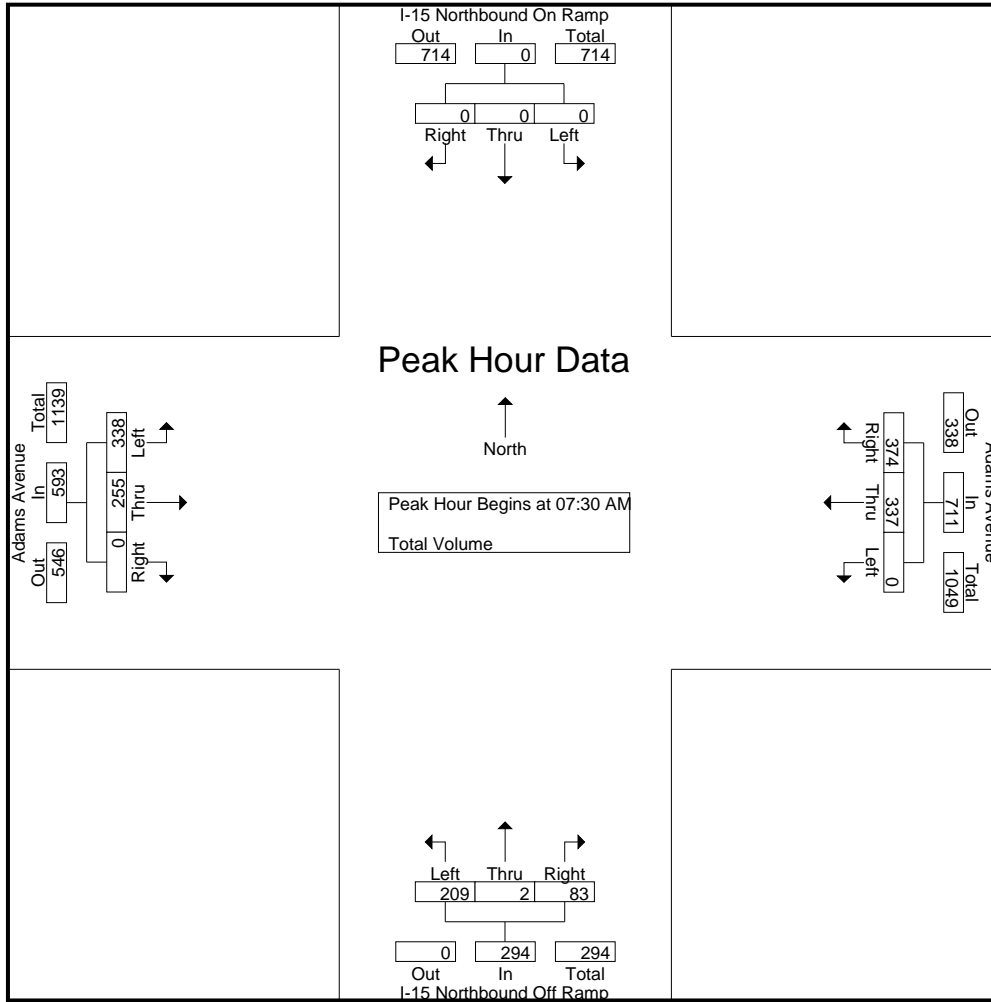
Groups Printed- Total Volume

Start Time	I-15 Northbound On Ramp Southbound				Adams Avenue Westbound				I-15 Northbound Off Ramp Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	38	58	96	30	0	18	48	56	37	0	93	237
07:15 AM	0	0	0	0	0	59	84	143	47	2	16	65	70	45	0	115	323
07:30 AM	0	0	0	0	0	101	99	200	38	0	12	50	89	46	0	135	385
07:45 AM	0	0	0	0	0	89	95	184	76	1	20	97	90	70	0	160	441
Total	0	0	0	0	0	287	336	623	191	3	66	260	305	198	0	503	1386
08:00 AM	0	0	0	0	0	77	86	163	45	0	21	66	88	72	0	160	389
08:15 AM	0	0	0	0	0	70	94	164	50	1	30	81	71	67	0	138	383
08:30 AM	0	0	0	0	0	69	82	151	56	0	26	82	49	69	0	118	351
08:45 AM	0	0	0	0	0	85	84	169	54	0	33	87	76	105	0	181	437
Total	0	0	0	0	0	301	346	647	205	1	110	316	284	313	0	597	1560
Grand Total	0	0	0	0	0	588	682	1270	396	4	176	576	589	511	0	1100	2946
Apprch %	0	0	0	0	0	46.3	53.7		68.8	0.7	30.6		53.5	46.5	0		
Total %	0	0	0	0	0	20	23.2	43.1	13.4	0.1	6	19.6	20	17.3	0	37.3	

Start Time	I-15 Northbound On Ramp Southbound				Adams Avenue Westbound				I-15 Northbound Off Ramp Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	<b>101</b>	<b>99</b>	<b>200</b>	38	0	12	50	89	46	0	135	385
07:45 AM	0	0	0	0	0	89	95	184	<b>76</b>	<b>1</b>	20	<b>97</b>	<b>90</b>	70	0	<b>160</b>	<b>441</b>
08:00 AM	0	0	0	0	0	77	86	163	45	0	21	66	88	<b>72</b>	0	160	389
08:15 AM	0	0	0	0	0	70	94	164	50	1	<b>30</b>	81	71	67	0	138	383
Total Volume	0	0	0	0	0	337	374	711	209	2	83	294	338	255	0	593	1598
% App. Total	0	0	0	0	0	47.4	52.6		71.1	0.7	28.2		57	43	0		
PHF	.000	.000	.000	.000	.000	.834	.944	.889	.688	.500	.692	.758	.939	.885	.000	.927	.906

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:30 AM





Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:45 AM				08:00 AM			
+0 mins.	0	0	0	0	0	<b>101</b>	<b>99</b>	<b>200</b>	<b>76</b>	<b>1</b>	20	<b>97</b>	<b>88</b>	72	0	160
+15 mins.	0	0	0	0	0	89	95	184	45	0	21	66	71	67	0	138
+30 mins.	0	0	0	0	0	77	86	163	50	1	<b>30</b>	81	49	69	0	118
+45 mins.	0	0	0	0	0	70	94	164	56	0	26	82	76	<b>105</b>	0	<b>181</b>
Total Volume	0	0	0	0	0	337	374	711	227	2	97	326	284	313	0	597
% App. Total	0	0	0	0	0	47.4	52.6		69.6	0.6	29.8		47.6	52.4	0	
PHF	.000	.000	.000	.000	.000	.834	.944	.889	.747	.500	.808	.840	.807	.745	.000	.825

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 04\_SDG\_15N\_Adams MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

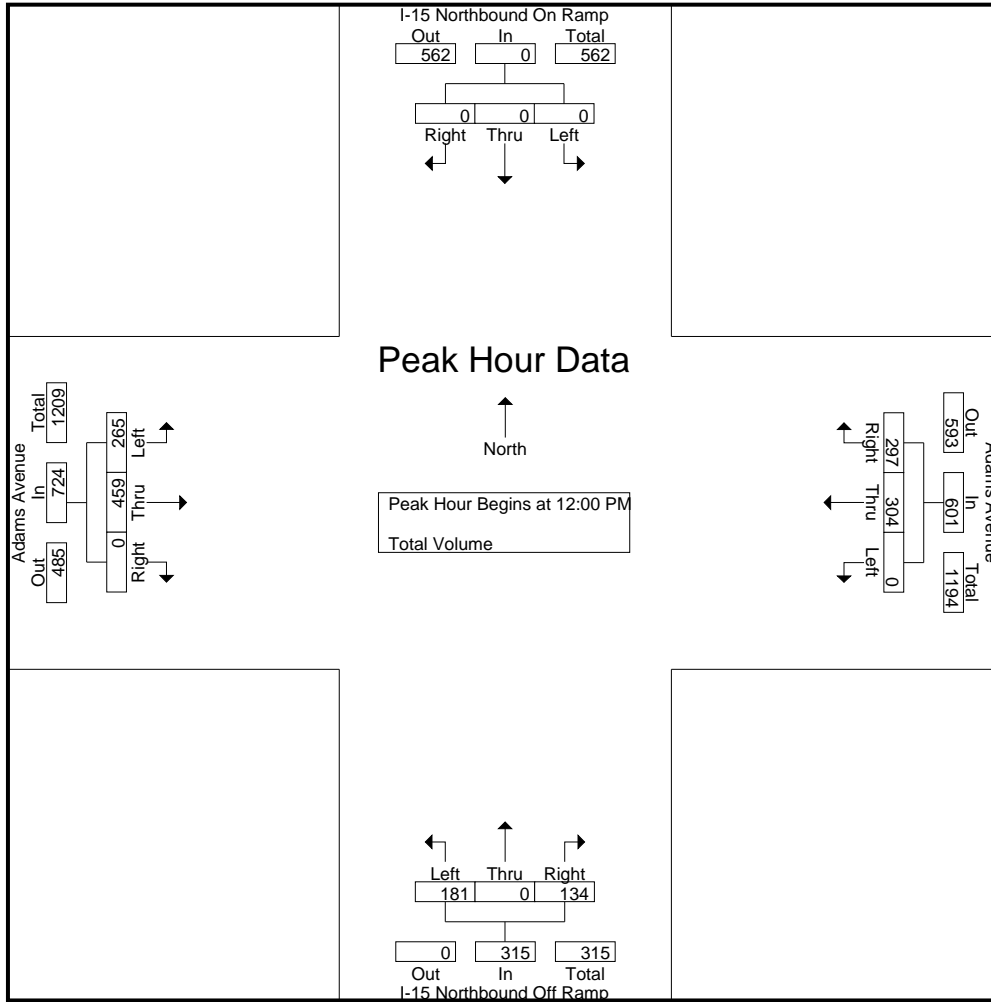
Start Time	I-15 Northbound On Ramp Southbound				Adams Avenue Westbound				I-15 Northbound Off Ramp Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	0	0	0	0	0	84	78	162	49	0	31	80	67	94	0	161	403
11:45 AM	0	0	0	0	0	76	78	154	43	1	28	72	73	112	0	185	411
Total	0	0	0	0	0	160	156	316	92	1	59	152	140	206	0	346	814
12:00 PM	0	0	0	0	0	75	74	149	48	0	31	79	69	124	0	193	421
12:15 PM	0	0	0	0	0	73	70	143	55	0	26	81	68	112	0	180	404
12:30 PM	0	0	0	0	0	79	78	157	30	0	32	62	66	116	0	182	401
12:45 PM	0	0	0	0	0	77	75	152	48	0	45	93	62	107	0	169	414
Total	0	0	0	0	0	304	297	601	181	0	134	315	265	459	0	724	1640
01:00 PM	0	0	0	0	0	66	51	117	48	0	23	71	75	108	0	183	371
01:15 PM	0	0	0	0	0	66	70	136	45	0	37	82	70	114	0	184	402
Grand Total	0	0	0	0	0	596	574	1170	366	1	253	620	550	887	0	1437	3227
Apprch %	0	0	0	0	0	50.9	49.1		59	0.2	40.8		38.3	61.7	0		
Total %	0	0	0	0	0	18.5	17.8	36.3	11.3	0	7.8	19.2	17	27.5	0	44.5	

Start Time	I-15 Northbound On Ramp Southbound				Adams Avenue Westbound				I-15 Northbound Off Ramp Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:00 PM	0	0	0	0	0	75	74	149	48	0	31	79	<b>69</b>	<b>124</b>	0	<b>193</b>	<b>421</b>
12:15 PM	0	0	0	0	0	73	70	143	<b>55</b>	0	26	81	68	112	0	180	404
12:30 PM	0	0	0	0	0	<b>79</b>	<b>78</b>	<b>157</b>	30	0	32	62	66	116	0	182	401
12:45 PM	0	0	0	0	0	77	75	152	48	0	<b>45</b>	<b>93</b>	62	107	0	169	414
Total Volume	0	0	0	0	0	304	297	601	181	0	134	315	265	459	0	724	1640
% App. Total	0	0	0	0	0	50.6	49.4		57.5	0	42.5		36.6	63.4	0		
PHF	.000	.000	.000	.000	.000	.962	.952	.957	.823	.000	.744	.847	.960	.925	.000	.938	.974

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:00 PM

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 04\_SDG\_15N\_Adams MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	11:30 AM				11:30 AM				12:00 PM				11:45 AM			
+0 mins.	0	0	0	0	0	<b>84</b>	<b>78</b>	<b>162</b>	48	0	31	79	<b>73</b>	112	0	185
+15 mins.	0	0	0	0	0	76	78	154	<b>55</b>	0	26	81	69	<b>124</b>	0	<b>193</b>
+30 mins.	0	0	0	0	0	75	74	149	30	0	32	62	68	112	0	180
+45 mins.	0	0	0	0	0	73	70	143	48	0	<b>45</b>	<b>93</b>	66	116	0	182
Total Volume	0	0	0	0	0	308	300	608	181	0	134	315	276	464	0	740
% App. Total	0	0	0	0	0	50.7	49.3		57.5	0	42.5		37.3	62.7	0	
PHF	.000	.000	.000	.000	.000	.917	.962	.938	.823	.000	.744	.847	.945	.935	.000	.959

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 04\_SDG\_15N\_Adams PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

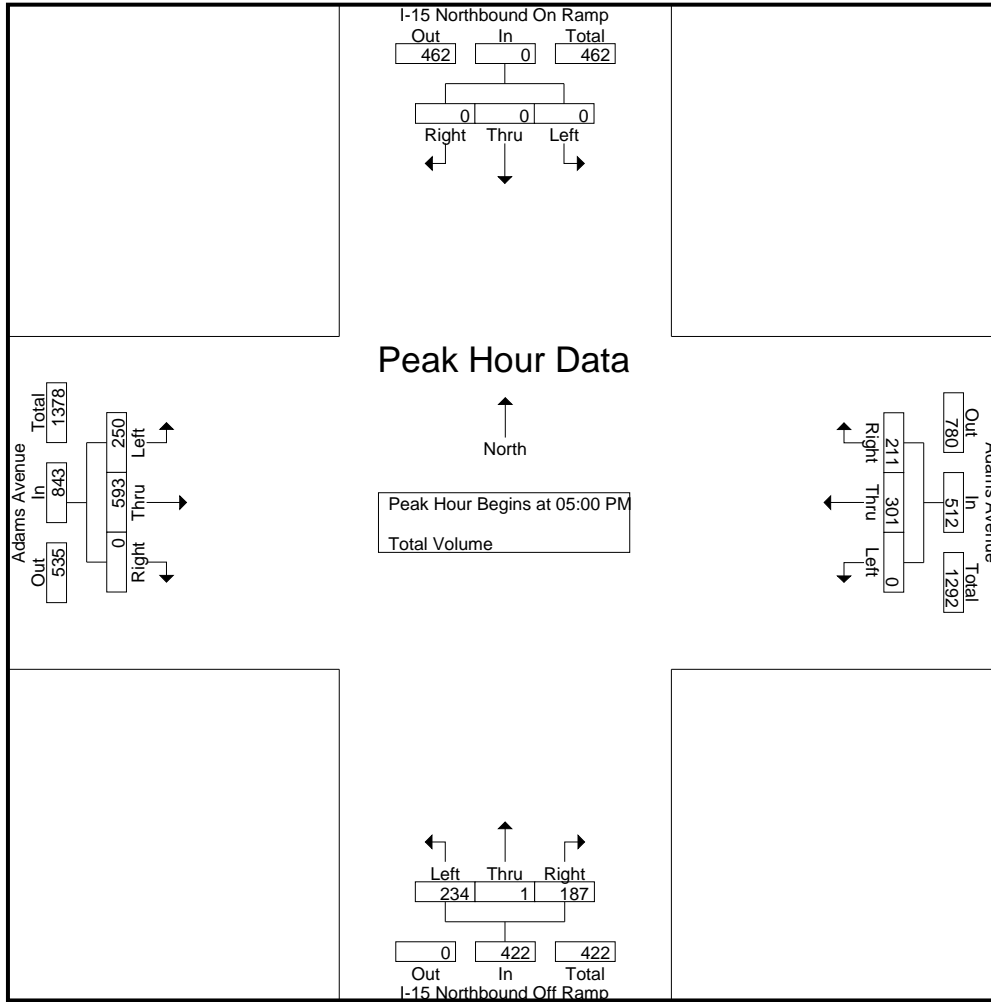
Start Time	I-15 Northbound On Ramp Southbound				Adams Avenue Westbound				I-15 Northbound Off Ramp Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	84	58	142	49	0	49	98	51	135	0	186	426
04:15 PM	0	0	0	0	0	71	67	138	70	0	61	131	67	138	0	205	474
04:30 PM	0	0	0	0	0	81	42	123	88	0	38	126	70	123	0	193	442
04:45 PM	0	0	0	0	0	71	49	120	55	0	52	107	53	129	0	182	409
Total	0	0	0	0	0	307	216	523	262	0	200	462	241	525	0	766	1751
05:00 PM	0	0	0	0	0	85	59	144	48	0	45	93	65	136	0	201	438
05:15 PM	0	0	0	0	0	62	55	117	64	1	45	110	67	141	0	208	435
05:30 PM	0	0	0	0	0	75	48	123	64	0	56	120	54	168	0	222	465
05:45 PM	0	0	0	0	0	79	49	128	58	0	41	99	64	148	0	212	439
Total	0	0	0	0	0	301	211	512	234	1	187	422	250	593	0	843	1777
Grand Total	0	0	0	0	0	608	427	1035	496	1	387	884	491	1118	0	1609	3528
Apprch %	0	0	0	0	0	58.7	41.3		56.1	0.1	43.8		30.5	69.5	0		
Total %	0	0	0	0	0	17.2	12.1	29.3	14.1	0	11	25.1	13.9	31.7	0	45.6	

Start Time	I-15 Northbound On Ramp Southbound				Adams Avenue Westbound				I-15 Northbound Off Ramp Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	0	0	0	0	0	<b>85</b>	<b>59</b>	<b>144</b>	48	0	45	93	65	136	0	201	438
05:15 PM	0	0	0	0	0	62	55	117	<b>64</b>	<b>1</b>	45	110	<b>67</b>	141	0	208	435
05:30 PM	0	0	0	0	0	75	48	123	64	0	<b>56</b>	<b>120</b>	54	<b>168</b>	0	<b>222</b>	<b>465</b>
05:45 PM	0	0	0	0	0	79	49	128	58	0	41	99	64	148	0	212	439
Total Volume	0	0	0	0	0	301	211	512	234	1	187	422	250	593	0	843	1777
% App. Total	0	0	0	0	0	58.8	41.2		55.5	0.2	44.3		29.7	70.3	0		
PHF	.000	.000	.000	.000	.000	.885	.894	.889	.914	.250	.835	.879	.933	.882	.000	.949	.955

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 05:00 PM

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 04\_SDG\_15N\_Adams PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	71	<b>67</b>	138	49	0	49	98	65	136	0	201
+15 mins.	0	0	0	0	0	81	42	123	70	0	<b>61</b>	<b>131</b>	<b>67</b>	141	0	208
+30 mins.	0	0	0	0	0	71	49	120	<b>88</b>	0	38	126	54	<b>168</b>	0	<b>222</b>
+45 mins.	0	0	0	0	0	<b>85</b>	59	<b>144</b>	55	0	52	107	64	148	0	212
Total Volume	0	0	0	0	0	308	217	525	262	0	200	462	250	593	0	843
% App. Total	0	0	0	0	0	58.7	41.3		56.7	0	43.3		29.7	70.3	0	
PHF	.000	.000	.000	.000	.000	.906	.810	.911	.744	.000	.820	.882	.933	.882	.000	.949

Location: San Diego  
 N/S: I-15 NB Ramps  
 E/W: Adams Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg I-15 NB Ramps	East Leg Adams Avenue	South Leg I-15 NB Ramps	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	3	0	6	0	9
7:15 AM	2	3	1	0	6
7:30 AM	2	0	1	0	3
7:45 AM	5	0	5	0	10
8:00 AM	6	1	1	0	8
8:15 AM	1	0	3	0	4
8:30 AM	1	1	2	0	4
8:45 AM	8	0	3	0	11
TOTAL VOLUMES:	28	5	22	0	55

	North Leg I-15 NB Ramps	East Leg Adams Avenue	South Leg I-15 NB Ramps	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	2	0	9	0	11
11:45 AM	7	0	11	0	18
12:00 PM	2	1	4	0	7
12:15 PM	4	1	2	0	7
12:30 PM	7	0	5	0	12
12:45 PM	6	4	5	0	15
1:00 PM	1	1	5	0	7
1:15 PM	7	3	3	0	13
TOTAL VOLUMES:	36	10	44	0	90

	North Leg I-15 NB Ramps	East Leg Adams Avenue	South Leg I-15 NB Ramps	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	5	6	8	0	19
4:15 PM	12	0	5	0	17
4:30 PM	5	3	8	0	16
4:45 PM	11	9	19	0	39
5:00 PM	6	1	5	0	12
5:15 PM	5	7	6	0	18
5:30 PM	0	12	18	0	30
5:45 PM	11	12	7	0	30
TOTAL VOLUMES:	55	50	76	0	181

Location: San Diego  
 N/S: I-15 NB Ramps  
 E/W: Adams Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound I-15 NB Ramps			Westbound Adams Avenue			Northbound I-15 NB Ramps			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	1	3	0	6

	Southbound I-15 NB Ramps			Westbound Adams Avenue			Northbound I-15 NB Ramps			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	1	0	0	0	0	0	3	0	4
12:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
12:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	5	0	0	0	0	0	6	0	11

	Southbound I-15 NB Ramps			Westbound Adams Avenue			Northbound I-15 NB Ramps			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	1	0	0	0	0	1	0	0	3
4:30 PM	0	0	0	0	1	0	0	0	0	0	2	0	3
4:45 PM	0	0	0	0	1	0	0	0	0	0	2	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	2	0	2	0	0	0	0	0	1	0	5
5:30 PM	0	0	0	0	2	0	0	0	0	0	2	0	4
5:45 PM	0	0	0	0	3	0	0	0	0	2	0	0	5
TOTAL VOLUMES:	0	0	3	0	10	0	0	0	0	3	8	0	24

6) Marlborough Dr & Adams Ave



City of San Diego  
 N/S: Marlborough Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 05\_SDG\_Marl\_Adams AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

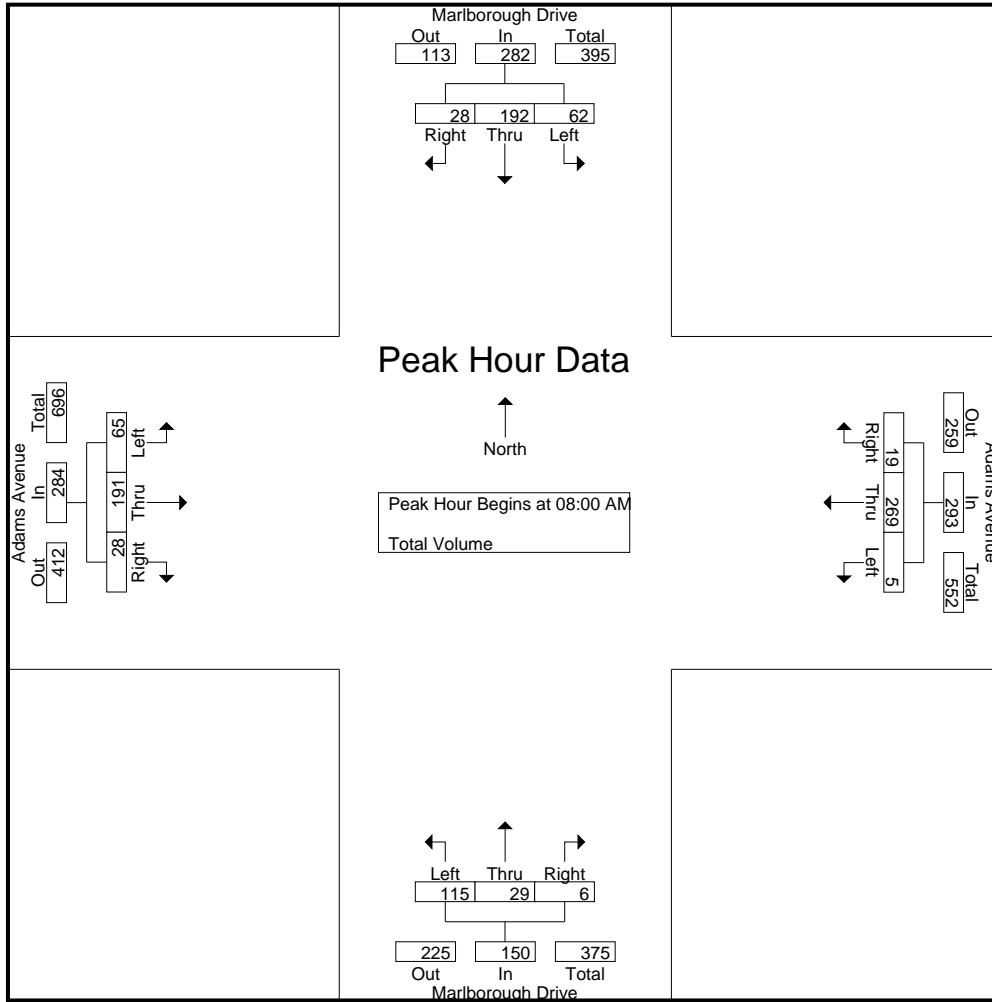
Groups Printed- Total Volume

Start Time	Marlborough Drive Southbound				Adams Avenue Westbound				Marlborough Drive Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	11	22	4	37	1	44	2	47	20	1	2	23	11	22	4	37	144
07:15 AM	11	26	6	43	1	68	0	69	18	3	0	21	11	26	6	43	176
07:30 AM	11	23	3	37	0	94	2	96	44	4	1	49	11	23	3	37	219
07:45 AM	19	37	5	61	0	79	4	83	43	10	1	54	19	37	5	61	259
<b>Total</b>	<b>52</b>	<b>108</b>	<b>18</b>	<b>178</b>	<b>2</b>	<b>285</b>	<b>8</b>	<b>295</b>	<b>125</b>	<b>18</b>	<b>4</b>	<b>147</b>	<b>52</b>	<b>108</b>	<b>18</b>	<b>178</b>	<b>798</b>
08:00 AM	12	49	6	67	0	75	6	81	25	7	2	34	12	50	6	68	250
08:15 AM	17	44	5	66	3	52	5	60	30	5	1	36	18	42	5	65	227
08:30 AM	15	39	5	59	0	75	2	77	28	3	2	33	15	39	5	59	228
08:45 AM	18	60	12	90	2	67	6	75	32	14	1	47	20	60	12	92	304
<b>Total</b>	<b>62</b>	<b>192</b>	<b>28</b>	<b>282</b>	<b>5</b>	<b>269</b>	<b>19</b>	<b>293</b>	<b>115</b>	<b>29</b>	<b>6</b>	<b>150</b>	<b>65</b>	<b>191</b>	<b>28</b>	<b>284</b>	<b>1009</b>
<b>Grand Total</b>	<b>114</b>	<b>300</b>	<b>46</b>	<b>460</b>	<b>7</b>	<b>554</b>	<b>27</b>	<b>588</b>	<b>240</b>	<b>47</b>	<b>10</b>	<b>297</b>	<b>117</b>	<b>299</b>	<b>46</b>	<b>462</b>	<b>1807</b>
Apprch %	24.8	65.2	10		1.2	94.2	4.6		80.8	15.8	3.4		25.3	64.7	10		
Total %	6.3	16.6	2.5	25.5	0.4	30.7	1.5	32.5	13.3	2.6	0.6	16.4	6.5	16.5	2.5	25.6	

Start Time	Marlborough Drive Southbound				Adams Avenue Westbound				Marlborough Drive Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	12	49	6	67	0	<b>75</b>	<b>6</b>	<b>81</b>	25	7	<b>2</b>	34	12	50	6	68	250
08:15 AM	17	44	5	66	<b>3</b>	52	5	60	30	5	1	36	18	42	5	65	227
08:30 AM	15	39	5	59	0	75	2	77	28	3	2	33	15	39	5	59	228
08:45 AM	<b>18</b>	<b>60</b>	<b>12</b>	<b>90</b>	2	67	6	75	<b>32</b>	<b>14</b>	<b>1</b>	<b>47</b>	<b>20</b>	<b>60</b>	<b>12</b>	<b>92</b>	<b>304</b>
Total Volume	62	192	28	282	5	269	19	293	115	29	6	150	65	191	28	284	1009
% App. Total	22	68.1	9.9		1.7	91.8	6.5		76.7	19.3	4		22.9	67.3	9.9		
PHF	.861	.800	.583	.783	.417	.897	.792	.904	.898	.518	.750	.798	.813	.796	.583	.772	.830

City of San Diego  
 N/S: Marlborough Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 05\_SDG\_Marl\_Adams AM  
 Site Code : 22924058  
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	08:00 AM				07:15 AM				07:30 AM				08:00 AM			
+0 mins.	12	49	6	67	1	68	0	69	44	4	1	49	12	50	6	68
+15 mins.	17	44	5	66	0	94	2	96	43	10	1	54	18	42	5	65
+30 mins.	15	39	5	59	0	79	4	83	25	7	2	34	15	39	5	59
+45 mins.	18	60	12	90	0	75	6	81	30	5	1	36	20	60	12	92
Total Volume	62	192	28	282	1	316	12	329	142	26	5	173	65	191	28	284
% App. Total	22	68.1	9.9		0.3	96	3.6		82.1	15	2.9		22.9	67.3	9.9	
PHF	.861	.800	.583	.783	.250	.840	.500	.857	.807	.650	.625	.801	.813	.796	.583	.772

City of San Diego  
 N/S: Marlborough Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 05\_SDG\_Marl\_Adams MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

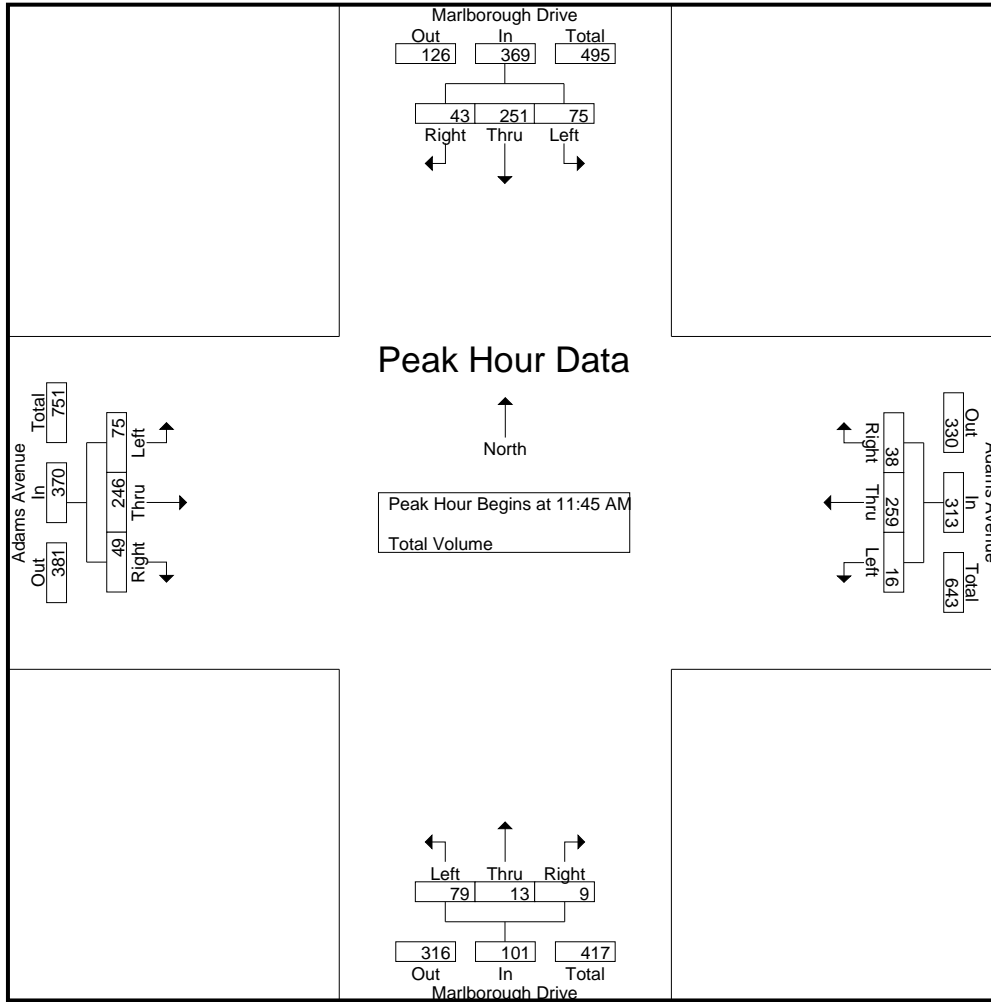
Groups Printed- Total Volume

Start Time	Marlborough Drive Southbound				Adams Avenue Westbound				Marlborough Drive Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	19	44	11	74	3	67	10	80	34	6	3	43	19	44	11	74	271
11:45 AM	18	68	14	100	4	65	11	80	15	3	2	20	17	63	18	98	298
Total	37	112	25	174	7	132	21	160	49	9	5	63	36	107	29	172	569
12:00 PM	23	66	11	100	4	63	10	77	22	1	3	26	24	66	12	102	305
12:15 PM	16	56	10	82	2	67	9	78	17	7	2	26	15	56	10	81	267
12:30 PM	18	61	8	87	6	64	8	78	25	2	2	29	19	61	9	89	283
12:45 PM	20	62	10	92	0	60	7	67	20	8	2	30	22	62	9	93	282
Total	77	245	39	361	12	254	34	300	84	18	9	111	80	245	40	365	1137
01:00 PM	19	53	7	79	3	53	5	61	13	5	2	20	17	52	7	76	236
01:15 PM	21	66	13	100	4	61	8	73	12	3	5	20	21	67	13	101	294
Grand Total	154	476	84	714	26	500	68	594	158	35	21	214	154	471	89	714	2236
Apprch %	21.6	66.7	11.8		4.4	84.2	11.4		73.8	16.4	9.8		21.6	66	12.5		
Total %	6.9	21.3	3.8	31.9	1.2	22.4	3	26.6	7.1	1.6	0.9	9.6	6.9	21.1	4	31.9	

Start Time	Marlborough Drive Southbound				Adams Avenue Westbound				Marlborough Drive Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	18	<b>68</b>	<b>14</b>	<b>100</b>	4	65	<b>11</b>	<b>80</b>	15	3	2	20	17	63	<b>18</b>	98	298
12:00 PM	<b>23</b>	66	11	100	4	63	10	77	22	1	<b>3</b>	26	<b>24</b>	<b>66</b>	12	<b>102</b>	<b>305</b>
12:15 PM	16	56	10	82	2	<b>67</b>	9	78	17	<b>7</b>	2	26	15	56	10	81	267
12:30 PM	18	61	8	87	<b>6</b>	64	8	78	<b>25</b>	2	2	<b>29</b>	19	61	9	89	283
Total Volume	75	251	43	369	16	259	38	313	79	13	9	101	75	246	49	370	1153
% App. Total	20.3	68	11.7		5.1	82.7	12.1		78.2	12.9	8.9		20.3	66.5	13.2		
PHF	.815	.923	.768	.923	.667	.966	.864	.978	.790	.464	.750	.871	.781	.932	.681	.907	.945

City of San Diego  
 N/S: Marlborough Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 05\_SDG\_Marl\_Adams MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	11:45 AM				11:30 AM				11:30 AM				11:45 AM			
+0 mins.	18	68	14	100	3	67	10	80	34	6	3	43	17	63	18	98
+15 mins.	23	66	11	100	4	65	11	80	15	3	2	20	24	66	12	102
+30 mins.	16	56	10	82	4	63	10	77	22	1	3	26	15	56	10	81
+45 mins.	18	61	8	87	2	67	9	78	17	7	2	26	19	61	9	89
Total Volume	75	251	43	369	13	262	40	315	88	17	10	115	75	246	49	370
% App. Total	20.3	68	11.7		4.1	83.2	12.7		76.5	14.8	8.7		20.3	66.5	13.2	
PHF	.815	.923	.768	.923	.813	.978	.909	.984	.647	.607	.833	.669	.781	.932	.681	.907

City of San Diego  
 N/S: Marlborough Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 05\_SDG\_Marl\_Adams PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Marlborough Drive Southbound				Adams Avenue Westbound				Marlborough Drive Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	16	86	16	118	5	63	4	72	19	11	2	32	15	86	16	117	339
04:15 PM	27	88	12	127	2	56	4	62	16	4	4	24	27	88	12	127	340
04:30 PM	18	73	11	102	3	61	5	69	19	6	0	25	18	73	11	102	298
04:45 PM	21	90	9	120	5	52	6	63	13	3	3	19	20	90	9	119	321
Total	82	337	48	467	15	232	19	266	67	24	9	100	80	337	48	465	1298
05:00 PM	29	74	11	114	4	76	4	84	20	6	1	27	29	74	11	114	339
05:15 PM	16	87	7	110	4	44	3	51	21	3	1	25	15	86	7	108	294
05:30 PM	25	95	14	134	3	52	3	58	16	0	2	18	23	94	14	131	341
05:45 PM	23	89	13	125	2	62	5	69	19	3	0	22	23	89	12	124	340
Total	93	345	45	483	13	234	15	262	76	12	4	92	90	343	44	477	1314
Grand Total	175	682	93	950	28	466	34	528	143	36	13	192	170	680	92	942	2612
Apprch %	18.4	71.8	9.8		5.3	88.3	6.4		74.5	18.8	6.8		18	72.2	9.8		
Total %	6.7	26.1	3.6	36.4	1.1	17.8	1.3	20.2	5.5	1.4	0.5	7.4	6.5	26	3.5	36.1	

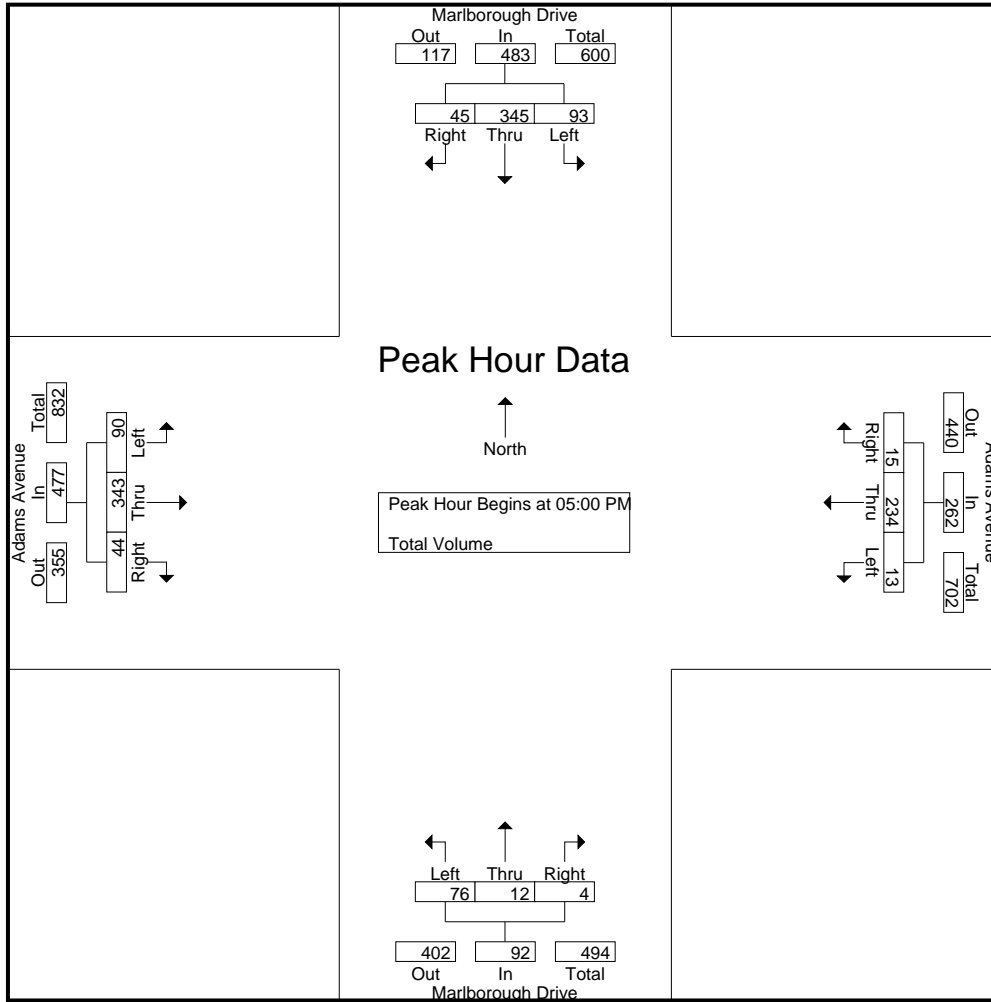
Start Time	Marlborough Drive Southbound				Adams Avenue Westbound				Marlborough Drive Northbound				Adams Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	<b>29</b>	74	11	114	<b>4</b>	<b>76</b>	4	<b>84</b>	<b>20</b>	<b>6</b>	1	<b>27</b>	<b>29</b>	74	11	114	339
05:15 PM	16	87	7	110	4	44	3	51	<b>21</b>	3	1	25	15	86	7	108	294
05:30 PM	25	<b>95</b>	<b>14</b>	<b>134</b>	3	52	3	58	16	0	<b>2</b>	18	23	<b>94</b>	<b>14</b>	<b>131</b>	<b>341</b>
05:45 PM	23	89	13	125	2	62	<b>5</b>	69	19	3	0	22	23	89	12	124	340
Total Volume	93	345	45	483	13	234	15	262	76	12	4	92	90	343	44	477	1314
% App. Total	19.3	71.4	9.3		5	89.3	5.7		82.6	13	4.3		18.9	71.9	9.2		
PHF	.802	.908	.804	.901	.813	.770	.750	.780	.905	.500	.500	.852	.776	.912	.786	.910	.963

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

City of San Diego  
 N/S: Marlborough Drive  
 E/W: Adams Avenue  
 Weather: Clear

File Name : 05\_SDG\_Marl\_Adams PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:00 PM				05:00 PM			
+0 mins.	<b>29</b>	74	11	114	2	56	4	62	<b>19</b>	<b>11</b>	2	<b>32</b>	<b>29</b>	74	11	114
+15 mins.	16	87	7	110	3	61	5	69	16	4	<b>4</b>	24	15	86	7	108
+30 mins.	25	<b>95</b>	<b>14</b>	<b>134</b>	<b>5</b>	52	<b>6</b>	63	19	6	0	25	23	<b>94</b>	<b>14</b>	<b>131</b>
+45 mins.	23	89	13	125	4	<b>76</b>	4	<b>84</b>	13	3	3	19	23	89	12	124
Total Volume	93	345	45	483	14	245	19	278	67	24	9	100	90	343	44	477
% App. Total	19.3	71.4	9.3		5	88.1	6.8		67	24	9		18.9	71.9	9.2	
PHF	.802	.908	.804	.901	.700	.806	.792	.827	.882	.545	.563	.781	.776	.912	.786	.910

Location: San Diego  
 N/S: Marlborough Drive  
 E/W: Adams Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Marlborough Drive	East Leg Adams Avenue	South Leg Marlborough Drive	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	5	2	5	3	15
7:15 AM	5	1	4	5	15
7:30 AM	3	7	0	3	13
7:45 AM	1	5	3	1	10
8:00 AM	4	5	5	5	19
8:15 AM	5	7	4	4	20
8:30 AM	7	7	4	6	24
8:45 AM	5	16	7	3	31
TOTAL VOLUMES:	35	50	32	30	147

	North Leg Marlborough Drive	East Leg Adams Avenue	South Leg Marlborough Drive	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	8	16	8	8	40
11:45 AM	14	7	13	14	48
12:00 PM	5	9	11	4	29
12:15 PM	12	10	18	11	51
12:30 PM	11	19	12	9	51
12:45 PM	13	11	12	12	48
1:00 PM	12	7	12	14	45
1:15 PM	7	12	11	7	37
TOTAL VOLUMES:	82	91	97	79	349

	North Leg Marlborough Drive	East Leg Adams Avenue	South Leg Marlborough Drive	West Leg Adams Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	11	17	19	12	59
4:15 PM	14	15	14	15	58
4:30 PM	6	10	4	6	26
4:45 PM	9	16	11	9	45
5:00 PM	11	5	14	11	41
5:15 PM	7	9	9	7	32
5:30 PM	10	7	13	11	41
5:45 PM	13	19	17	14	63
TOTAL VOLUMES:	81	98	101	85	365

Location: San Diego  
 N/S: Marlborough Drive  
 E/W: Adams Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Marlborough Drive			Westbound Adams Avenue			Northbound Marlborough Drive			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	1	0	0	1	0	0	0	0	0	1	0	3
7:30 AM	0	1	0	0	0	1	0	0	0	0	1	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	1	0	2
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	0	3	1	0	0	0	0	3	0	10

	Southbound Marlborough Drive			Westbound Adams Avenue			Northbound Marlborough Drive			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
11:45 AM	1	2	0	0	0	0	0	0	0	1	2	0	6
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	2	0	0	1	0	0	0	0	0	2	0	5
12:30 PM	0	0	0	0	1	0	1	0	0	0	0	0	2
12:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	2
1:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	2
1:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL VOLUMES:	1	6	0	0	4	0	2	0	0	1	6	0	20

	Southbound Marlborough Drive			Westbound Adams Avenue			Northbound Marlborough Drive			Eastbound Adams Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	1	2
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	2	0	0	0	0	0	0	0	0	2	0	0	4
4:45 PM	1	0	0	0	0	0	0	0	0	1	0	0	2
5:00 PM	1	2	0	0	0	0	0	1	0	1	2	0	7
5:15 PM	0	0	1	1	0	0	0	1	0	0	0	1	4
5:30 PM	0	1	1	0	0	0	0	0	0	0	1	1	4
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	4	3	3	1	2	0	0	2	0	4	3	3	25



7) Aldine Ave & Adams Ave

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Van Dyke Ave/Aldine Dr & Adams Ave  
 City: San Diego  
 Control: 4-Way Stop

Project ID: 24-040164-001  
 Date: 9/5/2024

### Data - Totals

NS/EW Streets:	Van Dyke Ave/Aldine Dr				Van Dyke Ave/Aldine Dr				Adams Ave				Adams Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	1	0	0	1	3	27	0	17	5	1	0	2	9	2	0	72
7:15 AM	4	4	1	0	1	1	37	0	17	1	2	0	0	9	0	0	77
7:30 AM	8	9	0	0	2	18	44	0	37	3	4	0	0	16	1	0	142
7:45 AM	11	9	0	0	2	2	49	0	46	7	3	1	1	11	2	0	144
8:00 AM	9	2	1	0	4	2	40	0	37	6	2	0	1	7	2	0	113
8:15 AM	2	1	1	0	3	1	38	0	29	5	6	0	1	3	5	0	95
8:30 AM	6	3	1	0	6	0	60	0	32	10	1	0	0	5	1	0	125
8:45 AM	5	0	0	0	6	0	41	0	44	10	1	0	1	10	2	0	120
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	59.76%	35.37%	4.88%	0.00%	6.44%	6.96%	86.60%	0.00%	79.20%	14.37%	6.12%	0.31%	6.59%	76.92%	16.48%	0.00%	888
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																TOTAL
<b>PEAK HR VOL :</b>	30	21	2	0	11	23	171	0	149	21	15	1	3	37	10	0	494
<b>PEAK HR FACTOR :</b>	0.682	0.583	0.500	0.000	0.688	0.319	0.872	0.000	0.810	0.750	0.625	0.250	0.750	0.578	0.500	0.000	0.858
	0.663				0.801				0.816				0.735				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	3	1	0	1	4	45	0	56	12	12	0	0	10	4	0	152
4:15 PM	2	2	1	0	3	3	54	0	30	9	6	0	0	12	4	0	126
4:30 PM	4	3	0	0	0	1	50	0	68	8	3	0	0	12	2	0	151
4:45 PM	7	0	2	0	3	3	52	0	54	6	6	0	1	6	4	0	144
5:00 PM	7	5	0	0	3	1	36	0	62	9	8	0	0	4	5	0	140
5:15 PM	3	0	0	0	3	3	49	0	50	7	5	0	0	6	1	0	127
5:30 PM	4	0	0	0	3	1	38	0	55	7	2	0	1	5	2	0	118
5:45 PM	5	0	0	0	2	1	23	0	50	8	7	0	1	3	1	0	101
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	67.92%	24.53%	7.55%	0.00%	4.71%	4.45%	90.84%	0.00%	78.70%	12.22%	9.07%	0.00%	3.57%	69.05%	27.38%	0.00%	1059
<b>PEAK HR :</b>	04:00 PM - 05:00 PM																TOTAL
<b>PEAK HR VOL :</b>	17	8	4	0	7	11	201	0	208	35	27	0	1	40	14	0	573
<b>PEAK HR FACTOR :</b>	0.607	0.667	0.500	0.000	0.583	0.688	0.931	0.000	0.765	0.729	0.563	0.000	0.250	0.833	0.875	0.000	0.942
	0.806				0.913				0.844				0.859				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Van Dyke Ave/Aldine Dr & Adams Ave  
 City: San Diego  
 Control: 4-Way Stop

Project ID: 24-040164-001  
 Date: 9/5/2024

### Data - Bikes

NS/EW Streets:	Van Dyke Ave/Aldine Dr				Van Dyke Ave/Aldine Dr				Adams Ave				Adams Ave					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	7:15 AM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
	7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
	7:45 AM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
	8:15 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
	8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>	
<b>APPROACH %'s :</b>	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	42.86%	28.57%	28.57%	0.00%	0.00%	100.00%	0.00%	0.00%	14	
<b>PEAK HR :</b>	07:30 AM - 08:30 AM				0	0	0	0	3	2	1	0	0	3	0	0	<b>TOTAL</b>	
<b>PEAK HR VOL :</b>	0	0	0	0	0	0	0	0	0.750	0.500	0.250	0.000	0.000	0.375	0.000	0.000	9	
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750				0.375				0.750	
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	4:45 PM	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3
	5:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>	
<b>APPROACH %'s :</b>	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	33.33%	66.67%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	7	
<b>PEAK HR :</b>	04:00 PM - 05:00 PM				0	0	0	0	1	1	0	0	0	1	0	0	<b>TOTAL</b>	
<b>PEAK HR VOL :</b>	1	0	0	0	0	0	0	0	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	4	
<b>PEAK HR FACTOR :</b>	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500				0.250				0.333	

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Van Dyke Ave/Aldine Dr & Adams Ave  
**City:** San Diego

**Project ID:** 24-040164-001  
**Date:** 9/5/2024

### Data - Pedestrians (Crosswalks)

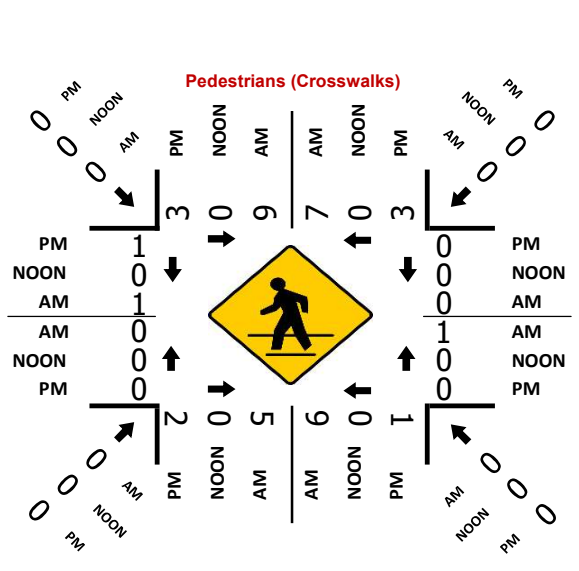
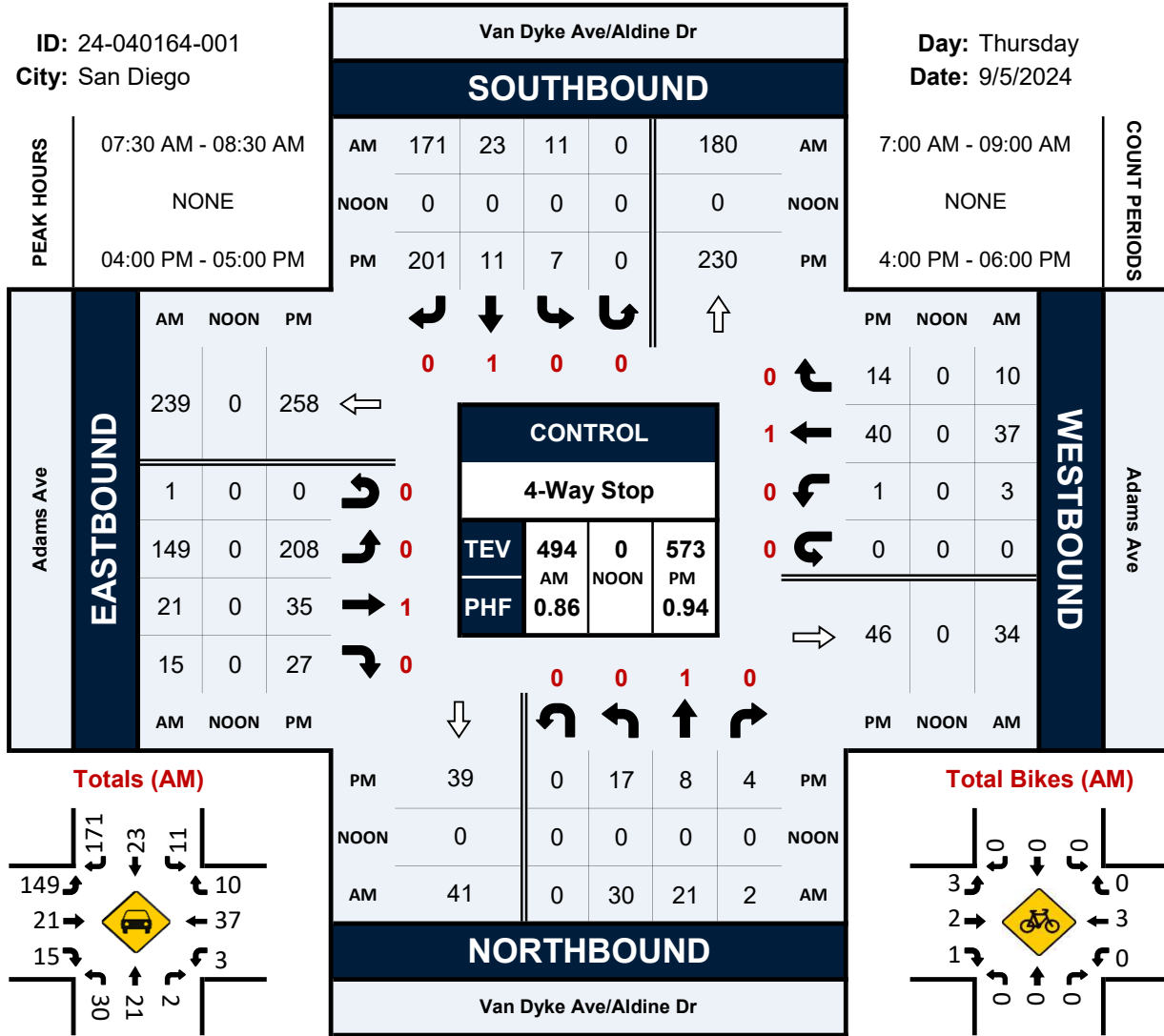
NS/EW Streets:	Van Dyke Ave/Aldine Dr		Van Dyke Ave/Aldine Dr		Adams Ave		Adams Ave			
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	7:00 AM	2	0	2	6	0	1	2	0	13
	7:15 AM	1	2	2	4	0	0	0	2	11
	7:30 AM	3	1	2	4	0	0	0	0	10
	7:45 AM	1	3	2	1	1	0	0	0	8
	8:00 AM	2	0	1	3	0	0	0	0	6
	8:15 AM	3	3	0	1	0	0	0	1	8
	8:30 AM	0	0	0	4	0	0	4	0	8
	8:45 AM	1	4	4	0	1	0	0	0	10
<b>TOTAL VOLUMES :</b>	EB 13	WB 13	EB 13	WB 23	NB 2	SB 1	NB 6	SB 3	<b>TOTAL</b> 74	
<b>APPROACH %'s :</b>	50.00%	50.00%	36.11%	63.89%	66.67%	33.33%	66.67%	33.33%		
<b>PEAK HR :</b>	07:30 AM - 08:30 AM								<b>TOTAL</b>	
<b>PEAK HR VOL :</b>	9	7	5	9	1	0	0	1	32	
<b>PEAK HR FACTOR :</b>	0.750	0.583	0.625	0.563	0.250			0.250	0.800	
	0.667		0.583		0.250		0.250			
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	4:00 PM	0	0	1	0	0	0	0	1	2
	4:15 PM	0	1	0	0	0	0	0	0	1
	4:30 PM	3	0	1	0	0	0	0	0	4
	4:45 PM	0	2	0	1	0	0	0	0	3
	5:00 PM	2	0	3	2	1	1	0	0	9
	5:15 PM	0	1	1	2	0	0	1	1	6
	5:30 PM	0	0	0	1	0	0	0	0	1
	5:45 PM	3	0	2	5	0	0	2	1	13
<b>TOTAL VOLUMES :</b>	EB 8	WB 4	EB 8	WB 11	NB 1	SB 1	NB 3	SB 3	<b>TOTAL</b> 39	
<b>APPROACH %'s :</b>	66.67%	33.33%	42.11%	57.89%	50.00%	50.00%	50.00%	50.00%		
<b>PEAK HR :</b>	04:00 PM - 05:00 PM								<b>TOTAL</b>	
<b>PEAK HR VOL :</b>	3	3	2	1	0	0	0	1	10	
<b>PEAK HR FACTOR :</b>	0.250	0.375	0.500	0.250				0.250	0.625	
	0.500		0.750				0.250			

# Van Dyke Ave/Aldine Dr & Adams Ave

## Peak Hour Turning Movement Count

ID: 24-040164-001  
 City: San Diego

Day: Thursday  
 Date: 9/5/2024



88) Fairmount Ave & Aldine DrDr

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Aldine Dr & Fairmount Ave Off-Ramp  
**City:** San Diego  
**Control:** 3-Way Stop(NB/SB/WB)

**Project ID:** 24-040164-002  
**Date:** 9/5/2024

### Data - Totals

NS/EW Streets:	Aldine Dr				Aldine Dr				Fairmount Ave Off-Ramp				Fairmount Ave Off-Ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	21	0	0	0	22	0	0	0	0	0	0	44	0	12	0	99
7:15 AM	0	22	0	0	0	18	0	0	0	0	0	0	39	0	19	0	98
7:30 AM	0	40	0	0	0	46	0	0	0	0	0	0	50	0	20	0	156
7:45 AM	0	27	0	0	0	56	0	0	0	0	0	0	66	0	27	0	176
8:00 AM	0	18	0	0	0	45	0	0	0	0	0	0	92	0	27	0	182
8:15 AM	0	22	0	0	0	34	0	0	0	0	0	0	97	0	23	0	176
8:30 AM	0	33	0	0	0	39	0	0	0	0	0	0	82	0	30	0	184
8:45 AM	0	21	0	0	0	43	0	0	0	0	0	0	92	0	28	0	184
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	204	0	0	0	303	0	0	0	0	0	0	562	0	186	0	1255
<b>APPROACH %'s :</b>	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					75.13%	0.00%	24.87%	0.00%	
<b>PEAK HR :</b>	08:00 AM - 09:00 AM																TOTAL
<b>PEAK HR VOL :</b>	0	94	0	0	0	161	0	0	0	0	0	0	363	0	108	0	726
<b>PEAK HR FACTOR :</b>	0.000	0.712	0.000	0.000	0.000	0.894	0.000	0.000	0.000	0.000	0.000	0.000	0.936	0.000	0.900	0.000	0.986
				0.712				0.894								0.981	
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	20	0	0	0	62	0	0	0	0	0	0	176	0	26	0	284
4:15 PM	0	29	0	0	0	37	0	0	0	0	0	0	179	0	29	0	274
4:30 PM	0	18	0	0	0	69	0	0	0	0	0	0	182	0	34	0	303
4:45 PM	0	29	0	0	0	62	0	0	0	0	0	0	185	0	26	0	302
5:00 PM	0	21	0	0	0	72	0	0	0	0	0	0	176	0	19	0	288
5:15 PM	0	22	0	0	0	47	0	0	0	0	0	0	188	0	34	0	291
5:30 PM	0	17	0	0	0	59	0	0	0	0	0	0	181	0	21	0	278
5:45 PM	0	13	0	0	0	49	0	0	0	0	0	0	181	0	13	0	256
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	169	0	0	0	457	0	0	0	0	0	0	1448	0	202	0	2276
<b>APPROACH %'s :</b>	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					87.76%	0.00%	12.24%	0.00%	
<b>PEAK HR :</b>	04:30 PM - 05:30 PM																TOTAL
<b>PEAK HR VOL :</b>	0	90	0	0	0	250	0	0	0	0	0	0	731	0	113	0	1184
<b>PEAK HR FACTOR :</b>	0.000	0.776	0.000	0.000	0.000	0.868	0.000	0.000	0.000	0.000	0.000	0.000	0.972	0.000	0.831	0.000	0.977
				0.776				0.868								0.950	

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Aldine Dr & Fairmount Ave Off-Ramp  
**City:** San Diego  
**Control:** 3-Way Stop(NB/SB/WB)

**Project ID:** 24-040164-002  
**Date:** 9/5/2024

### Data - Bikes

NS/EW Streets:	Aldine Dr				Aldine Dr				Fairmount Ave Off-Ramp				Fairmount Ave Off-Ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0	0	0	0	5
<b>PEAK HR :</b>	08:00 AM - 09:00 AM																TOTAL
<b>PEAK HR VOL :</b>	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
<b>PEAK HR FACTOR :</b>	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
5:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0.00%	0.00%	100.00%	0.00%	5
<b>PEAK HR :</b>	04:30 PM - 05:30 PM																TOTAL
<b>PEAK HR VOL :</b>	0	1	0	0	0	2	0	0	0	0	0	0	0	0	1	0	4
<b>PEAK HR FACTOR :</b>	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500



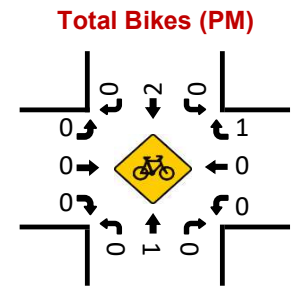
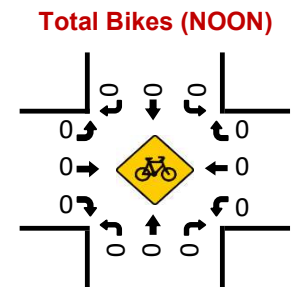
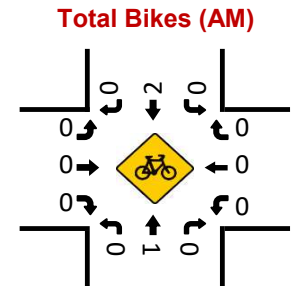
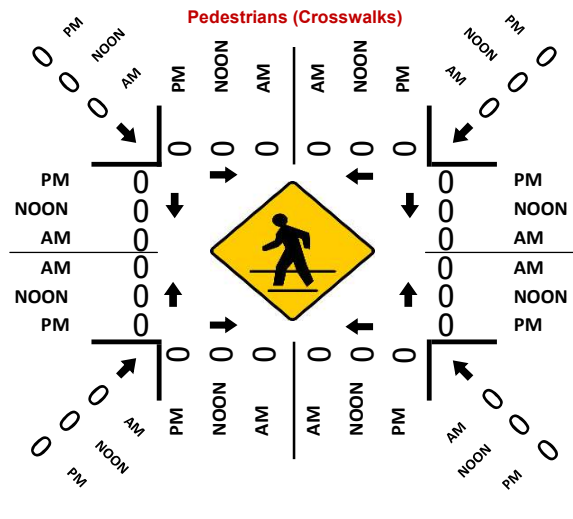
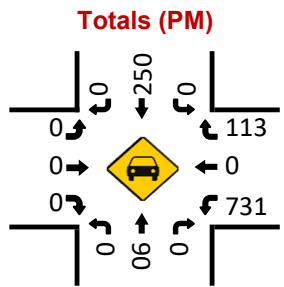
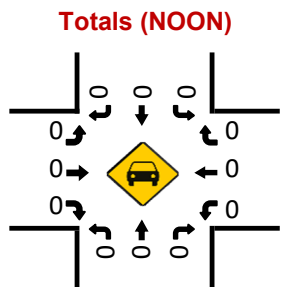
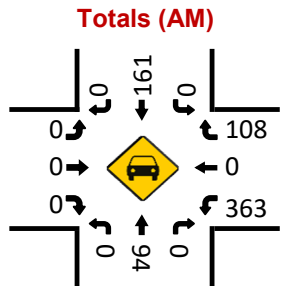
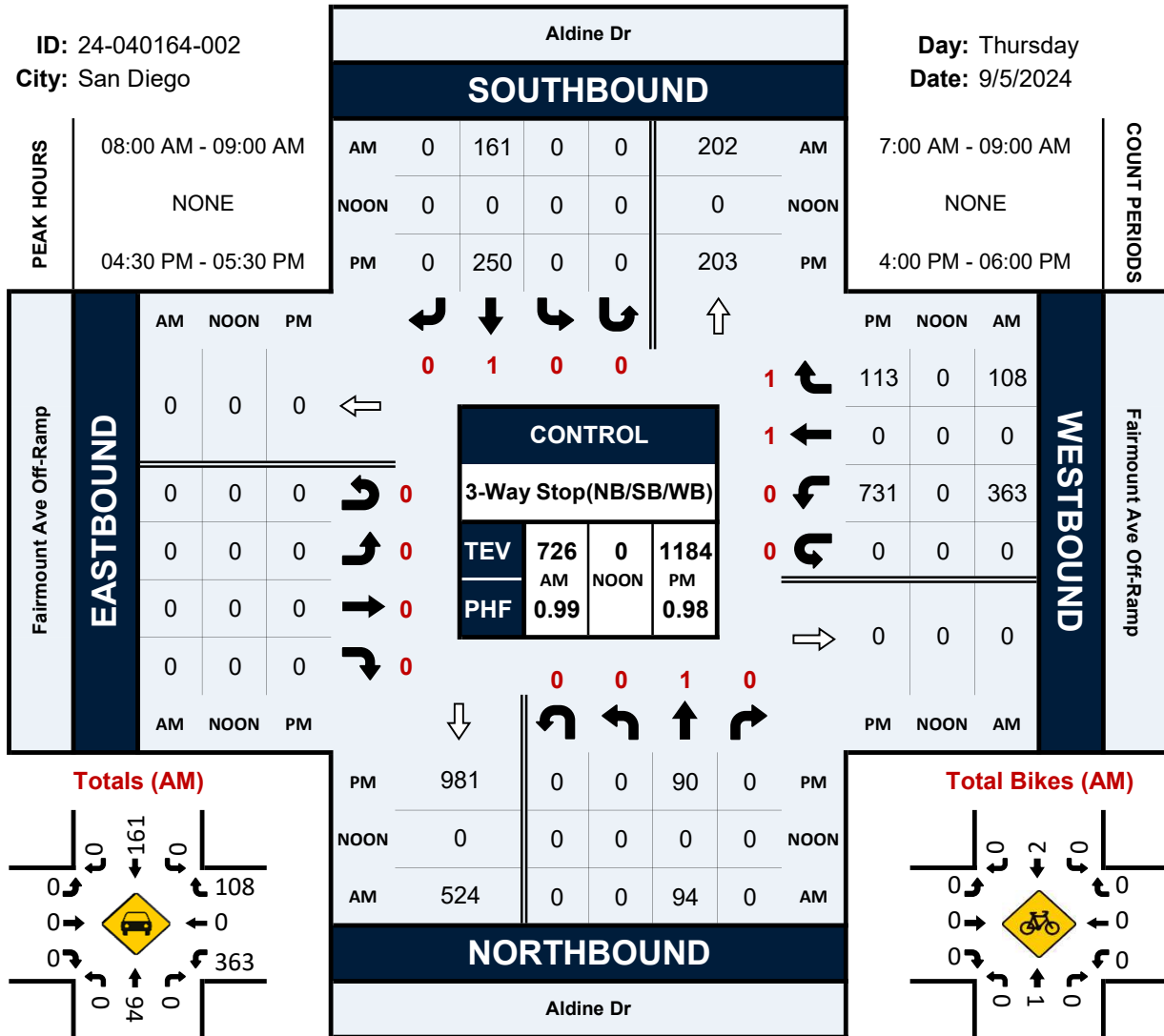


# Aldine Dr & Fairmount Ave Off-Ramp

## Peak Hour Turning Movement Count

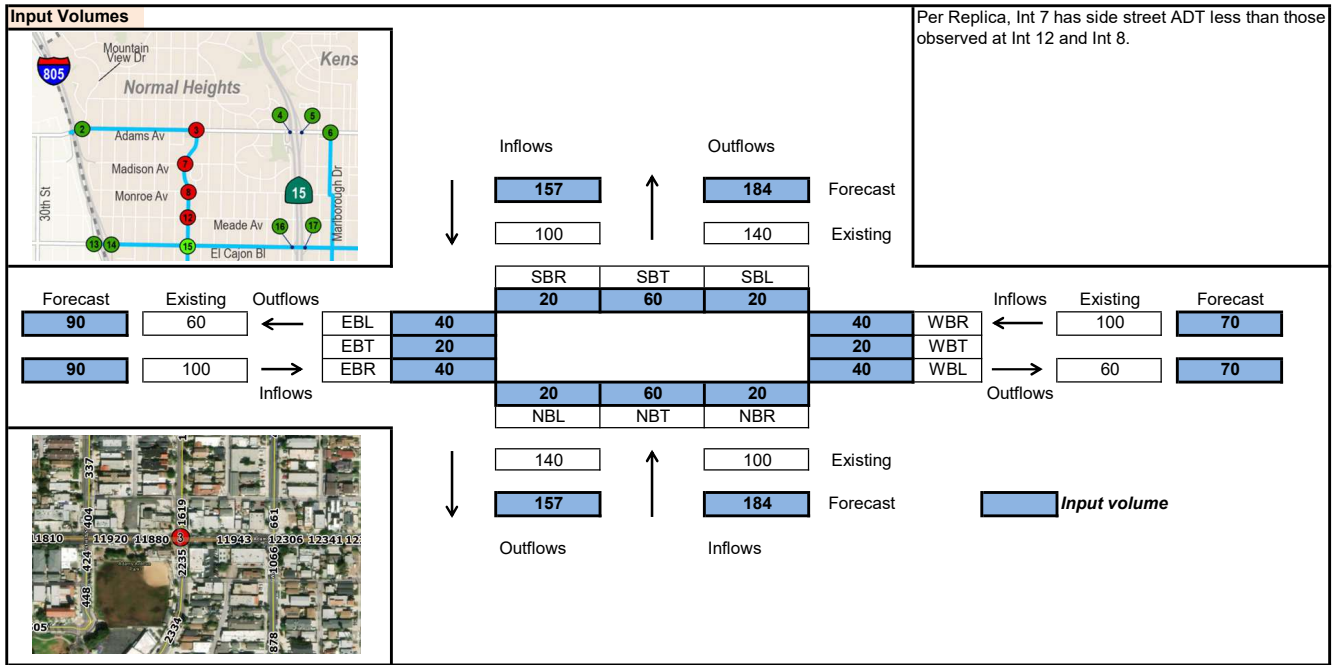
ID: 24-040164-002  
City: San Diego

Day: Thursday  
Date: 9/5/2024

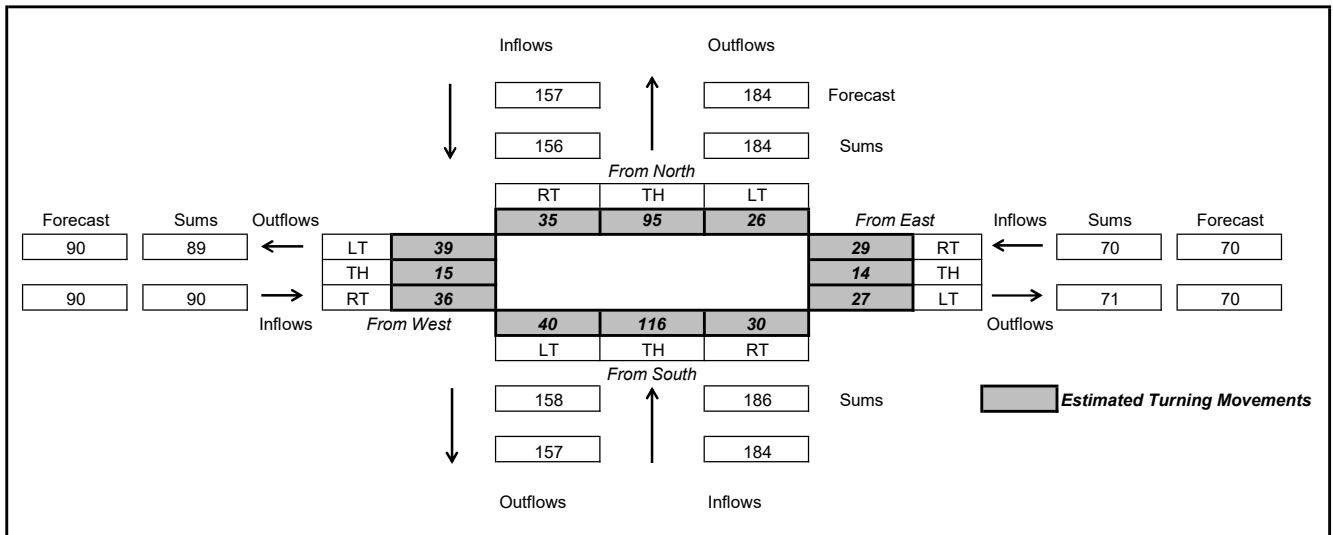


99) 35th St & Madison Ave

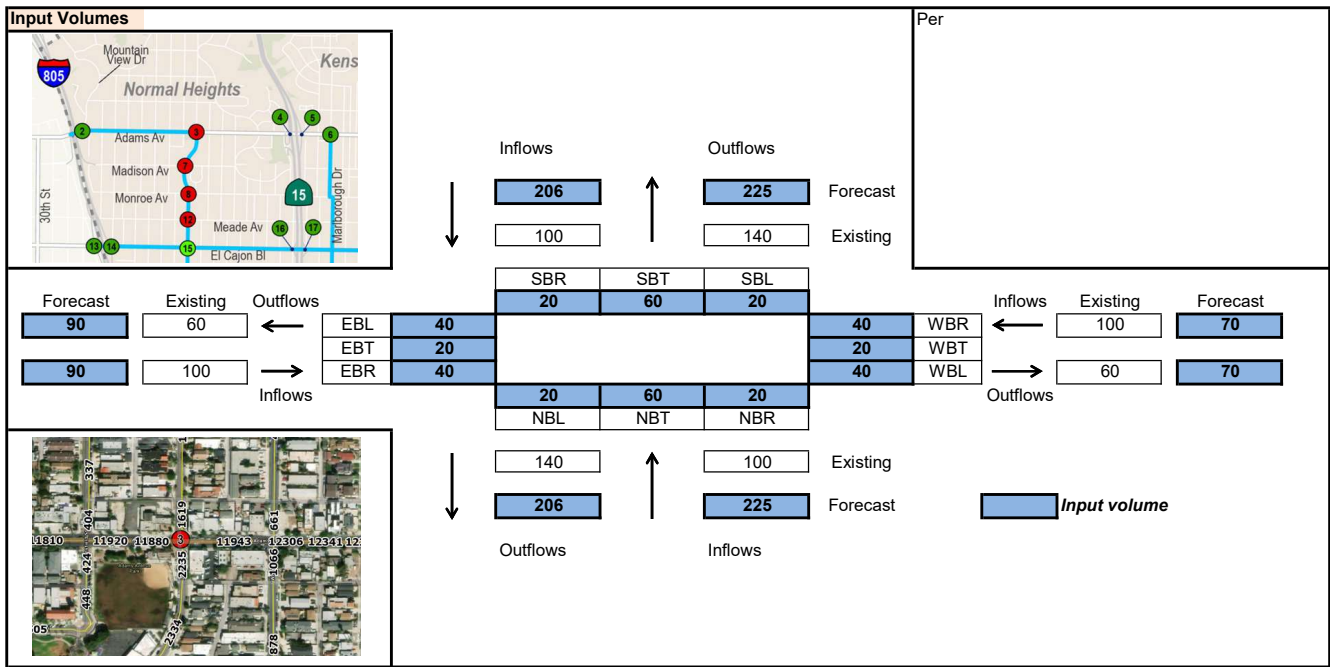
### Iterative Method Estimated Turning Movements



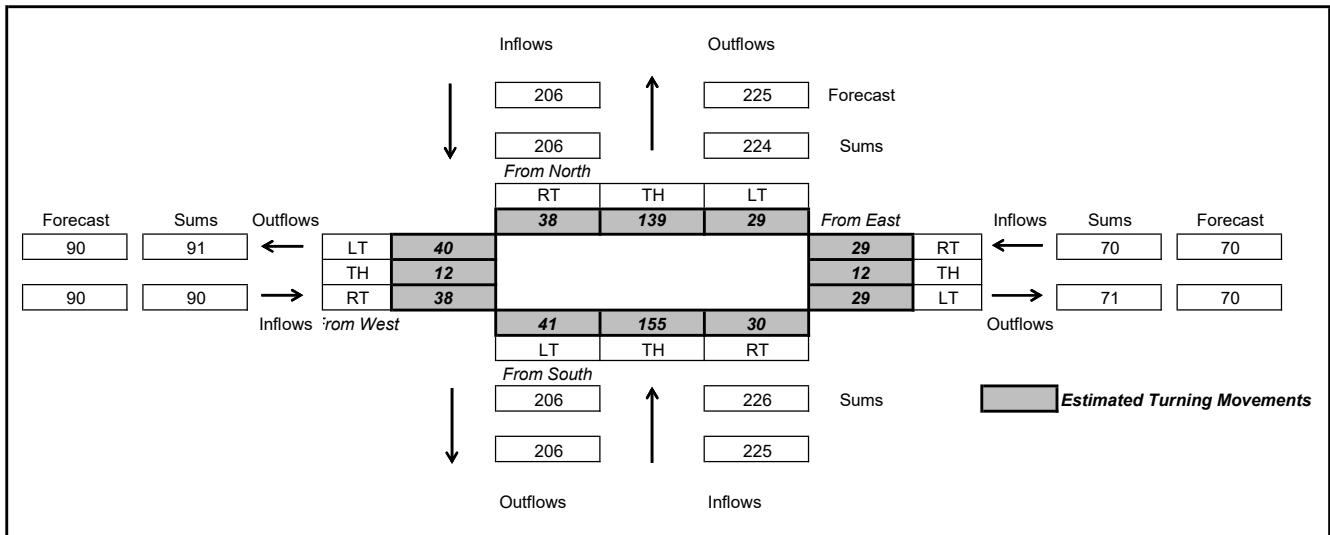
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements

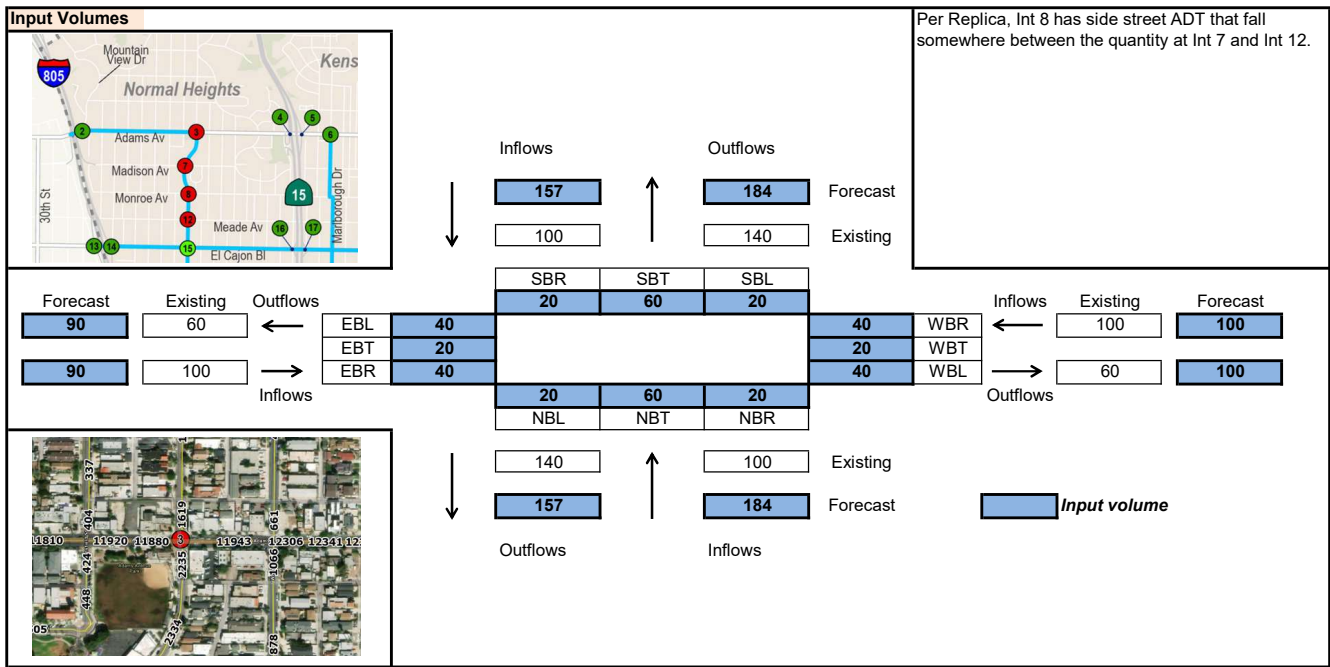


### Estimated Turning Movements

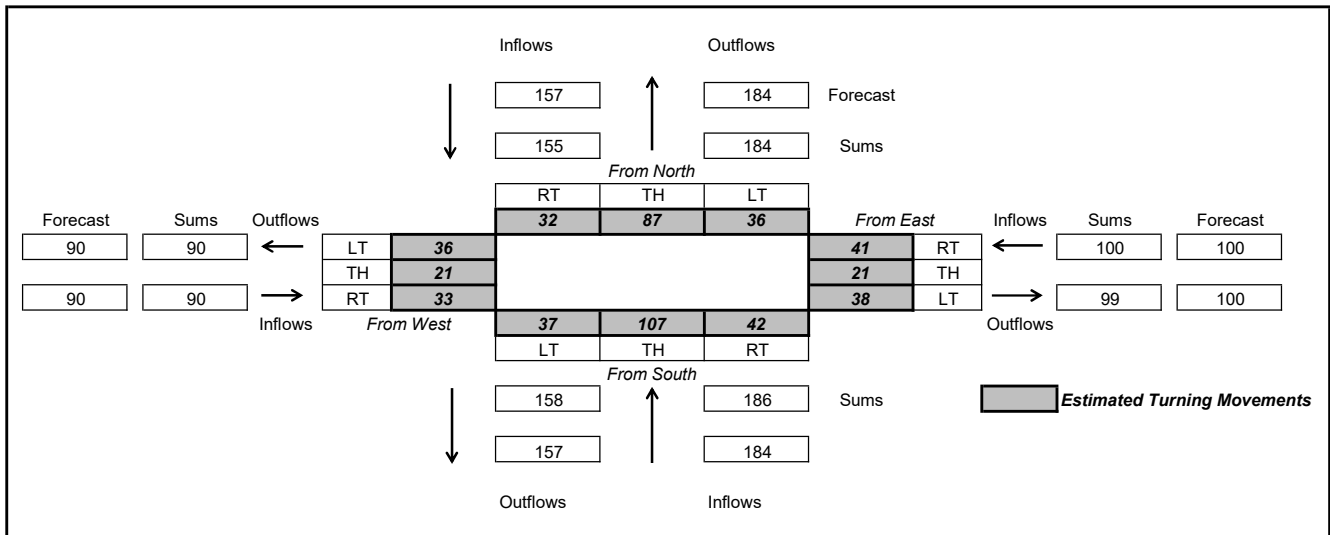


10) 35th St & Monroe Ave

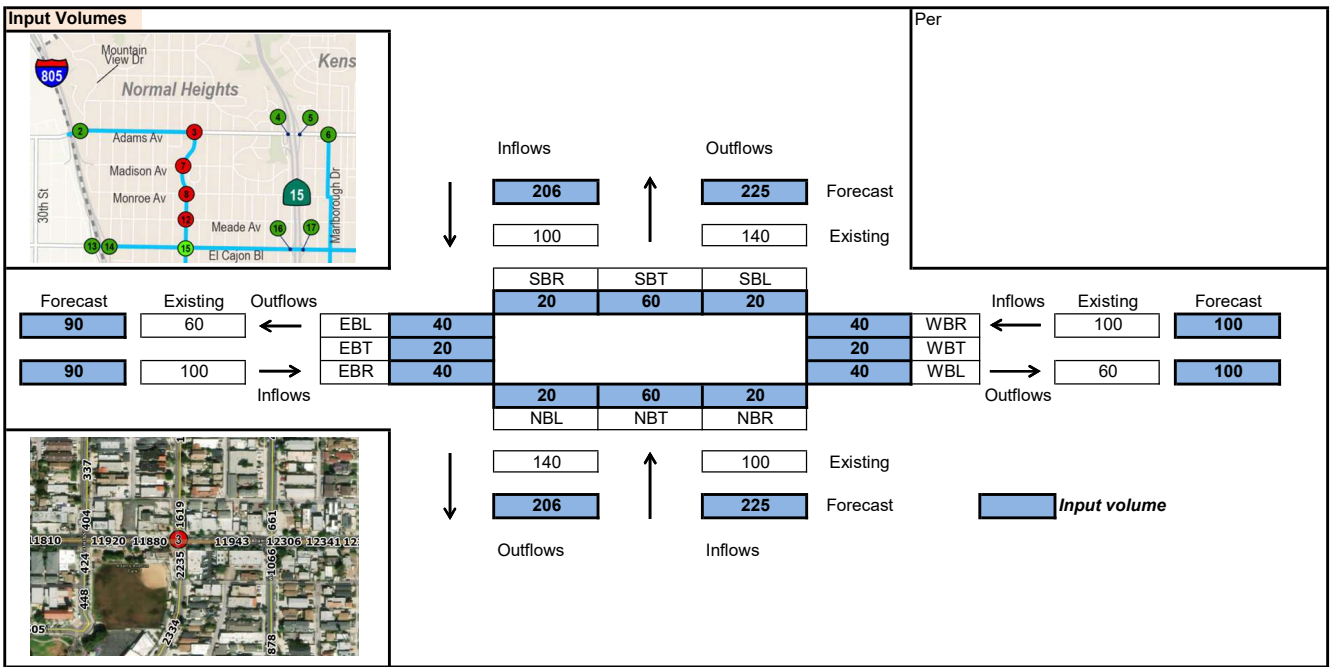
### Iterative Method Estimated Turning Movements



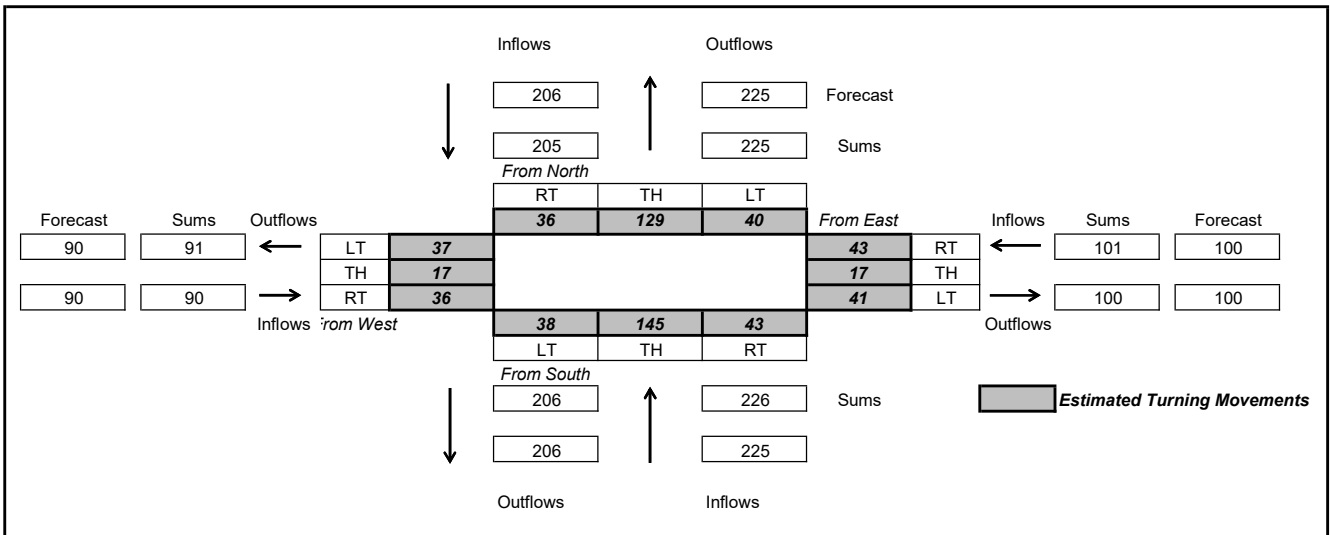
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



### Estimated Turning Movements





11) Euclid Ave & Monroe Ave

Summary

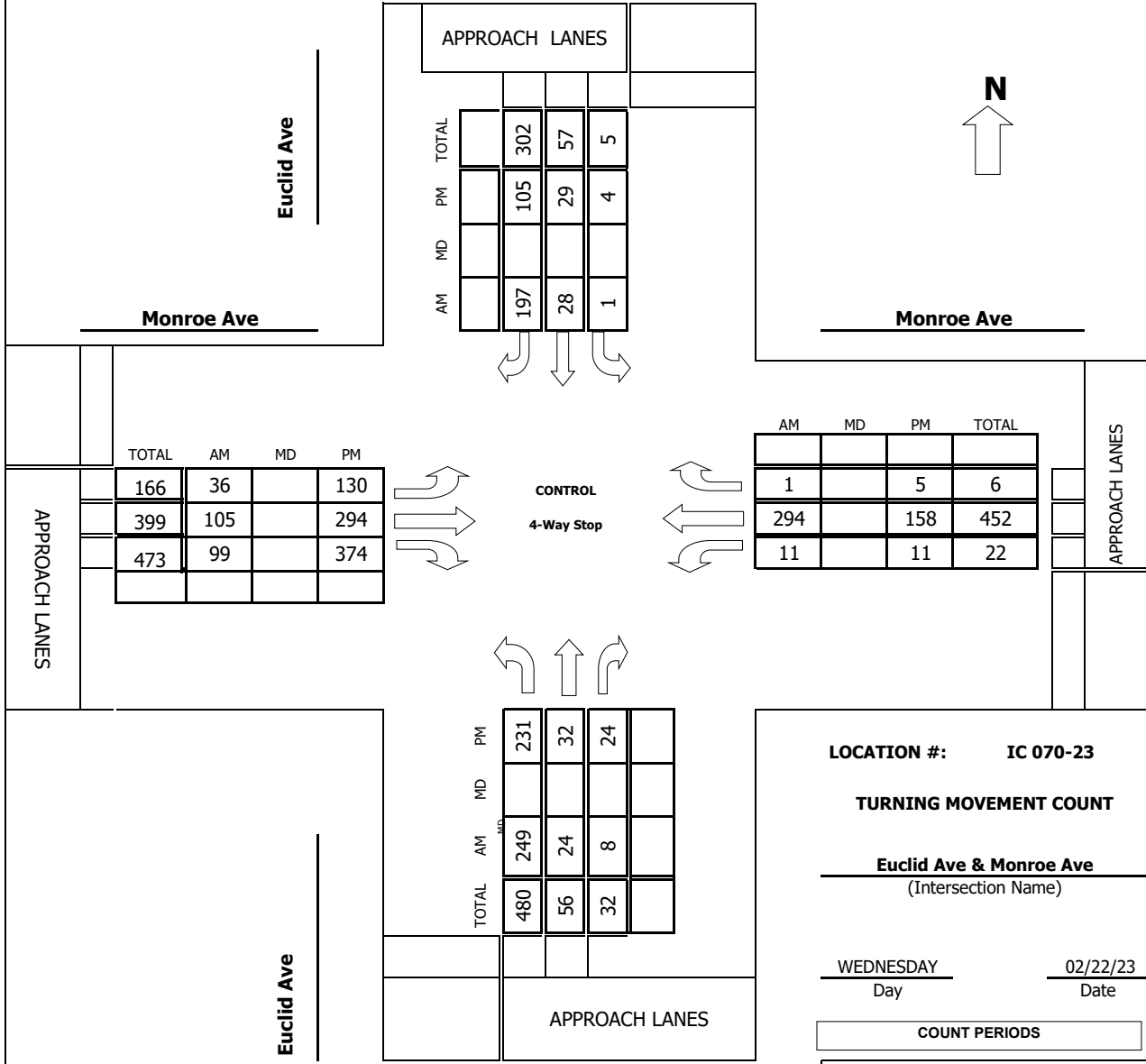
	Location		Latitude	Longitude	FILE NO	STUDY DATE	STUDY TIME	VEHICLES	PEDS	OTHER	BICYCLES	TOTAL	Mode Share PEDS	Mode Share OTHER	Mode Share BICYCLES	Mode Share Vehicles
AM	Euclid Ave	& Monroe Ave	32.759027	-117.092113	IC 070-23	02/22/23	0700-0900	1840	43	0	13	1896	2.3%	0.0%	0.7%	97.0%
PM	Euclid Ave	& Monroe Ave	32.759027	-117.092113	IC 070-23	02/22/23	1600-1800	2602	42	0	14	2658	1.6%	0.0%	0.5%	97.9%

**Intersection Turning Movement  
Prepared by:**



**Project #:** IC 070-23

**TMC SUMMARY OF Euclid Ave & Monroe Ave**



TOTAL	AM	MD	PM
166	36		130
399	105		294
473	99		374

AM	MD	PM	TOTAL
1		5	6
294		158	452
11		11	22

TOTAL	AM	MD	PM
480	249	24	32
56	24	8	32
231			24

**LOCATION #:** IC 070-23

**TURNING MOVEMENT COUNT**

**Euclid Ave & Monroe Ave**  
(Intersection Name)

WEDNESDAY                      02/22/23  
Day    Date

COUNT PERIODS	
<b>AM</b>	700AM - 900AM
<b>NOON</b>	-
<b>PM</b>	400PM - 600PM

AM PEAK HOUR                      730 AM  
NOON PEAK HOUR                      \_\_\_\_\_  
PM PEAK HOUR                      445 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **Euclid Ave**      DATE: **02/22/23**      LOCATION: **San Diego**  
 E-W STREET: **Monroe Ave**      DAY: **WEDNESDAY**      PROJECT# **IC 070-23**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	1	0	0	1	0	0	1	1	0	1	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	41	8	1	2	1	30	5	16	19	2	50	1	176
7:15 AM	43	6	3	1	5	39	2	21	20	3	59	2	204
7:30 AM	66	9	2	0	8	43	8	25	21	6	60	0	248
7:45 AM	60	5	1	0	5	41	11	30	25	1	85	0	264
8:00 AM	65	8	4	0	9	50	10	26	24	4	74	1	275
8:15 AM	58	2	1	1	6	63	7	24	29	0	75	0	266
8:30 AM	52	5	2	0	8	24	4	20	26	1	59	0	201
8:45 AM	41	1	1	1	8	28	5	19	33	2	66	1	206
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	426	44	15	5	50	318	52	181	197	19	528	5	1840
Approach %	87.84	9.07	3.09	1.34	13.40	85.25	12.09	42.09	45.81	3.44	95.65	0.91	
App/Depart	485	/	101	373	/	266	430	/	201	552	/	1272	

AM Peak Hr Begins at: 730 AM

**PEAK**

Volumes	249	24	8	1	28	197	36	105	99	11	294	1	1053
Approach %	88.61	8.54	2.85	0.44	12.39	87.17	15.00	43.75	41.25	3.59	96.08	0.33	

**PEAK HR.**

FACTOR:	0.912	0.807	0.909	0.890	0.957
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**CONTROL:**

4-Way Stop

**COMMENT 1:**

GPS: 32.759027      -117.092113

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Euclid Ave**      DATE: **02/22/23**      LOCATION: **San Diego**  
 E-W STREET: **Monroe Ave**      DAY: **WEDNESDAY**      PROJECT# **IC 070-23**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	1	0	0	1	0	0	1	1	0	1	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	46	6	3	2	4	19	28	65	85	3	28	0	289
4:15 PM	60	5	9	0	7	21	24	60	74	6	27	1	294
4:30 PM	65	4	6	3	8	20	29	59	89	2	29	2	316
4:45 PM	69	7	8	1	5	29	26	75	99	5	33	1	358
5:00 PM	50	10	5	0	9	24	33	74	90	1	30	0	326
5:15 PM	54	6	7	1	6	28	30	85	98	4	54	3	376
5:30 PM	58	9	4	2	9	24	41	60	87	1	41	1	337
5:45 PM	52	4	5	1	9	28	43	69	46	2	45	2	306
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	454	51	47	10	57	193	254	547	668	24	287	10	2602
Approach %	82.25	9.24	8.51	3.85	21.92	74.23	17.29	37.24	45.47	7.48	89.41	3.12	
App/Depart	552	/	315	260	/	749	1469	/	604	321	/	934	

PM Peak Hr Begins at: 445 PM

**PEAK**

Volumes	231	32	24	4	29	105	130	294	374	11	158	5	1397
Approach %	80.49	11.15	8.36	2.90	21.01	76.09	16.29	36.84	46.87	6.32	90.80	2.87	

**PEAK HR.**

FACTOR:	0.854	0.986	0.937	0.713	0.929
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CONTROL: **4-Way Stop**

COMMENT 1: **0**

GPS: **32.759027      -117.092113**

**Pedestrian & Bicycle Study**

N-S STREET: Euclid Ave  
E-W STREET: Monroe Ave

Date: 02/22/23  
Day: WEDNESDAY

City: San Diego  
Project #: IC 070-23

	PEDESTRIANS				GRAND TOTAL
	N-LEG	S-LEG	E-LEG	W-LEG	
7:00 AM	1	0	1	2	
7:15 AM	0	1	2	4	
7:30 AM	0	1	1	1	
7:45 AM	2	2	0	2	
8:00 AM	1	1	0	5	
8:15 AM	0	0	0	2	
8:30 AM	1	1	1	3	
8:45 AM	3	2	2	1	
<b>TOTAL</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>20</b>	<b>43</b>

	PEDESTRIANS				GRAND TOTAL
	N-LEG	S-LEG	E-LEG	W-LEG	
4:00 PM	0	1	1	2	
4:15 PM	0	0	2	4	
4:30 PM	0	1	1	1	
4:45 PM	1	2	0	2	
5:00 PM	0	3	1	3	
5:15 PM	1	1	4	1	
5:30 PM	2	0	1	2	
5:45 PM	0	1	2	2	
<b>TOTAL</b>	<b>4</b>	<b>9</b>	<b>12</b>	<b>17</b>	<b>42</b>

	OTHER (SCOOTERS, SKATEBOARD, ETC) FROM SIDEWALK AND ROADWAY												GRAND TOTAL	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

	OTHER (SCOOTERS, SKATEBOARD, ETC) FROM SIDEWALK AND ROADWAY												GRAND TOTAL	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

	BICYCLES FROM SIDEWALK AND ROADWAY												GRAND TOTAL	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>13</b>

	BICYCLES FROM SIDEWALK AND ROADWAY												GRAND TOTAL	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0	0	1	0	0	1	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>14</b>

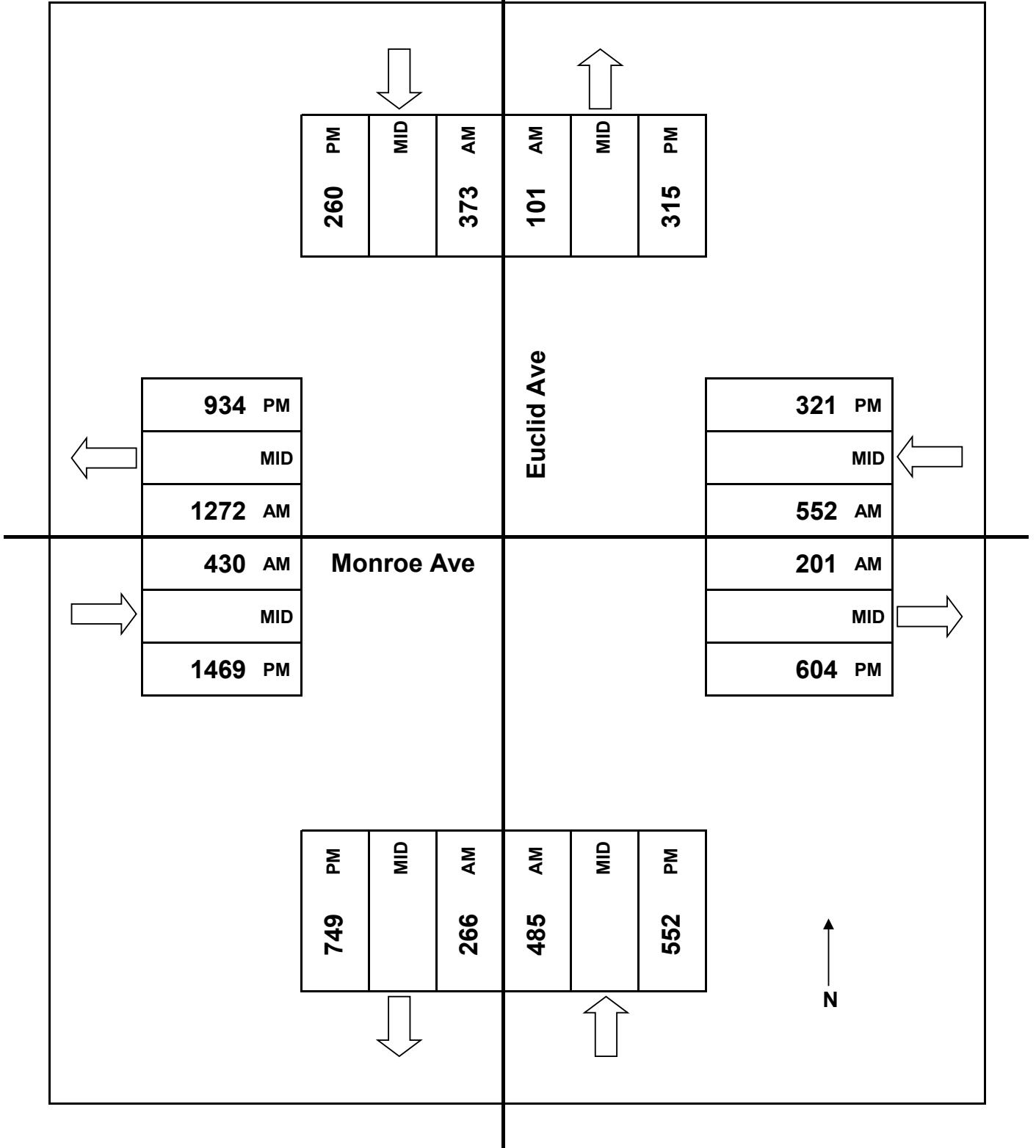


JOB# IC 070-23

VALIDATED: \_\_\_\_\_

DATE: 02/22/23

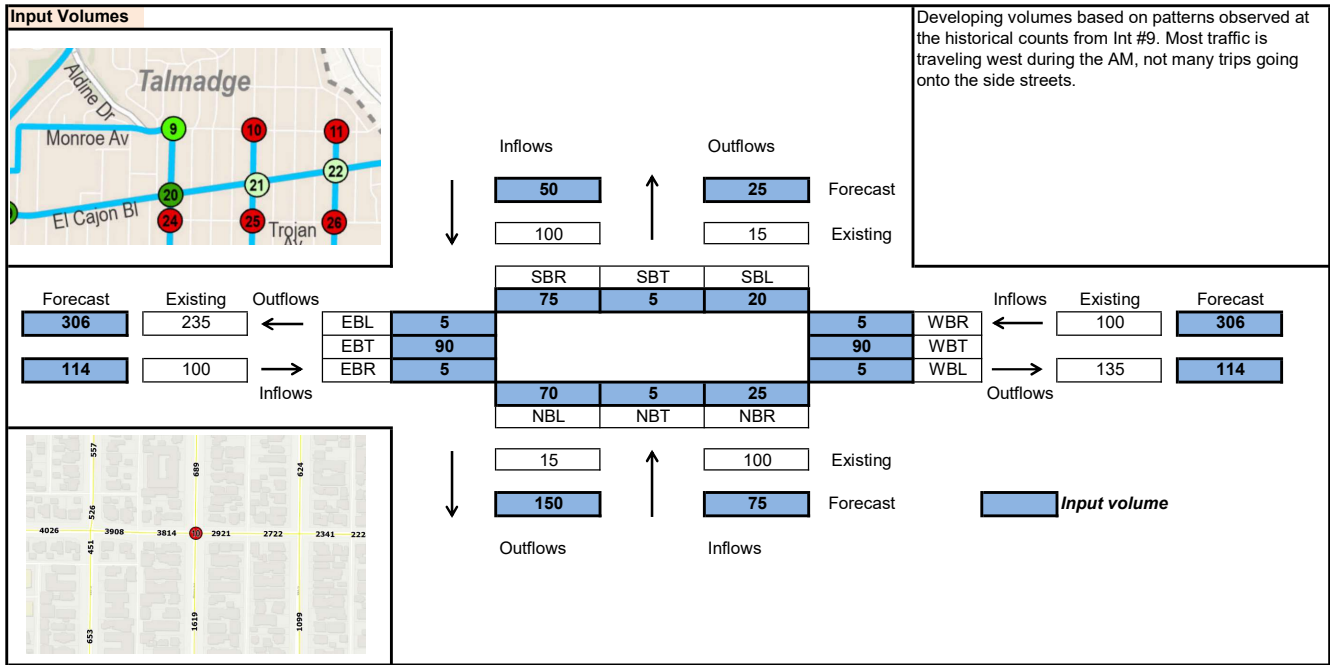
DAY: WEDNESDAY



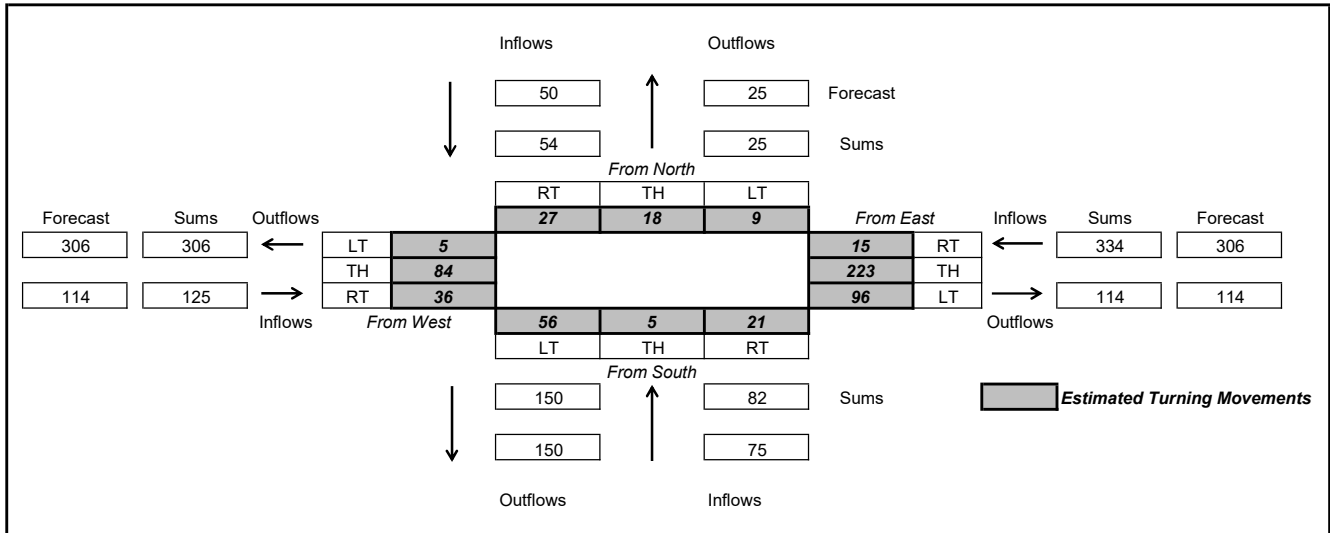
12) Monroe Ave & Winona Ave



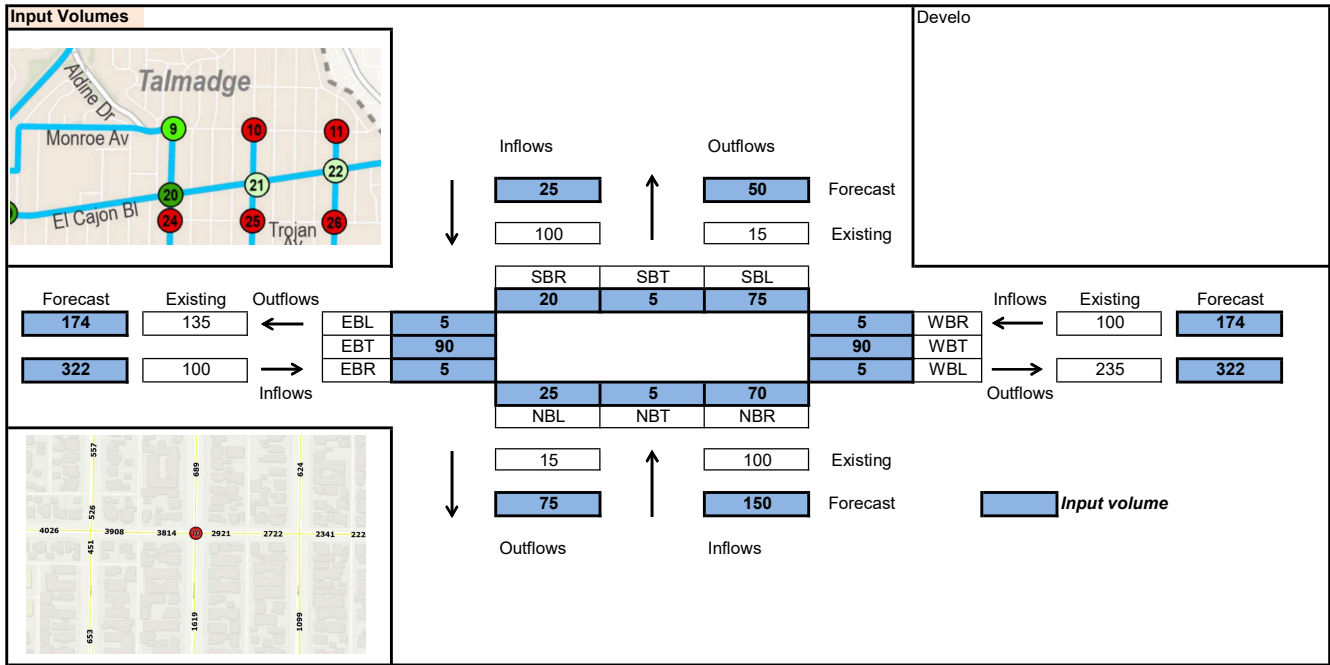
### Iterative Method Estimated Turning Movements



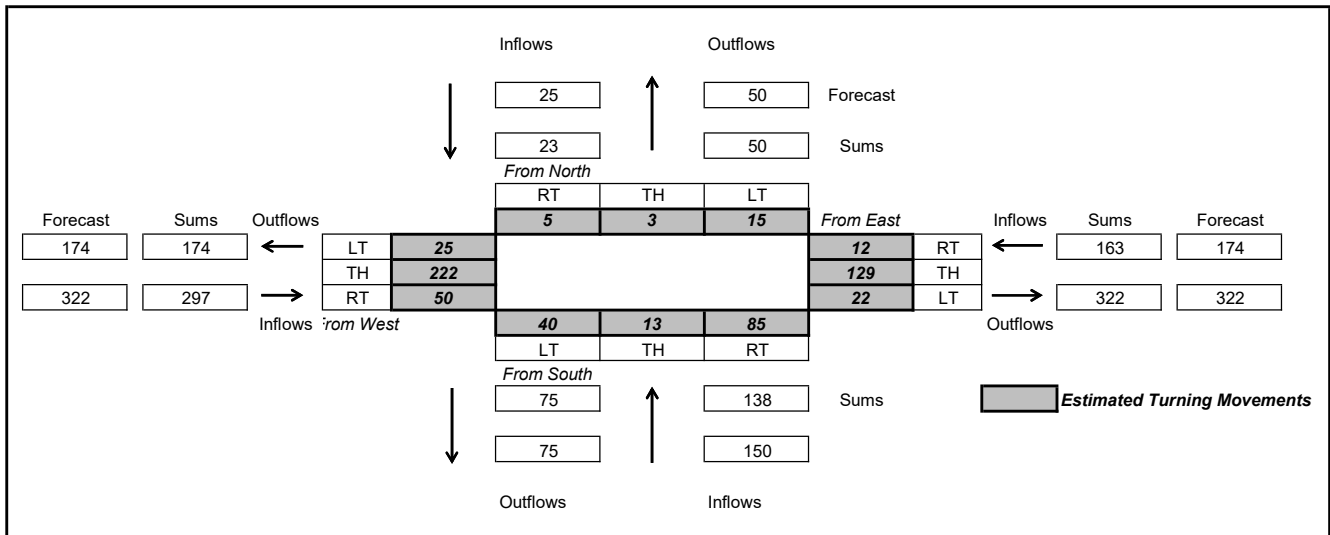
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements

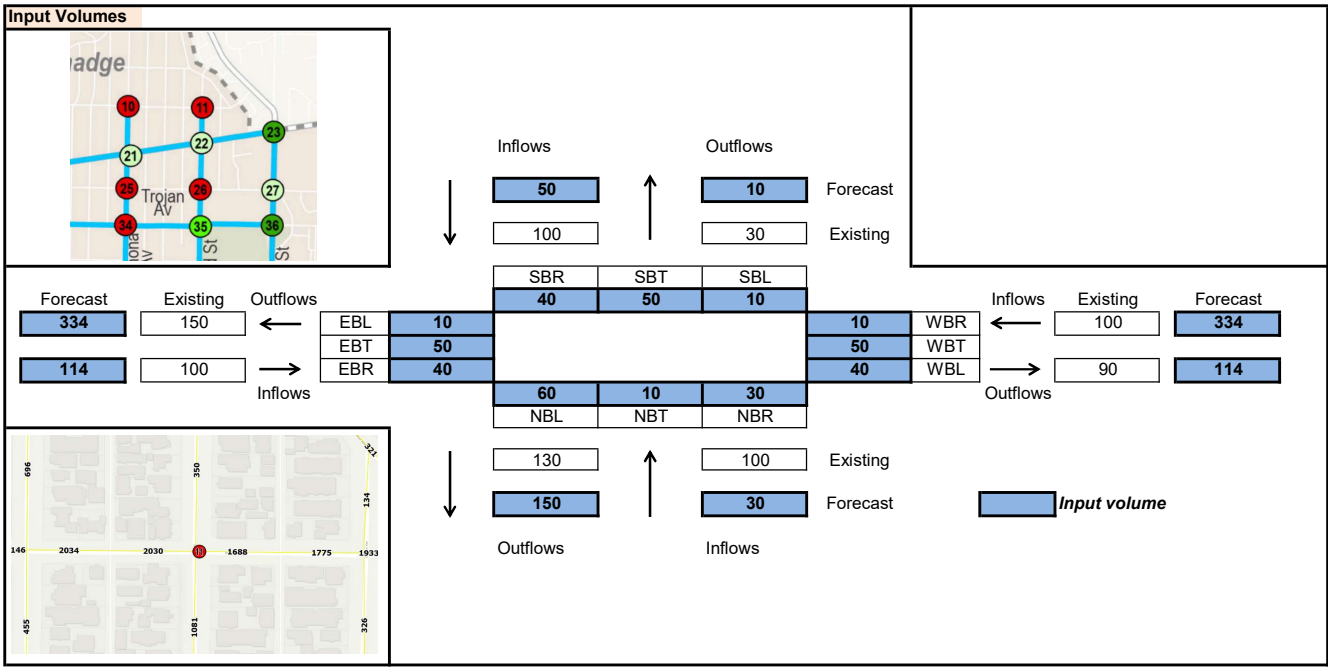


### Estimated Turning Movements

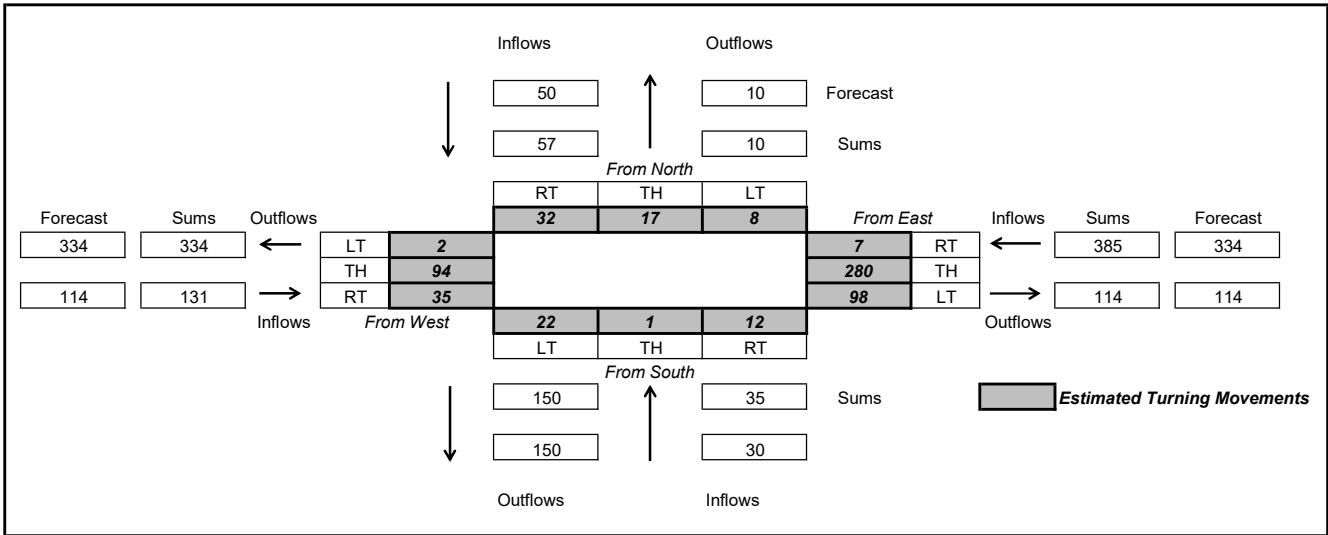


13) 52nd St & Monroe Ave

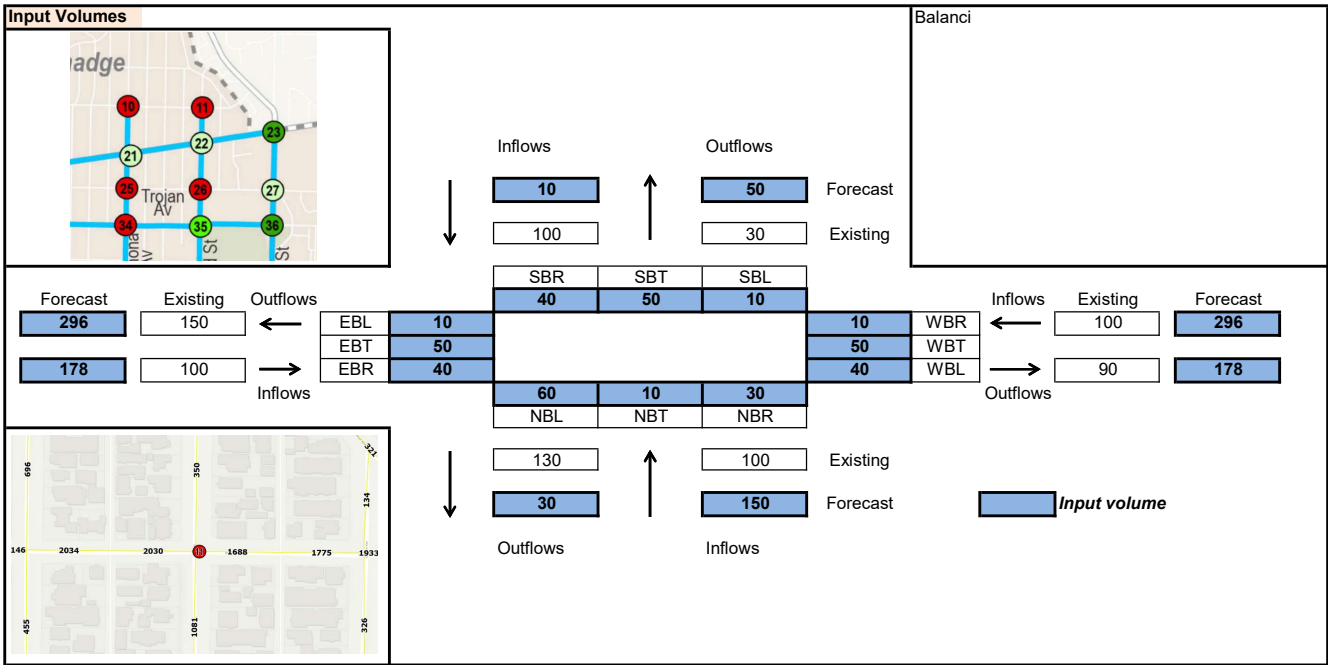
### Iterative Method Estimated Turning Movements



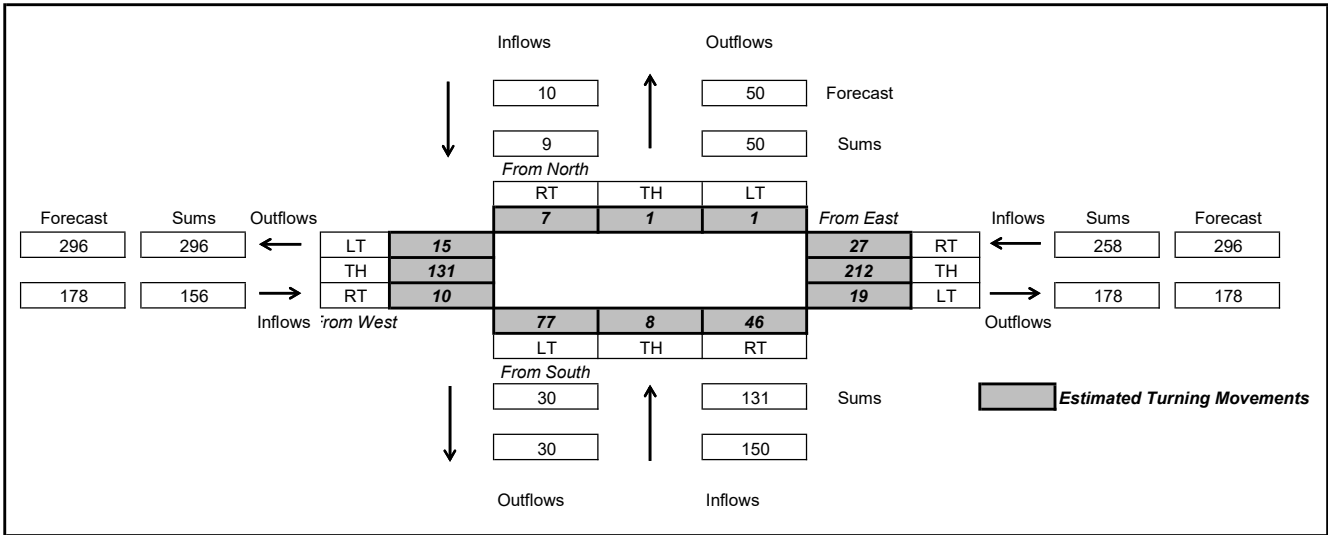
### Estimated Turning Movements



## Iterative Method Estimated Turning Movements

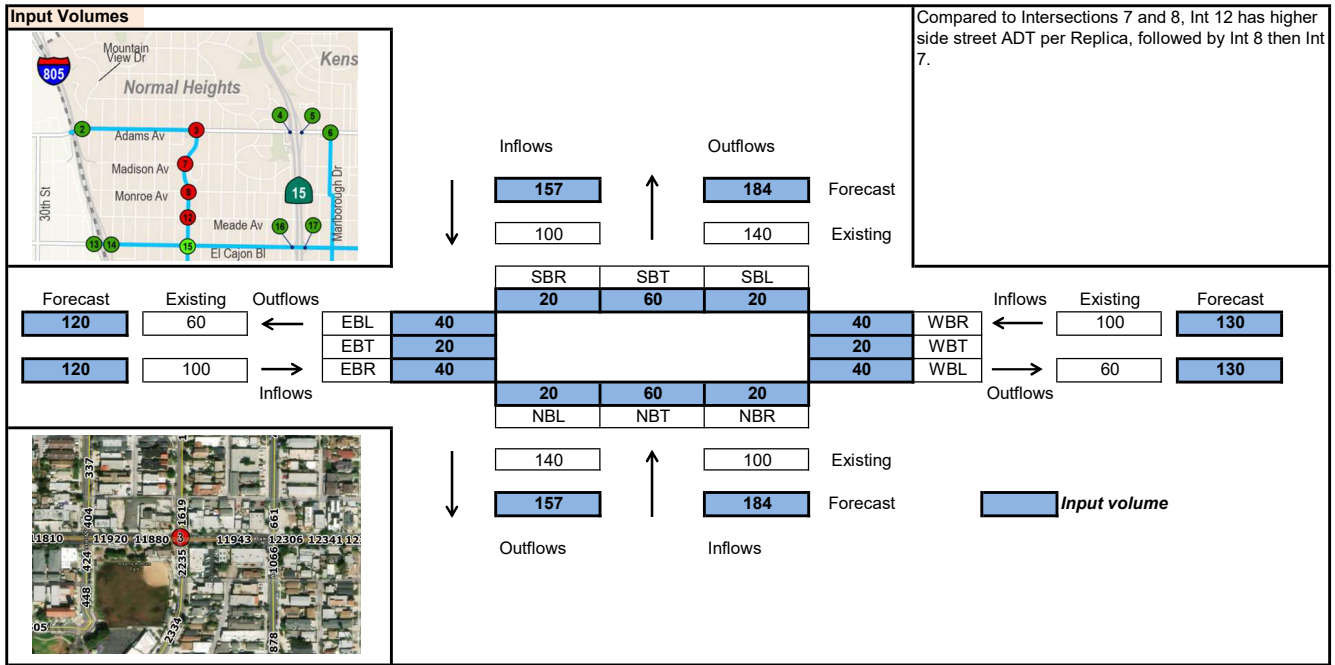


**Estimated Turning Movements**

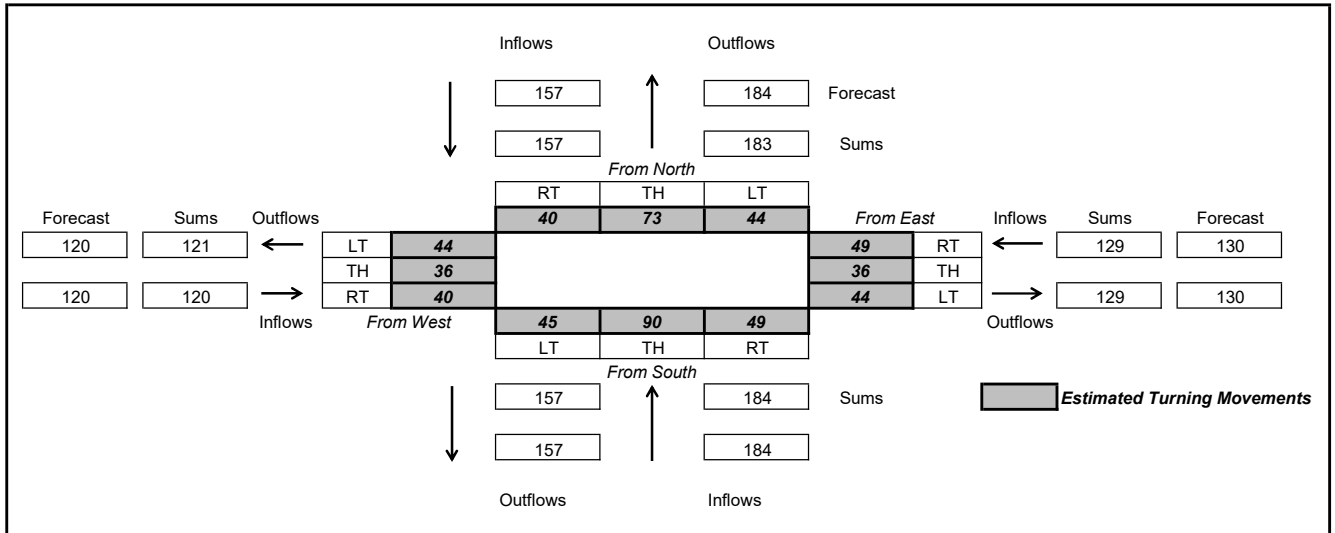


14) 35th St & Meade Ave

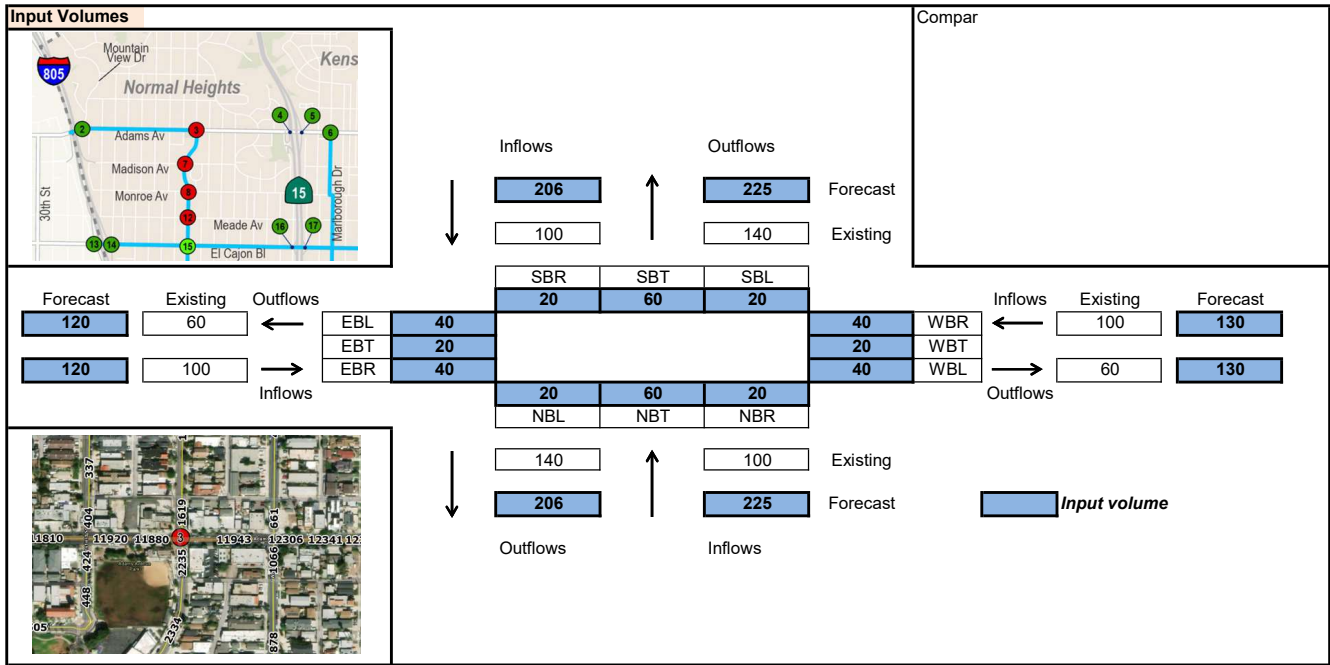
### Iterative Method Estimated Turning Movements



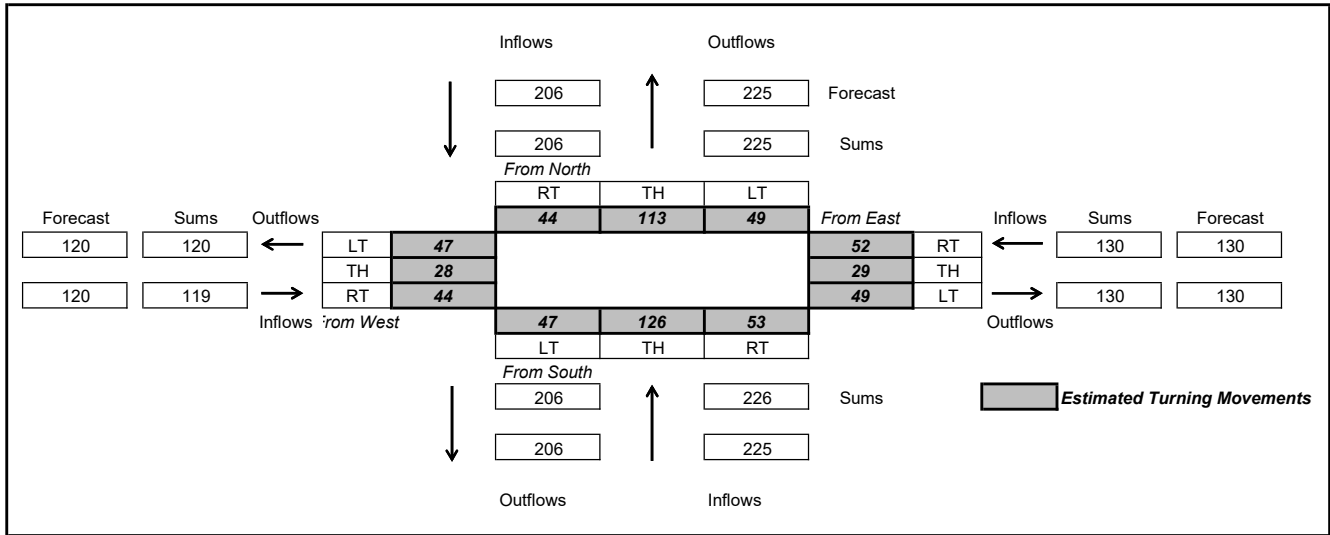
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



### Estimated Turning Movements





15) I-805 SB Ramps & El Cajon Blvd

City of San Diego  
 N/S: I-805 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 06\_SDG\_805S\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	I-805 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-805 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	19	2	67	88	20	138	0	158	0	0	0	0	0	136	114	250	496
07:15 AM	17	0	87	104	33	163	0	196	0	0	0	0	0	141	136	277	577
07:30 AM	41	0	86	127	35	220	0	255	0	0	0	0	0	167	183	350	732
07:45 AM	44	2	122	168	48	264	0	312	0	0	0	0	0	158	209	367	847
Total	121	4	362	487	136	785	0	921	0	0	0	0	0	602	642	1244	2652
08:00 AM	31	0	113	144	37	239	0	276	0	0	0	0	0	161	154	315	735
08:15 AM	36	0	131	167	33	226	0	259	0	0	0	0	0	177	124	301	727
08:30 AM	32	0	86	118	33	206	0	239	0	0	0	0	0	168	114	282	639
08:45 AM	38	1	107	146	35	251	0	286	0	0	0	0	0	147	118	265	697
Total	137	1	437	575	138	922	0	1060	0	0	0	0	0	653	510	1163	2798
Grand Total	258	5	799	1062	274	1707	0	1981	0	0	0	0	0	1255	1152	2407	5450
Apprch %	24.3	0.5	75.2		13.8	86.2	0		0	0	0	0	0	52.1	47.9		
Total %	4.7	0.1	14.7	19.5	5	31.3	0	36.3	0	0	0	0	0	23	21.1	44.2	

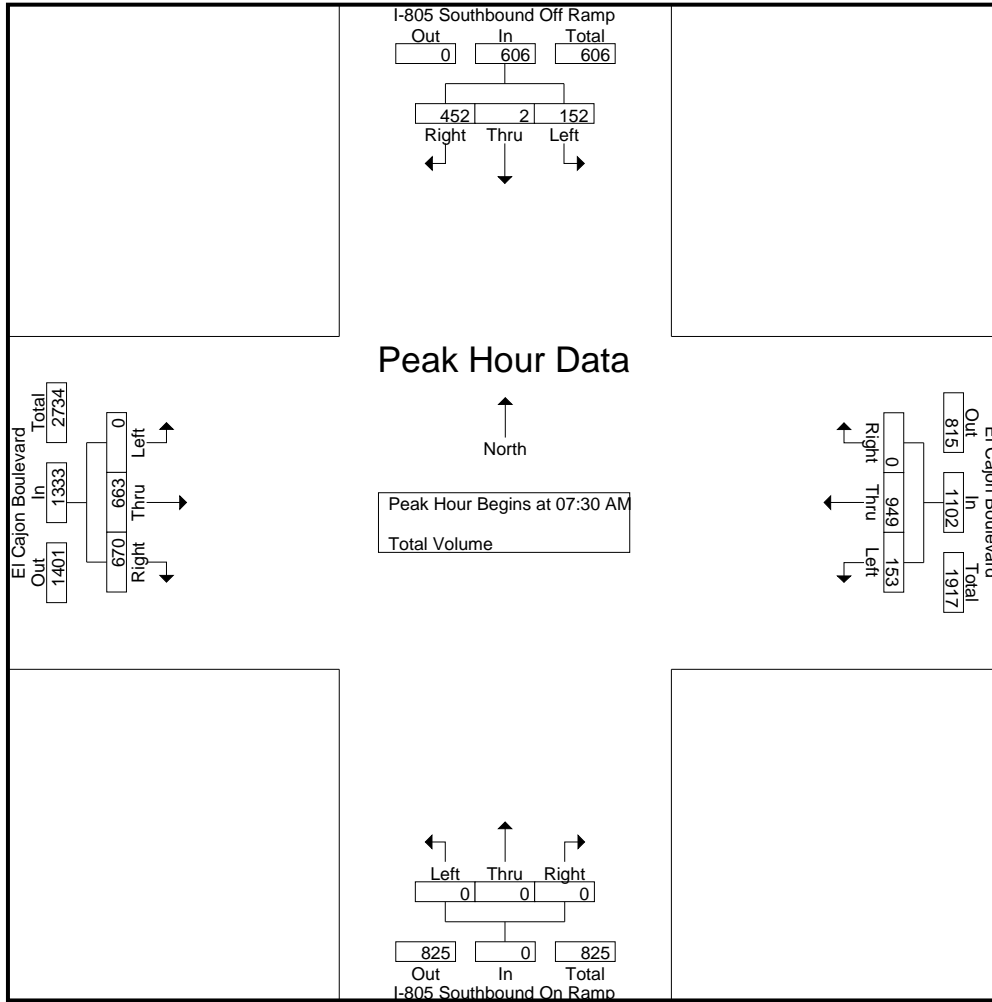
Start Time	I-805 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-805 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	41	0	86	127	35	220	0	255	0	0	0	0	0	167	183	350	732
07:45 AM	<b>44</b>	<b>2</b>	122	<b>168</b>	<b>48</b>	<b>264</b>	0	<b>312</b>	0	0	0	0	0	158	<b>209</b>	<b>367</b>	<b>847</b>
08:00 AM	31	0	113	144	37	239	0	276	0	0	0	0	0	161	154	315	735
08:15 AM	36	0	<b>131</b>	167	33	226	0	259	0	0	0	0	0	<b>177</b>	124	301	727
Total Volume	152	2	452	606	153	949	0	1102	0	0	0	0	0	663	670	1333	3041
% App. Total	25.1	0.3	74.6		13.9	86.1	0		0	0	0	0	0	49.7	50.3		
PHF	.864	.250	.863	.902	.797	.899	.000	.883	.000	.000	.000	.000	.000	.936	.801	.908	.898

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM

City of San Diego  
 N/S: I-805 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 06\_SDG\_805S\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:00 AM				07:30 AM			
+0 mins.	41	0	86	127	35	220	0	255	0	0	0	0	0	167	183	350
+15 mins.	<b>44</b>	<b>2</b>	122	<b>168</b>	<b>48</b>	<b>264</b>	0	<b>312</b>	0	0	0	0	0	158	<b>209</b>	<b>367</b>
+30 mins.	31	0	113	144	37	239	0	276	0	0	0	0	0	161	154	315
+45 mins.	36	0	<b>131</b>	167	33	226	0	259	0	0	0	0	0	<b>177</b>	124	301
Total Volume	152	2	452	606	153	949	0	1102	0	0	0	0	0	663	670	1333
% App. Total	25.1	0.3	74.6		13.9	86.1	0		0	0	0		0	49.7	50.3	
PHF	.864	.250	.863	.902	.797	.899	.000	.883	.000	.000	.000	.000	.000	.936	.801	.908

City of San Diego  
 N/S: I-805 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 06\_SDG\_805S\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

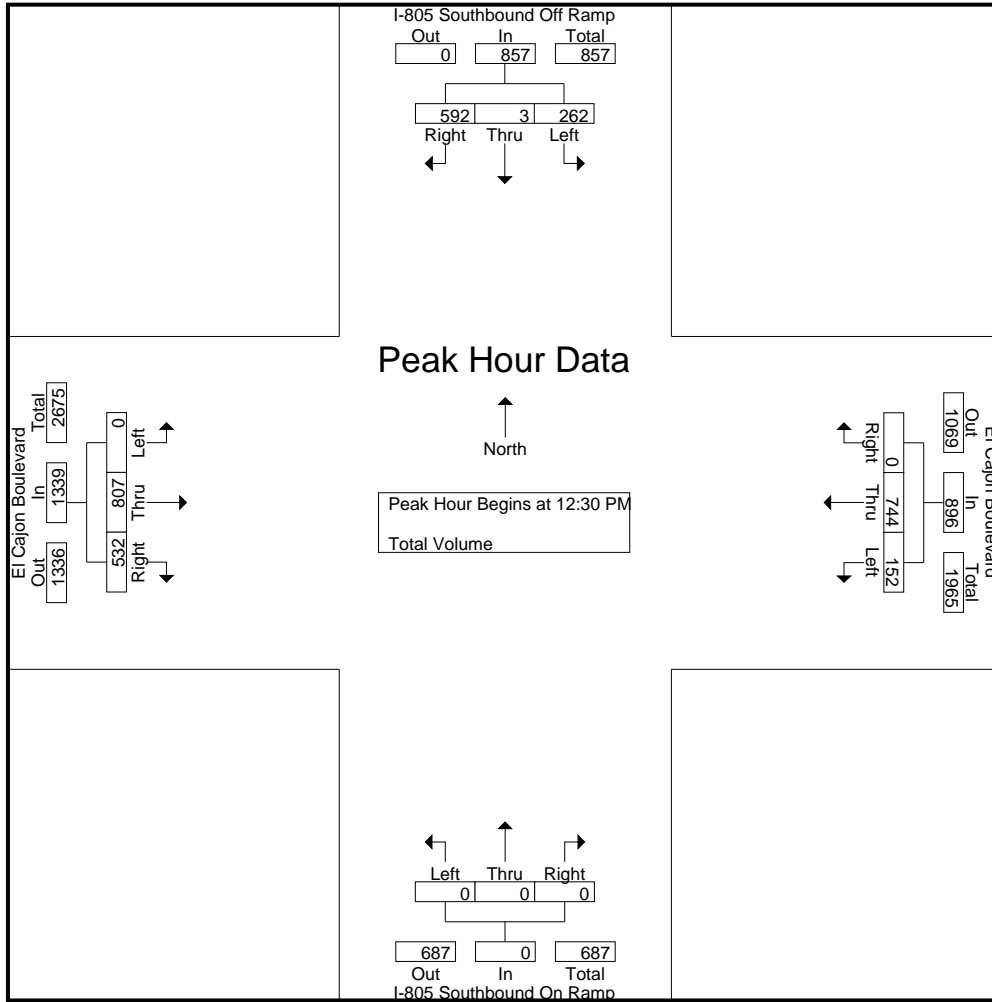
Start Time	I-805 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-805 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	56	1	120	177	25	207	0	232	0	0	0	0	0	199	94	293	702
11:45 AM	55	2	143	200	39	181	0	220	0	0	0	0	0	160	111	271	691
Total	111	3	263	377	64	388	0	452	0	0	0	0	0	359	205	564	1393
12:00 PM	55	2	145	202	50	156	0	206	0	0	0	0	0	200	148	348	756
12:15 PM	67	1	132	200	47	179	0	226	0	0	0	0	0	191	124	315	741
12:30 PM	57	0	141	198	32	191	0	223	0	0	0	0	0	188	125	313	734
12:45 PM	49	1	139	189	46	188	0	234	0	0	0	0	0	211	137	348	771
Total	228	4	557	789	175	714	0	889	0	0	0	0	0	790	534	1324	3002
01:00 PM	80	0	143	223	41	184	0	225	0	0	0	0	0	200	131	331	779
01:15 PM	76	2	169	247	33	181	0	214	0	0	0	0	0	208	139	347	808
Grand Total	495	9	1132	1636	313	1467	0	1780	0	0	0	0	0	1557	1009	2566	5982
Apprch %	30.3	0.6	69.2		17.6	82.4	0		0	0	0	0	0	60.7	39.3		
Total %	8.3	0.2	18.9	27.3	5.2	24.5	0	29.8	0	0	0	0	0	26	16.9	42.9	

Start Time	I-805 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-805 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:30 PM	57	0	141	198	32	<b>191</b>	0	223	0	0	0	0	0	188	125	313	734
12:45 PM	49	1	139	189	<b>46</b>	188	0	<b>234</b>	0	0	0	0	0	<b>211</b>	137	<b>348</b>	771
01:00 PM	<b>80</b>	0	143	223	41	184	0	225	0	0	0	0	0	200	131	331	779
01:15 PM	76	<b>2</b>	<b>169</b>	<b>247</b>	33	181	0	214	0	0	0	0	0	208	<b>139</b>	347	<b>808</b>
Total Volume	262	3	592	857	152	744	0	896	0	0	0	0	0	807	532	1339	3092
% App. Total	30.6	0.4	69.1		17	83	0		0	0	0	0	0	60.3	39.7		
PHF	.819	.375	.876	.867	.826	.974	.000	.957	.000	.000	.000	.000	.000	.956	.957	.962	.957

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:30 PM

City of San Diego  
 N/S: I-805 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 06\_SDG\_805S\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:30 PM				12:15 PM				11:30 AM				12:30 PM			
+0 mins.	57	0	141	198	<b>47</b>	179	0	226	0	0	0	0	0	188	125	313
+15 mins.	49	1	139	189	32	<b>191</b>	0	223	0	0	0	0	0	<b>211</b>	137	<b>348</b>
+30 mins.	<b>80</b>	0	143	223	46	188	0	<b>234</b>	0	0	0	0	0	200	131	331
+45 mins.	76	<b>2</b>	<b>169</b>	<b>247</b>	41	184	0	225	0	0	0	0	0	208	<b>139</b>	347
Total Volume	262	3	592	857	166	742	0	908	0	0	0	0	0	807	532	1339
% App. Total	30.6	0.4	69.1		18.3	81.7	0		0	0	0	0	0	60.3	39.7	
PHF	.819	.375	.876	.867	.883	.971	.000	.970	.000	.000	.000	.000	.000	.956	.957	.962

City of San Diego  
 N/S: I-805 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 06\_SDG\_805S\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	I-805 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-805 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	90	5	138	233	53	201	0	254	0	0	0	0	0	187	159	346	833
04:15 PM	91	13	161	265	37	217	0	254	0	0	0	0	0	191	186	377	896
04:30 PM	70	2	143	215	51	231	0	282	0	0	0	0	0	219	159	378	875
04:45 PM	78	10	146	234	37	219	0	256	0	0	0	0	0	178	170	348	838
Total	329	30	588	947	178	868	0	1046	0	0	0	0	0	775	674	1449	3442
05:00 PM	93	1	173	267	52	227	0	279	0	0	0	0	0	210	182	392	938
05:15 PM	98	7	159	264	65	222	0	287	0	0	0	0	0	185	202	387	938
05:30 PM	87	3	166	256	55	216	0	271	0	0	0	0	0	193	176	369	896
05:45 PM	81	7	191	279	36	210	0	246	0	0	0	0	0	184	141	325	850
Total	359	18	689	1066	208	875	0	1083	0	0	0	0	0	772	701	1473	3622
Grand Total	688	48	1277	2013	386	1743	0	2129	0	0	0	0	0	1547	1375	2922	7064
Apprch %	34.2	2.4	63.4		18.1	81.9	0		0	0	0	0	0	52.9	47.1		
Total %	9.7	0.7	18.1	28.5	5.5	24.7	0	30.1	0	0	0	0	0	21.9	19.5	41.4	

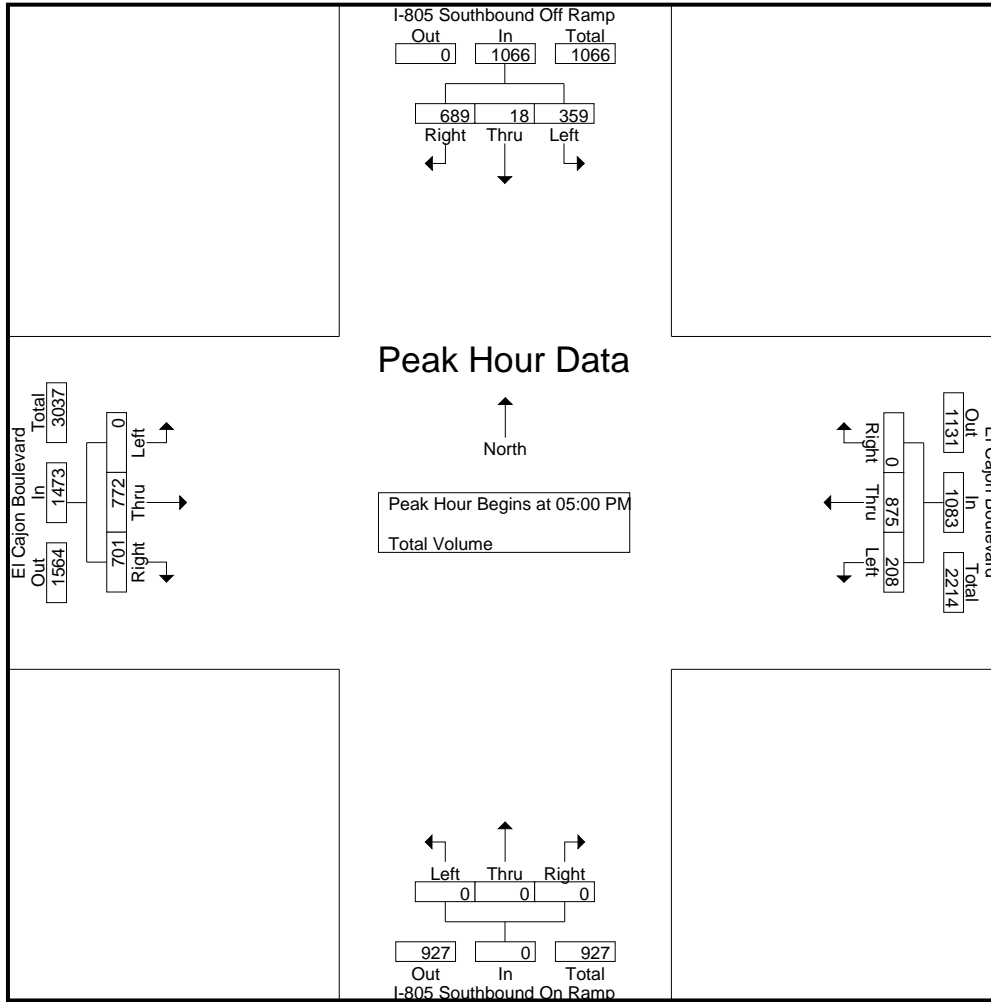
Start Time	I-805 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-805 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	93	1	173	267	52	<b>227</b>	0	279	0	0	0	0	0	<b>210</b>	182	<b>392</b>	<b>938</b>
05:15 PM	<b>98</b>	<b>7</b>	159	264	<b>65</b>	222	0	<b>287</b>	0	0	0	0	0	185	<b>202</b>	387	938
05:30 PM	87	3	166	256	55	216	0	271	0	0	0	0	0	193	176	369	896
05:45 PM	81	7	<b>191</b>	<b>279</b>	36	210	0	246	0	0	0	0	0	184	141	325	850
Total Volume	359	18	689	1066	208	875	0	1083	0	0	0	0	0	772	701	1473	3622
% App. Total	33.7	1.7	64.6		19.2	80.8	0		0	0	0	0	0	52.4	47.6		
PHF	.916	.643	.902	.955	.800	.964	.000	.943	.000	.000	.000	.000	.000	.919	.868	.939	.965

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

City of San Diego  
 N/S: I-805 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 06\_SDG\_805S\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				04:00 PM				04:30 PM			
+0 mins.	93	1	173	267	51	<b>231</b>	0	282	0	0	0	0	0	<b>219</b>	159	378
+15 mins.	<b>98</b>	<b>7</b>	159	264	37	219	0	256	0	0	0	0	0	178	170	348
+30 mins.	87	3	166	256	52	227	0	279	0	0	0	0	0	210	182	<b>392</b>
+45 mins.	81	7	<b>191</b>	<b>279</b>	<b>65</b>	222	0	<b>287</b>	0	0	0	0	0	185	<b>202</b>	387
Total Volume	359	18	689	1066	205	899	0	1104	0	0	0	0	0	792	713	1505
% App. Total	33.7	1.7	64.6		18.6	81.4	0		0	0	0		0	52.6	47.4	
PHF	.916	.643	.902	.955	.788	.973	.000	.962	.000	.000	.000	.000	.000	.904	.882	.960

Location: San Diego  
 N/S: I-805 SB Ramps  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg I-805 SB Ramps	East Leg El Cajon Boulevard	South Leg I-805 SB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	1	0	1
7:15 AM	0	0	0	2	2
7:30 AM	0	0	2	1	3
7:45 AM	0	0	0	1	1
8:00 AM	0	0	1	1	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	1	0	1
8:45 AM	0	0	0	1	1
TOTAL VOLUMES:	0	0	5	6	11

	North Leg I-805 SB Ramps	East Leg El Cajon Boulevard	South Leg I-805 SB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	0	0	0	0	0
11:45 AM	0	0	2	0	2
12:00 PM	0	0	5	1	6
12:15 PM	0	0	2	1	3
12:30 PM	0	0	3	0	3
12:45 PM	0	0	1	2	3
1:00 PM	0	0	0	1	1
1:15 PM	0	0	0	1	1
TOTAL VOLUMES:	0	0	13	6	19

	North Leg I-805 SB Ramps	East Leg El Cajon Boulevard	South Leg I-805 SB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	1	1	2
4:15 PM	0	0	4	3	7
4:30 PM	0	0	2	1	3
4:45 PM	0	0	2	1	3
5:00 PM	0	0	0	0	0
5:15 PM	0	0	1	0	1
5:30 PM	0	0	4	0	4
5:45 PM	0	0	2	0	2
TOTAL VOLUMES:	0	0	16	6	22



Location: San Diego  
 N/S: I-805 SB Ramps  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound I-805 SB Ramps			Westbound El Cajon Boulevard			Northbound I-805 SB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	0	0	2

	Southbound I-805 SB Ramps			Westbound El Cajon Boulevard			Northbound I-805 SB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	4	0	0	0	0	0	0	0	4

	Southbound I-805 SB Ramps			Westbound El Cajon Boulevard			Northbound I-805 SB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	2	0	0	0	0	0	1	0	4
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	3	0	0	0	0	0	1	0	5

16) I-805 NB Ramps & El Cajon Blvd

City of San Diego  
 N/S: I-805 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 07\_SDG\_805N\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

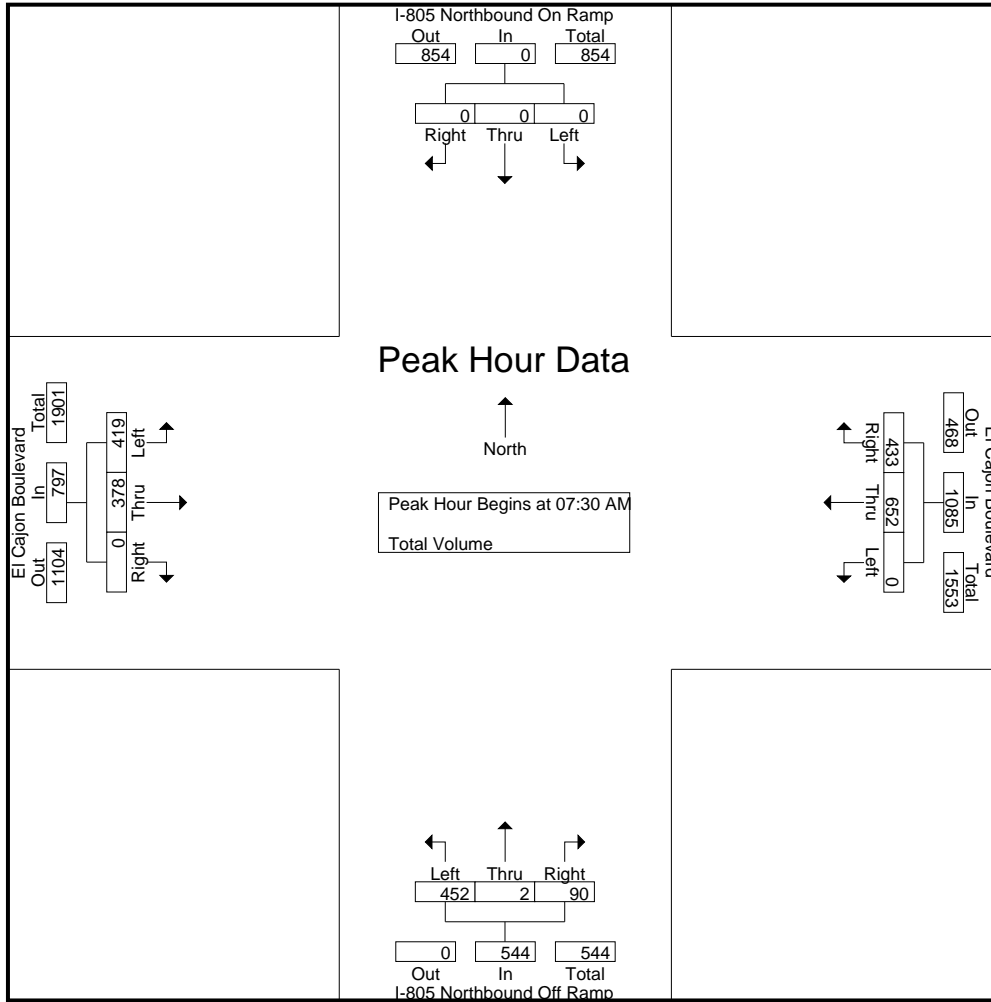
Groups Printed- Total Volume

Start Time	I-805 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-805 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	79	93	172	82	1	12	95	93	55	0	148	415
07:15 AM	0	0	0	0	0	106	91	197	86	0	17	103	109	52	0	161	461
07:30 AM	0	0	0	0	0	159	134	293	102	0	18	120	108	87	0	195	608
07:45 AM	0	0	0	0	0	186	109	295	121	0	28	149	105	102	0	207	651
Total	0	0	0	0	0	530	427	957	391	1	75	467	415	296	0	711	2135
08:00 AM	0	0	0	0	0	166	97	263	116	1	17	134	91	97	0	188	585
08:15 AM	0	0	0	0	0	141	93	234	113	1	27	141	115	92	0	207	582
08:30 AM	0	0	0	0	0	134	104	238	106	0	17	123	117	95	0	212	573
08:45 AM	0	0	0	0	0	146	71	217	145	2	42	189	86	99	0	185	591
Total	0	0	0	0	0	587	365	952	480	4	103	587	409	383	0	792	2331
Grand Total	0	0	0	0	0	1117	792	1909	871	5	178	1054	824	679	0	1503	4466
Apprch %	0	0	0	0	0	58.5	41.5		82.6	0.5	16.9		54.8	45.2	0		
Total %	0	0	0	0	0	25	17.7	42.7	19.5	0.1	4	23.6	18.5	15.2	0	33.7	

Start Time	I-805 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-805 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	159	<b>134</b>	293	102	0	18	120	108	87	0	195	608
07:45 AM	0	0	0	0	0	<b>186</b>	109	<b>295</b>	<b>121</b>	0	<b>28</b>	<b>149</b>	105	<b>102</b>	0	<b>207</b>	<b>651</b>
08:00 AM	0	0	0	0	0	166	97	263	116	1	17	134	91	97	0	188	585
08:15 AM	0	0	0	0	0	141	93	234	113	1	27	141	<b>115</b>	92	0	207	582
Total Volume	0	0	0	0	0	652	433	1085	452	2	90	544	419	378	0	797	2426
% App. Total	0	0	0	0	0	60.1	39.9		83.1	0.4	16.5		52.6	47.4	0		
PHF	.000	.000	.000	.000	.000	.876	.808	.919	.934	.500	.804	.913	.911	.926	.000	.963	.932

City of San Diego  
 N/S: I-805 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 07\_SDG\_805N\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				08:00 AM				07:45 AM			
+0 mins.	0	0	0	0	0	159	<b>134</b>	293	116	1	17	134	105	<b>102</b>	0	207
+15 mins.	0	0	0	0	0	<b>186</b>	109	<b>295</b>	113	1	27	141	91	97	0	188
+30 mins.	0	0	0	0	0	166	97	263	106	0	17	123	115	92	0	207
+45 mins.	0	0	0	0	0	141	93	234	<b>145</b>	<b>2</b>	<b>42</b>	<b>189</b>	<b>117</b>	95	0	<b>212</b>
Total Volume	0	0	0	0	0	652	433	1085	480	4	103	587	428	386	0	814
% App. Total	0	0	0	0	0	60.1	39.9		81.8	0.7	17.5		52.6	47.4	0	
PHF	.000	.000	.000	.000	.000	.876	.808	.919	.828	.500	.613	.776	.915	.946	.000	.960

City of San Diego  
 N/S: I-805 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 07\_SDG\_805N\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

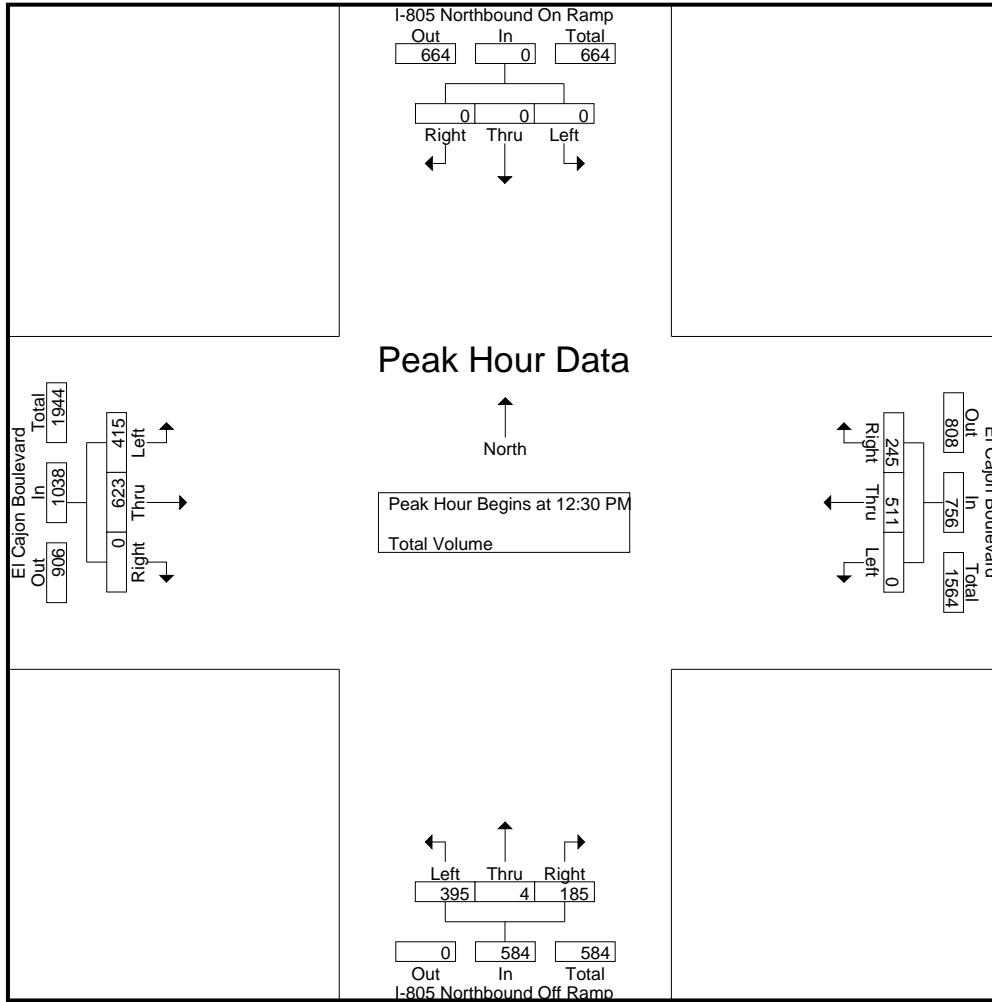
Start Time	I-805 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-805 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	0	0	0	0	0	118	61	179	106	0	55	161	103	146	0	249	589
11:45 AM	0	0	0	0	0	122	61	183	95	0	49	144	80	141	0	221	548
Total	0	0	0	0	0	240	122	362	201	0	104	305	183	287	0	470	1137
12:00 PM	0	0	0	0	0	123	50	173	71	2	37	110	108	155	0	263	546
12:15 PM	0	0	0	0	0	133	65	198	92	0	44	136	97	161	0	258	592
12:30 PM	0	0	0	0	0	121	75	196	100	3	51	154	90	154	0	244	594
12:45 PM	0	0	0	0	0	128	61	189	108	0	44	152	113	135	0	248	589
Total	0	0	0	0	0	505	251	756	371	5	176	552	408	605	0	1013	2321
01:00 PM	0	0	0	0	0	129	58	187	94	1	45	140	99	170	0	269	596
01:15 PM	0	0	0	0	0	133	51	184	93	0	45	138	113	164	0	277	599
Grand Total	0	0	0	0	0	1007	482	1489	759	6	370	1135	803	1226	0	2029	4653
Apprch %	0	0	0	0	0	67.6	32.4		66.9	0.5	32.6		39.6	60.4	0		
Total %	0	0	0	0	0	21.6	10.4	32	16.3	0.1	8	24.4	17.3	26.3	0	43.6	

Start Time	I-805 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-805 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:30 PM	0	0	0	0	0	121	<b>75</b>	<b>196</b>	100	<b>3</b>	<b>51</b>	<b>154</b>	90	154	0	244	594
12:45 PM	0	0	0	0	0	128	61	189	<b>108</b>	0	44	152	<b>113</b>	135	0	248	589
01:00 PM	0	0	0	0	0	129	58	187	94	1	45	140	99	<b>170</b>	0	269	596
01:15 PM	0	0	0	0	0	<b>133</b>	51	184	93	0	45	138	113	164	0	<b>277</b>	<b>599</b>
Total Volume	0	0	0	0	0	511	245	756	395	4	185	584	415	623	0	1038	2378
% App. Total	0	0	0	0	0	67.6	32.4		67.6	0.7	31.7		40	60	0		
PHF	.000	.000	.000	.000	.000	.961	.817	.964	.914	.333	.907	.948	.918	.916	.000	.937	.992

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:30 PM

City of San Diego  
 N/S: I-805 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 07\_SDG\_805N\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	11:30 AM				12:15 PM				12:30 PM				12:30 PM			
+0 mins.	0	0	0	0	0	<b>133</b>	<b>65</b>	<b>198</b>	<b>100</b>	<b>3</b>	<b>51</b>	<b>154</b>	90	154	0	244
+15 mins.	0	0	0	0	0	121	<b>75</b>	196	<b>108</b>	0	44	152	<b>113</b>	135	0	248
+30 mins.	0	0	0	0	0	128	61	189	94	1	45	140	99	<b>170</b>	0	269
+45 mins.	0	0	0	0	0	129	58	187	93	0	45	138	113	164	0	<b>277</b>
Total Volume	0	0	0	0	0	511	259	770	395	4	185	584	415	623	0	1038
% App. Total	0	0	0	0	0	66.4	33.6		67.6	0.7	31.7		40	60	0	
PHF	.000	.000	.000	.000	.000	.961	.863	.972	.914	.333	.907	.948	.918	.916	.000	.937

City of San Diego  
 N/S: I-805 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 07\_SDG\_805N\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

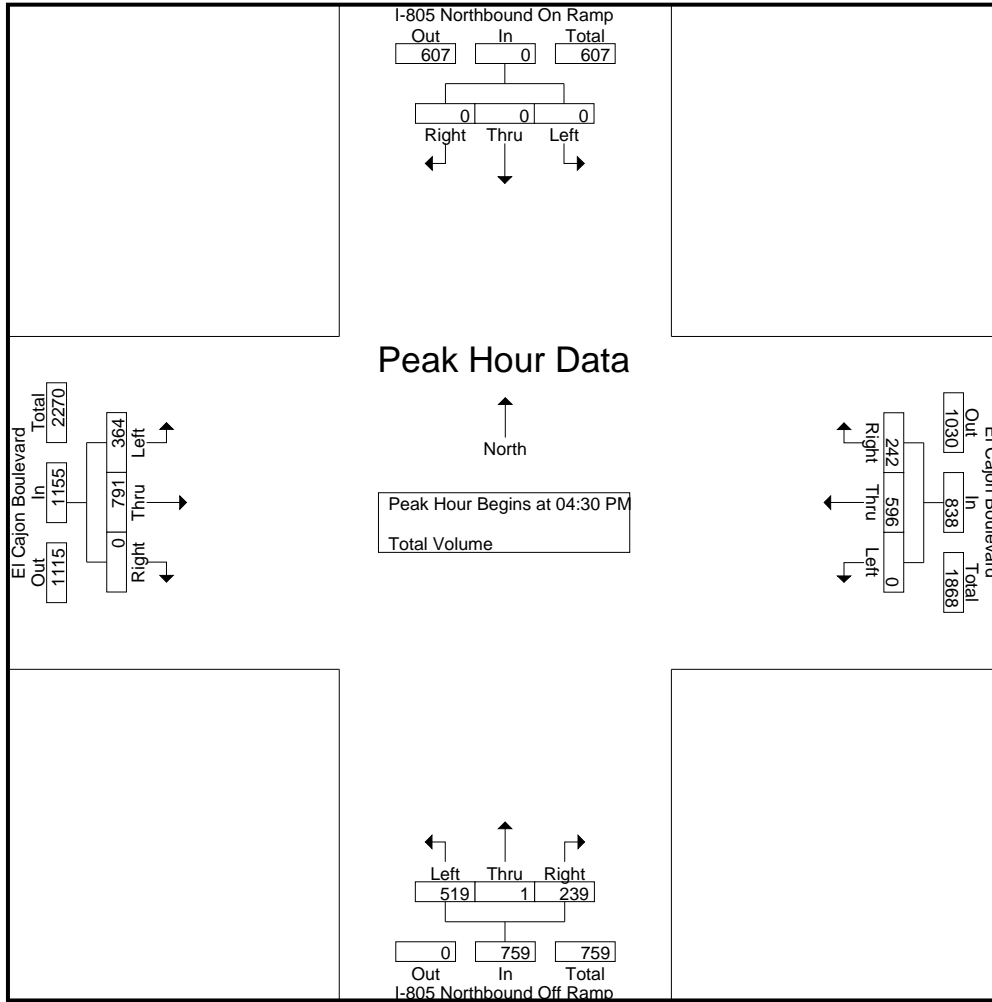
Start Time	I-805 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-805 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	124	50	174	126	0	56	182	88	186	0	274	630
04:15 PM	0	0	0	0	0	117	50	167	129	0	50	179	86	201	0	287	633
04:30 PM	0	0	0	0	0	159	61	220	124	0	56	180	93	211	0	304	704
04:45 PM	0	0	0	0	0	134	56	190	130	0	57	187	84	177	0	261	638
Total	0	0	0	0	0	534	217	751	509	0	219	728	351	775	0	1126	2605
05:00 PM	0	0	0	0	0	153	65	218	133	1	65	199	103	200	0	303	720
05:15 PM	0	0	0	0	0	150	60	210	132	0	61	193	84	203	0	287	690
05:30 PM	0	0	0	0	0	154	56	210	112	0	66	178	87	206	0	293	681
05:45 PM	0	0	0	0	0	136	43	179	118	1	46	165	81	175	0	256	600
Total	0	0	0	0	0	593	224	817	495	2	238	735	355	784	0	1139	2691
Grand Total	0	0	0	0	0	1127	441	1568	1004	2	457	1463	706	1559	0	2265	5296
Apprch %	0	0	0	0	0	71.9	28.1		68.6	0.1	31.2		31.2	68.8	0		
Total %	0	0	0	0	0	21.3	8.3	29.6	19	0	8.6	27.6	13.3	29.4	0	42.8	

Start Time	I-805 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-805 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	<b>159</b>	61	<b>220</b>	124	0	56	180	93	<b>211</b>	0	<b>304</b>	704
04:45 PM	0	0	0	0	0	134	56	190	130	0	57	187	84	177	0	261	638
05:00 PM	0	0	0	0	0	153	<b>65</b>	218	<b>133</b>	<b>1</b>	<b>65</b>	<b>199</b>	<b>103</b>	200	0	303	<b>720</b>
05:15 PM	0	0	0	0	0	150	60	210	132	0	61	193	84	203	0	287	690
Total Volume	0	0	0	0	0	596	242	838	519	1	239	759	364	791	0	1155	2752
% App. Total	0	0	0	0	0	71.1	28.9		68.4	0.1	31.5		31.5	68.5	0		
PHF	.000	.000	.000	.000	.000	.937	.931	.952	.976	.250	.919	.954	.883	.937	.000	.950	.956

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of San Diego  
 N/S: I-805 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 07\_SDG\_805N\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:30 PM				04:15 PM			
+0 mins.	0	0	0	0	0	<b>159</b>	61	<b>220</b>	124	0	56	180	86	201	0	287
+15 mins.	0	0	0	0	0	134	56	190	130	0	57	187	93	<b>211</b>	0	<b>304</b>
+30 mins.	0	0	0	0	0	153	<b>65</b>	218	<b>133</b>	<b>1</b>	<b>65</b>	<b>199</b>	84	177	0	261
+45 mins.	0	0	0	0	0	150	60	210	132	0	61	193	<b>103</b>	200	0	303
Total Volume	0	0	0	0	0	596	242	838	519	1	239	759	366	789	0	1155
% App. Total	0	0	0	0	0	71.1	28.9		68.4	0.1	31.5		31.7	68.3	0	
PHF	.000	.000	.000	.000	.000	.937	.931	.952	.976	.250	.919	.954	.888	.935	.000	.950



Location: San Diego  
 N/S: I-805 NB Ramps  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg I-805 NB Ramps	East Leg El Cajon Boulevard	South Leg I-805 NB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	2	0	2
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	1	1	0	0	2
8:00 AM	0	0	2	0	2
8:15 AM	0	0	0	0	0
8:30 AM	2	4	2	0	8
8:45 AM	2	3	0	0	5
TOTAL VOLUMES:	5	8	7	0	20

	North Leg I-805 NB Ramps	East Leg El Cajon Boulevard	South Leg I-805 NB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	0	3	1	0	4
11:45 AM	1	2	2	0	5
12:00 PM	1	3	0	0	4
12:15 PM	1	3	2	0	6
12:30 PM	1	3	5	0	9
12:45 PM	1	0	1	0	2
1:00 PM	2	0	1	1	4
1:15 PM	2	2	2	0	6
TOTAL VOLUMES:	9	16	14	1	40

	North Leg I-805 NB Ramps	East Leg El Cajon Boulevard	South Leg I-805 NB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	1	0	1
4:15 PM	1	2	7	0	10
4:30 PM	1	0	2	0	3
4:45 PM	2	0	1	0	3
5:00 PM	1	0	0	0	1
5:15 PM	1	0	1	0	2
5:30 PM	4	2	4	0	10
5:45 PM	0	1	3	0	4
TOTAL VOLUMES:	10	5	19	0	34

Location: San Diego  
 N/S: I-805 NB Ramps  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound I-805 NB Ramps			Westbound El Cajon Boulevard			Northbound I-805 NB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	1	0	3

	Southbound I-805 NB Ramps			Westbound El Cajon Boulevard			Northbound I-805 NB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
12:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	1	0	0	0	0	0	2	0	3
TOTAL VOLUMES:	0	0	0	0	5	0	0	0	0	0	3	0	8

	Southbound I-805 NB Ramps			Westbound El Cajon Boulevard			Northbound I-805 NB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	2	0	0	0	0	0	2	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	6	0	8

17) 35th St & El Cajon Blvd

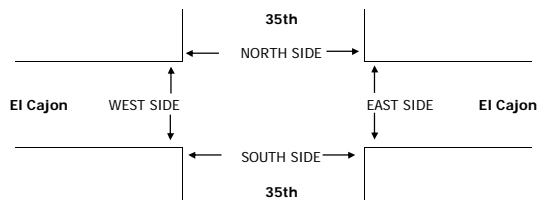
## INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

<b>DATE:</b> Tue, May 19, 15	<b>LOCATION:</b> NORTH & SOUTH: EAST & WEST:	<b>El Cajon</b> 35th El Cajon	<b>PROJECT #:</b> SC0625 <b>LOCATION #:</b> 15 <b>CONTROL:</b> SIGNAL
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<b>NOTES:</b>  	ASI PM MD OTHER OTHER	▲ N ← W S ▼	E ►	<input checked="" type="checkbox"/> Add U-Turns to Left Turns
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LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS					
	35th			35th			El Cajon			El Cajon				NB	SB	EB	WB	TTL	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR							
7:00 AM	17	11	6	2	8	16	5	53	2	3	100	6	229	0	0	0	0	0	
7:15 AM	20	16	4	5	15	14	7	71	4	5	123	5	289	0	0	2	1	3	
7:30 AM	15	32	6	7	5	26	3	75	10	8	139	12	338	0	0	0	1	1	
7:45 AM	24	21	7	12	12	14	7	79	6	13	135	19	349	0	0	2	2	4	
8:00 AM	17	26	6	7	11	8	7	82	3	3	123	8	301	0	0	0	1	1	
8:15 AM	19	19	10	15	9	18	7	84	2	6	104	8	301	0	0	1	2	3	
8:30 AM	17	19	7	9	16	14	7	79	12	3	110	4	297	0	0	1	1	2	
8:45 AM	10	22	8	5	12	8	2	91	6	8	110	8	290	0	0	0	3	3	
VOLUMES	139	166	54	62	88	118	45	614	45	49	944	70	2,394	0	0	6	11	17	
APPROACH %	39%	46%	15%	23%	33%	44%	6%	87%	6%	5%	89%	7%							
APP/DEPART	359	/	275	268	/	171	704	/	741	1,063	/	1,207	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	75	98	29	41	37	66	24	320	21	30	501	47	1,289						
APPROACH %	37%	49%	14%	28%	26%	46%	7%	88%	6%	5%	87%	8%							
PEAK HR FACTOR	0.953			0.857			0.981			0.865			0.923						
APP/DEPART	202	/	166	144	/	82	365	/	396	578	/	645	0						
11:00 AM	13	10	6	4	3	12	10	110	10	9	98	7	292	0	0	4	5	9	
11:15 AM	8	13	7	3	9	6	10	97	8	7	114	3	285	0	0	1	2	3	
11:30 AM	7	14	9	5	9	10	9	116	7	11	118	3	318	0	0	2	6	8	
11:45 AM	11	7	8	2	7	7	8	128	3	12	95	5	293	0	0	1	6	7	
12:00 PM	9	6	5	5	10	14	15	131	10	15	133	4	357	0	0	2	4	6	
12:15 PM	7	12	10	8	8	5	11	112	9	9	96	3	290	0	0	5	3	8	
12:30 PM	15	19	7	8	8	10	14	123	12	11	127	6	360	0	0	3	4	7	
12:45 PM	9	11	9	6	7	7	10	131	5	7	119	6	327	0	0	2	3	5	
1:00 PM	11	9	7	9	6	15	7	119	13	17	126	5	344	0	0	0	7	7	
1:15 PM	12	12	4	8	10	11	9	114	12	7	117	7	323	0	0	0	5	5	
1:30 PM	10	11	11	11	14	13	12	155	9	10	138	5	399	0	0	2	4	6	
1:45 PM	9	13	8	7	16	14	19	128	13	15	136	5	383	0	0	0	4	4	
2:00 PM	9	12	9	13	13	17	10	114	16	8	113	7	341	0	0	3	3	6	
2:15 PM	11	9	5	7	7	20	19	141	13	16	135	8	391	0	0	0	4	4	
VOLUMES	141	158	105	96	127	161	163	1,719	140	154	1,665	74	4,703	0	0	25	60	85	
APPROACH %	35%	39%	26%	25%	33%	42%	8%	85%	7%	8%	88%	4%							
APP/DEPART	404	/	370	384	/	361	2,022	/	1,980	1,893	/	1,992	0						
BEGIN PEAK HR	1:30 PM																		
VOLUMES	39	45	33	38	50	64	60	538	51	49	522	25	1,514						
APPROACH %	33%	38%	28%	25%	33%	42%	9%	83%	8%	8%	88%	4%							
PEAK HR FACTOR	0.914			0.884			0.922			0.937			0.949						
APP/DEPART	117	/	125	152	/	135	649	/	624	596	/	630	0						
4:00 PM	10	17	12	15	14	13	10	180	18	12	137	15	453	0	0	3	5	8	
4:15 PM	12	16	10	6	22	19	24	197	17	15	134	8	480	0	0	5	3	8	
4:30 PM	15	19	14	12	28	13	15	211	16	13	136	4	496	0	0	4	3	7	
4:45 PM	15	23	12	11	15	13	25	140	26	16	145	8	449	0	0	7	9	16	
5:00 PM	15	20	10	12	31	9	17	189	18	30	131	8	490	0	0	4	10	14	
5:15 PM	13	21	13	12	19	11	21	210	21	17	151	11	520	0	0	1	4	5	
5:30 PM	16	26	10	7	25	19	20	195	18	18	131	11	496	0	0	0	5	5	
5:45 PM	15	21	14	9	23	11	21	176	21	17	150	10	488	0	0	1	4	5	
VOLUMES	111	163	95	84	177	108	153	1,498	155	138	1,115	75	3,872	0	0	25	43	68	
APPROACH %	30%	44%	26%	23%	48%	29%	8%	83%	9%	10%	84%	6%							
APP/DEPART	369	/	366	369	/	427	1,806	/	1,720	1,328	/	1,359	0						
BEGIN PEAK HR	5:00 PM																		
VOLUMES	59	88	47	40	98	50	79	770	78	82	563	40	1,994						
APPROACH %	30%	45%	24%	21%	52%	27%	9%	83%	8%	12%	82%	6%							
PEAK HR FACTOR	0.933			0.904			0.920			0.957			0.959						
APP/DEPART	194	/	201	188	/	235	927	/	880	685	/	678	0						



	PEDESTRIAN + BIKE CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
7:00 AM	3	2	13	3	21
7:15 AM	2	4	5	3	14
7:30 AM	5	6	7	5	23
7:45 AM	1	10	3	11	25
8:00 AM	6	3	11	5	25
8:15 AM	1	4	3	2	10
8:30 AM	5	3	1	0	9
8:45 AM	4	5	3	5	17
TOTAL	27	37	46	34	144

	PEDESTRIAN CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
7:00 AM	3	2	10	3	18
7:15 AM	2	4	5	3	14
7:30 AM	5	6	6	5	22
7:45 AM	1	10	3	11	25
8:00 AM	6	3	10	5	24
8:15 AM	1	4	3	2	10
8:30 AM	5	3	1	0	9
8:45 AM	4	4	2	5	15
TOTAL	27	36	40	34	137

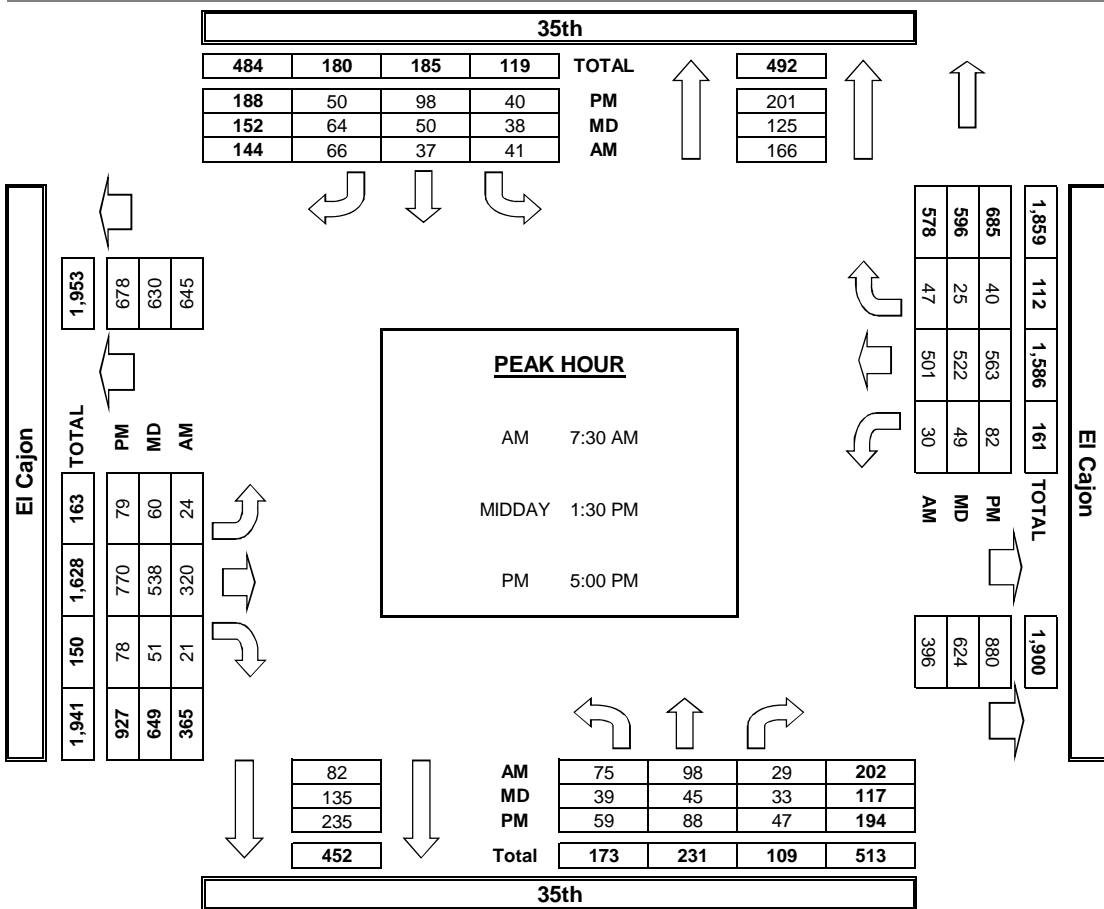
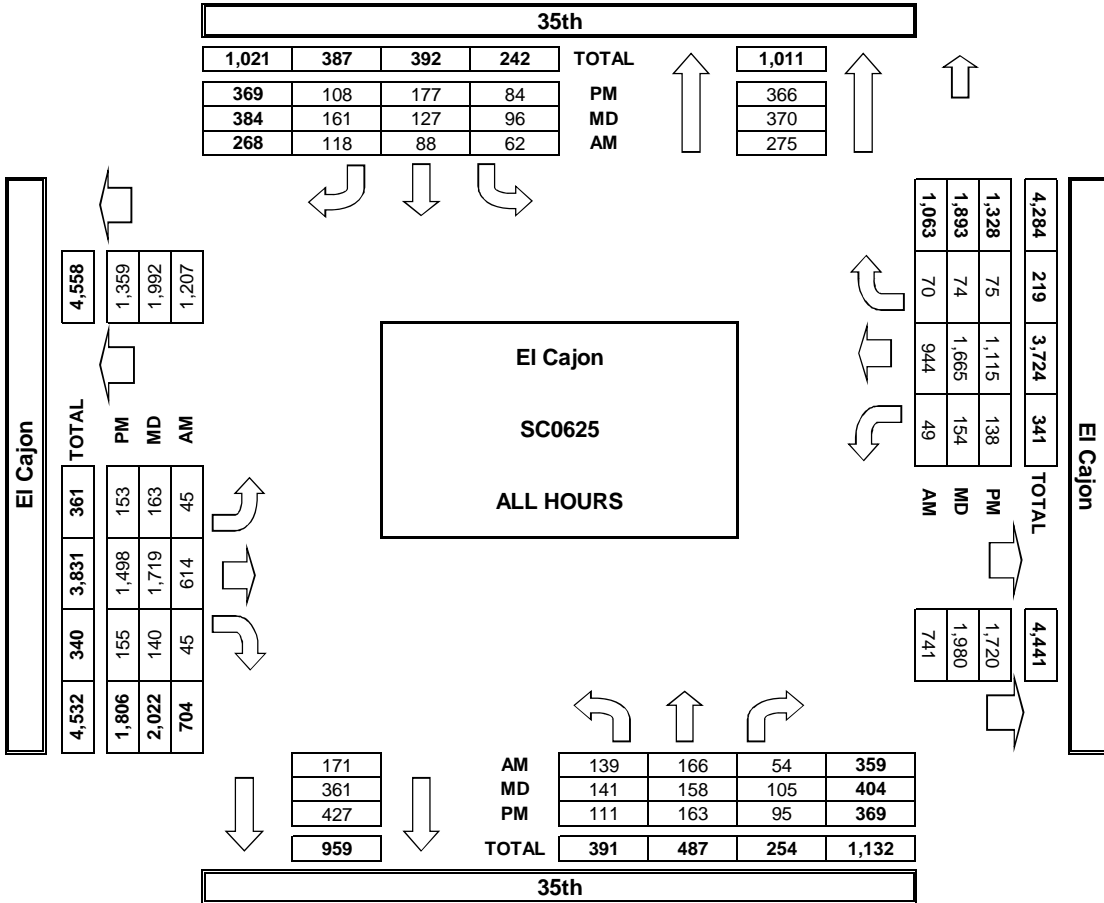
	BICYCLE CROSSINGS				
	NS	SS	ES	WS	TOTAL
7:00 AM	0	0	3	0	3
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	1	1	0	2
TOTAL	0	1	6	0	7

	PEDESTRIAN + BIKE CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
11:00 AM	6	8	5	1	20
11:15 AM	4	7	1	2	14
11:30 AM	1	5	3	0	9
11:45 AM	4	5	5	3	17
12:00 PM	3	2	0	3	8
12:15 PM	2	5	3	5	15
12:30 PM	0	4	3	4	11
12:45 PM	2	5	5	0	12
1:00 PM	5	7	3	6	21
1:15 PM	2	3	3	1	9
1:30 PM	4	4	1	4	13
1:45 PM	1	5	3	3	12
2:00 PM	10	9	9	4	32
2:15 PM	6	7	1	2	16
TOTAL	50	76	45	38	209

	PEDESTRIAN CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
4:00 PM	7	3	1	2	13
4:15 PM	3	7	8	6	24
4:30 PM	3	2	14	7	26
4:45 PM	5	8	10	2	25
5:00 PM	7	5	4	6	22
5:15 PM	6	5	11	7	29
5:30 PM	2	6	8	5	21
5:45 PM	1	7	5	6	19
TOTAL	34	43	61	41	179

	BICYCLE CROSSINGS				
	NS	SS	ES	WS	TOTAL
4:00 PM	0	0	3	0	3
4:15 PM	0	1	3	2	6
4:30 PM	1	2	0	0	3
4:45 PM	0	1	2	2	5
5:00 PM	0	2	0	1	3
5:15 PM	0	4	0	1	5
5:30 PM	0	3	1	0</	

**AimTD LLC**  
TURNING MOVEMENT COUNTS



**El Cajon**  
**SC0625**  
**ALL HOURS**

**PEAK HOUR**

AM 7:30 AM

MIDDAY 1:30 PM

PM 5:00 PM

18) El Cajon Blvd & I-15 SB Ramps

City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 08\_SDG\_15S\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	I-15 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-15 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	20	13	28	61	63	53	0	116	0	0	0	0	0	54	36	90	267
07:15 AM	30	21	37	88	68	103	0	171	0	0	0	0	0	83	55	138	397
07:30 AM	26	14	26	66	94	152	0	246	0	0	0	0	0	95	56	151	463
07:45 AM	43	20	56	119	94	194	0	288	0	0	0	0	0	138	75	213	620
Total	119	68	147	334	319	502	0	821	0	0	0	0	0	370	222	592	1747
08:00 AM	42	22	45	109	83	133	0	216	0	0	0	0	0	137	63	200	525
08:15 AM	54	21	49	124	93	120	0	213	0	0	0	0	0	115	66	181	518
08:30 AM	47	10	36	93	77	135	0	212	0	0	0	0	0	111	47	158	463
08:45 AM	46	19	46	111	69	130	0	199	0	0	0	0	0	111	46	157	467
Total	189	72	176	437	322	518	0	840	0	0	0	0	0	474	222	696	1973
Grand Total	308	140	323	771	641	1020	0	1661	0	0	0	0	0	844	444	1288	3720
Apprch %	39.9	18.2	41.9		38.6	61.4	0		0	0	0	0	0	65.5	34.5		
Total %	8.3	3.8	8.7	20.7	17.2	27.4	0	44.7	0	0	0	0	0	22.7	11.9	34.6	

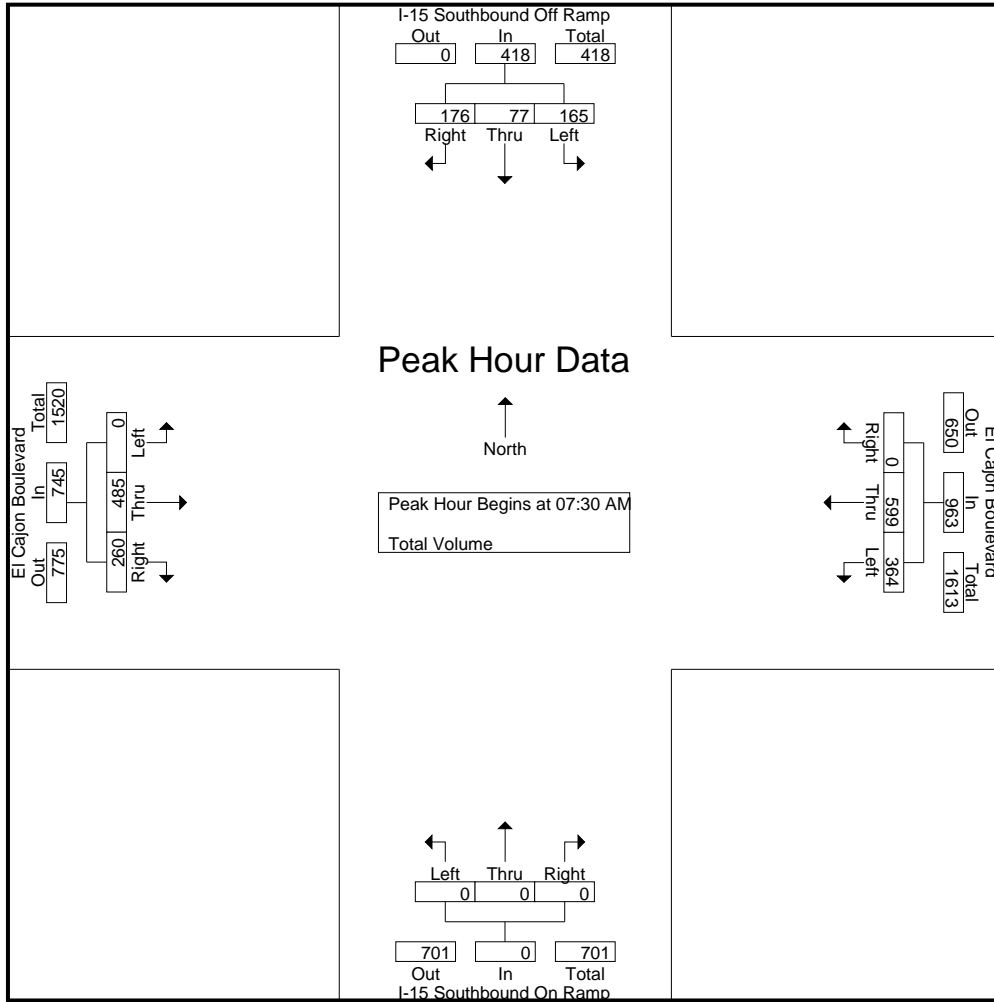
Start Time	I-15 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-15 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	26	14	26	66	<b>94</b>	152	0	246	0	0	0	0	0	95	56	151	463
07:45 AM	43	20	<b>56</b>	119	94	<b>194</b>	0	<b>288</b>	0	0	0	0	0	<b>138</b>	<b>75</b>	<b>213</b>	<b>620</b>
08:00 AM	42	<b>22</b>	45	109	83	133	0	216	0	0	0	0	0	137	63	200	525
08:15 AM	<b>54</b>	21	49	<b>124</b>	93	120	0	213	0	0	0	0	0	115	66	181	518
Total Volume	165	77	176	418	364	599	0	963	0	0	0	0	0	485	260	745	2126
% App. Total	39.5	18.4	42.1		37.8	62.2	0		0	0	0	0	0	65.1	34.9		
PHF	.764	.875	.786	.843	.968	.772	.000	.836	.000	.000	.000	.000	.000	.879	.867	.874	.857

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM

City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 08\_SDG\_15S\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:30 AM				07:00 AM				07:45 AM			
+0 mins.	43	20	<b>56</b>	119	<b>94</b>	152	0	<b>246</b>	0	0	0	0	0	<b>138</b>	<b>75</b>	<b>213</b>
+15 mins.	42	<b>22</b>	45	109	94	<b>194</b>	0	<b>288</b>	0	0	0	0	0	137	63	200
+30 mins.	<b>54</b>	21	49	<b>124</b>	83	133	0	216	0	0	0	0	0	115	66	181
+45 mins.	47	10	36	93	93	120	0	213	0	0	0	0	0	111	47	158
Total Volume	186	73	186	445	364	599	0	963	0	0	0	0	0	501	251	752
% App. Total	41.8	16.4	41.8		37.8	62.2	0		0	0	0		0	66.6	33.4	
PHF	.861	.830	.830	.897	.968	.772	.000	.836	.000	.000	.000	.000	.000	.908	.837	.883



City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 08\_SDG\_15S\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	I-15 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-15 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	39	19	47	105	62	110	0	172	0	0	0	0	0	120	33	153	430
11:45 AM	52	18	40	110	67	108	0	175	0	0	0	0	0	113	39	152	437
Total	91	37	87	215	129	218	0	347	0	0	0	0	0	233	72	305	867
12:00 PM	36	13	39	88	69	91	0	160	0	0	0	0	0	120	56	176	424
12:15 PM	53	20	47	120	79	90	0	169	0	0	0	0	0	133	43	176	465
12:30 PM	44	22	55	121	70	91	0	161	0	0	0	0	0	110	43	153	435
12:45 PM	45	17	45	107	66	87	0	153	0	0	0	0	0	113	47	160	420
Total	178	72	186	436	284	359	0	643	0	0	0	0	0	476	189	665	1744
01:00 PM	45	20	42	107	59	98	0	157	0	0	0	0	0	111	54	165	429
01:15 PM	43	18	42	103	75	85	0	160	0	0	0	0	0	118	41	159	422
Grand Total	357	147	357	861	547	760	0	1307	0	0	0	0	0	938	356	1294	3462
Apprch %	41.5	17.1	41.5		41.9	58.1	0		0	0	0	0	0	72.5	27.5		
Total %	10.3	4.2	10.3	24.9	15.8	22	0	37.8	0	0	0	0	0	27.1	10.3	37.4	

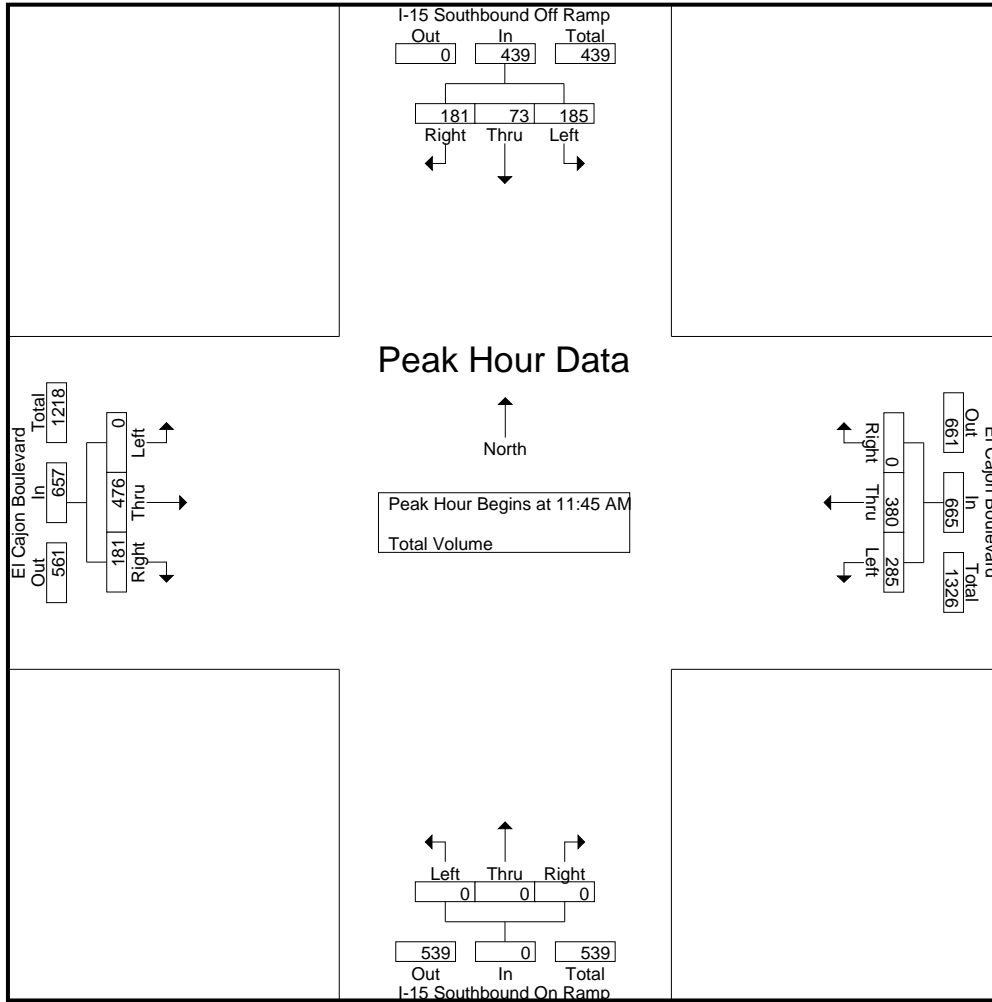
Start Time	I-15 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-15 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:45 AM	52	18	40	110	67	<b>108</b>	0	<b>175</b>	0	0	0	0	0	113	39	152	437
12:00 PM	36	13	39	88	69	91	0	160	0	0	0	0	0	120	<b>56</b>	<b>176</b>	424
12:15 PM	<b>53</b>	20	47	120	<b>79</b>	90	0	169	0	0	0	0	0	<b>133</b>	43	176	<b>465</b>
12:30 PM	44	<b>22</b>	<b>55</b>	<b>121</b>	70	91	0	161	0	0	0	0	0	110	43	153	435
Total Volume	185	73	181	439	285	380	0	665	0	0	0	0	0	476	181	657	1761
% App. Total	42.1	16.6	41.2		42.9	57.1	0		0	0	0	0	0	72.5	27.5		
PHF	.873	.830	.823	.907	.902	.880	.000	.950	.000	.000	.000	.000	.000	.895	.808	.933	.947

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 11:45 AM

City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 08\_SDG\_15S\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:15 PM				11:30 AM				11:30 AM				12:00 PM			
+0 mins.	53	20	47	120	62	110	0	172	0	0	0	0	0	120	56	176
+15 mins.	44	22	55	121	67	108	0	175	0	0	0	0	0	133	43	176
+30 mins.	45	17	45	107	69	91	0	160	0	0	0	0	0	110	43	153
+45 mins.	45	20	42	107	79	90	0	169	0	0	0	0	0	113	47	160
Total Volume	187	79	189	455	277	399	0	676	0	0	0	0	0	476	189	665
% App. Total	41.1	17.4	41.5		41	59	0		0	0	0	0	0	71.6	28.4	
PHF	.882	.898	.859	.940	.877	.907	.000	.966	.000	.000	.000	.000	.000	.895	.844	.945

City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 08\_SDG\_15S\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

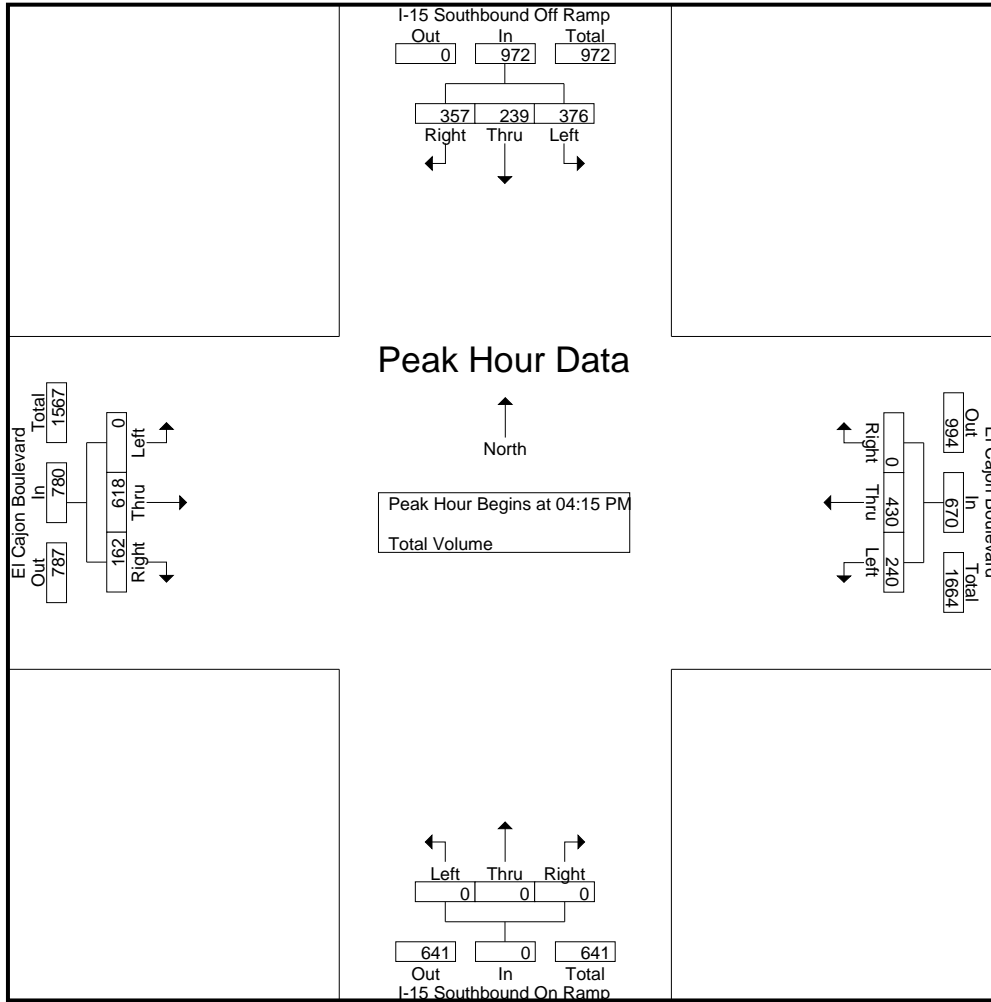
Start Time	I-15 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-15 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	87	54	85	226	49	103	0	152	0	0	0	0	0	121	38	159	537
04:15 PM	113	66	101	280	58	105	0	163	0	0	0	0	0	156	41	197	640
04:30 PM	95	59	84	238	67	103	0	170	0	0	0	0	0	143	36	179	587
04:45 PM	78	57	92	227	62	106	0	168	0	0	0	0	0	158	49	207	602
Total	373	236	362	971	236	417	0	653	0	0	0	0	0	578	164	742	2366
05:00 PM	90	57	80	227	53	116	0	169	0	0	0	0	0	161	36	197	593
05:15 PM	75	58	83	216	54	102	0	156	0	0	0	0	0	147	45	192	564
05:30 PM	111	50	103	264	60	94	0	154	0	0	0	0	0	154	30	184	602
05:45 PM	115	55	103	273	51	105	0	156	0	0	0	0	0	131	52	183	612
Total	391	220	369	980	218	417	0	635	0	0	0	0	0	593	163	756	2371
Grand Total	764	456	731	1951	454	834	0	1288	0	0	0	0	0	1171	327	1498	4737
Apprch %	39.2	23.4	37.5		35.2	64.8	0		0	0	0	0	0	78.2	21.8		
Total %	16.1	9.6	15.4	41.2	9.6	17.6	0	27.2	0	0	0	0	0	24.7	6.9	31.6	

Start Time	I-15 Southbound Off Ramp Southbound				El Cajon Boulevard Westbound				I-15 Southbound On Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	<b>113</b>	<b>66</b>	<b>101</b>	<b>280</b>	58	105	0	163	0	0	0	0	0	156	41	197	<b>640</b>
04:30 PM	95	59	84	238	<b>67</b>	103	0	<b>170</b>	0	0	0	0	0	143	36	179	587
04:45 PM	78	57	92	227	62	106	0	168	0	0	0	0	0	158	<b>49</b>	<b>207</b>	602
05:00 PM	90	57	80	227	53	<b>116</b>	0	169	0	0	0	0	0	<b>161</b>	36	197	593
Total Volume	376	239	357	972	240	430	0	670	0	0	0	0	0	618	162	780	2422
% App. Total	38.7	24.6	36.7		35.8	64.2	0		0	0	0	0	0	79.2	20.8		
PHF	.832	.905	.884	.868	.896	.927	.000	.985	.000	.000	.000	.000	.000	.960	.827	.942	.946

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:15 PM

City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 08\_SDG\_15S\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:00 PM				04:15 PM			
+0 mins.	90	57	80	227	58	105	0	163	0	0	0	0	0	156	41	197
+15 mins.	75	<b>58</b>	83	216	<b>67</b>	103	0	<b>170</b>	0	0	0	0	0	143	36	179
+30 mins.	111	50	<b>103</b>	264	62	106	0	168	0	0	0	0	0	158	<b>49</b>	<b>207</b>
+45 mins.	<b>115</b>	55	103	<b>273</b>	53	<b>116</b>	0	169	0	0	0	0	0	<b>161</b>	36	197
Total Volume	391	220	369	980	240	430	0	670	0	0	0	0	0	618	162	780
% App. Total	39.9	22.4	37.7		35.8	64.2	0		0	0	0	0	0	79.2	20.8	
PHF	.850	.948	.896	.897	.896	.927	.000	.985	.000	.000	.000	.000	.000	.960	.827	.942

Location: San Diego  
 N/S: I-15 SB Ramps  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg I-15 SB Ramps	East Leg El Cajon Boulevard	South Leg I-15 SB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	7	2	7	4	20
7:15 AM	5	1	4	5	15
7:30 AM	1	1	7	0	9
7:45 AM	1	3	12	3	19
8:00 AM	4	3	10	4	21
8:15 AM	8	2	3	2	15
8:30 AM	7	2	5	3	17
8:45 AM	2	2	4	0	8
TOTAL VOLUMES:	35	16	52	21	124

	North Leg I-15 SB Ramps	East Leg El Cajon Boulevard	South Leg I-15 SB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	7	0	6	5	18
11:45 AM	0	0	3	3	6
12:00 PM	5	5	9	2	21
12:15 PM	6	0	0	1	7
12:30 PM	4	1	13	0	18
12:45 PM	6	2	5	1	14
1:00 PM	5	4	4	1	14
1:15 PM	1	1	6	1	9
TOTAL VOLUMES:	34	13	46	14	107

	North Leg I-15 SB Ramps	East Leg El Cajon Boulevard	South Leg I-15 SB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	10	4	4	0	18
4:15 PM	1	0	4	0	5
4:30 PM	3	6	4	5	18
4:45 PM	5	5	7	2	19
5:00 PM	6	3	6	5	20
5:15 PM	7	5	6	3	21
5:30 PM	2	3	3	1	9
5:45 PM	9	8	10	4	31
TOTAL VOLUMES:	43	34	44	20	141

Location: San Diego  
 N/S: I-15 SB Ramps  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound I-15 SB Ramps			Westbound El Cajon Boulevard			Northbound I-15 SB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	3	0	4

	Southbound I-15 SB Ramps			Westbound El Cajon Boulevard			Northbound I-15 SB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	3	0	5

	Southbound I-15 SB Ramps			Westbound El Cajon Boulevard			Northbound I-15 SB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	4	0	5

19) I-15 NB Ramps & El Cajon Blvd

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 09\_SDG\_15N\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	I-15 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-15 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	98	60	158	13	0	48	61	32	48	0	80	299
07:15 AM	0	0	0	0	0	144	67	211	22	1	49	72	40	70	0	110	393
07:30 AM	0	0	0	0	0	217	93	310	31	1	69	101	41	70	0	111	522
07:45 AM	0	0	0	0	0	236	88	324	49	2	67	118	61	120	0	181	623
Total	0	0	0	0	0	695	308	1003	115	4	233	352	174	308	0	482	1837
08:00 AM	0	0	0	0	0	181	72	253	28	2	84	114	53	138	0	191	558
08:15 AM	0	0	0	0	0	174	62	236	35	1	99	135	55	124	0	179	550
08:30 AM	0	0	0	0	0	176	75	251	35	2	80	117	46	102	0	148	516
08:45 AM	0	0	0	0	0	167	63	230	35	0	67	102	61	105	0	166	498
Total	0	0	0	0	0	698	272	970	133	5	330	468	215	469	0	684	2122
Grand Total	0	0	0	0	0	1393	580	1973	248	9	563	820	389	777	0	1166	3959
Apprch %	0	0	0	0	0	70.6	29.4		30.2	1.1	68.7		33.4	66.6	0		
Total %	0	0	0	0	0	35.2	14.7	49.8	6.3	0.2	14.2	20.7	9.8	19.6	0	29.5	

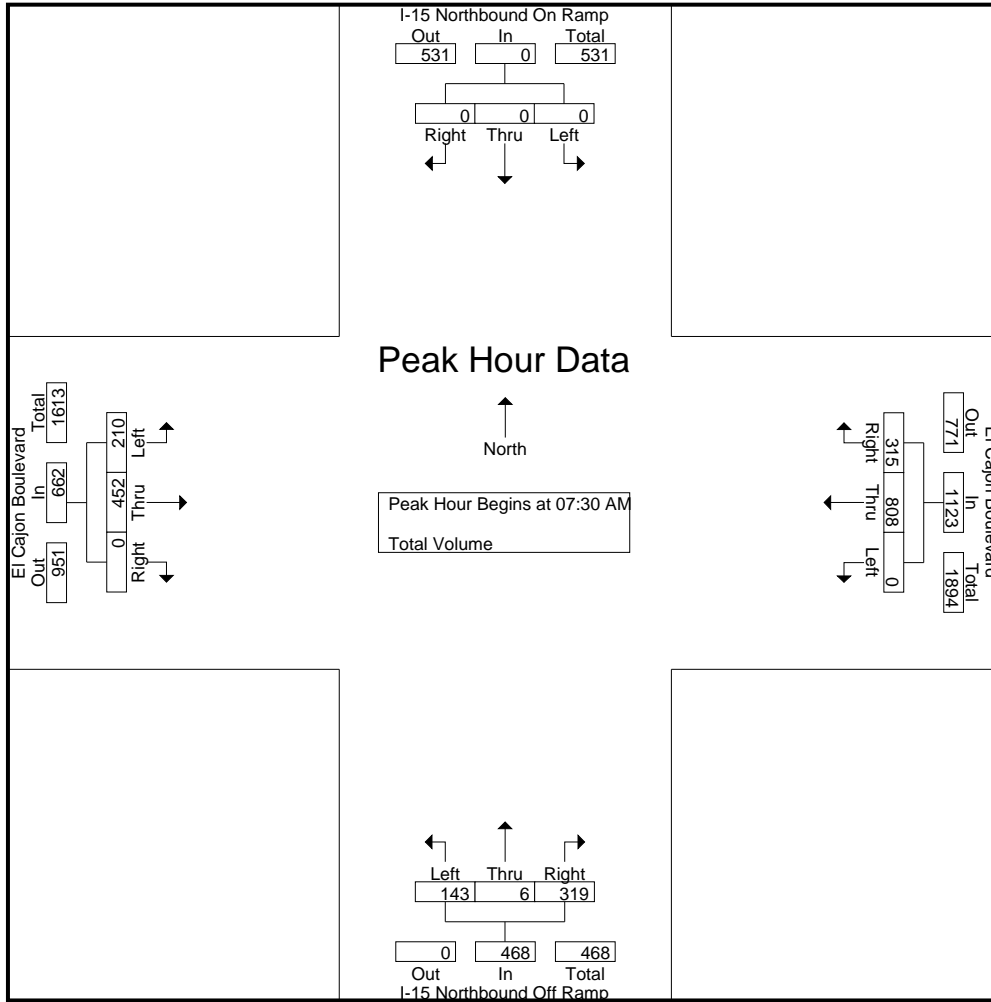
Start Time	I-15 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-15 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	217	<b>93</b>	310	31	1	69	101	41	70	0	111	522
07:45 AM	0	0	0	0	0	<b>236</b>	88	<b>324</b>	<b>49</b>	<b>2</b>	67	118	<b>61</b>	120	0	181	<b>623</b>
08:00 AM	0	0	0	0	0	181	72	253	28	2	84	114	53	<b>138</b>	0	<b>191</b>	558
08:15 AM	0	0	0	0	0	174	62	236	35	1	<b>99</b>	<b>135</b>	55	124	0	179	550
Total Volume	0	0	0	0	0	808	315	1123	143	6	319	468	210	452	0	662	2253
% App. Total	0	0	0	0	0	72	28		30.6	1.3	68.2		31.7	68.3	0		
PHF	.000	.000	.000	.000	.000	.856	.847	.867	.730	.750	.806	.867	.861	.819	.000	.866	.904

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:30 AM



City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 09\_SDG\_15N\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	217	<b>93</b>	310	<b>49</b>	<b>2</b>	67	118	<b>61</b>	120	0	181
+15 mins.	0	0	0	0	0	<b>236</b>	88	<b>324</b>	28	2	84	114	53	<b>138</b>	0	<b>191</b>
+30 mins.	0	0	0	0	0	181	72	253	35	1	<b>99</b>	<b>135</b>	55	124	0	179
+45 mins.	0	0	0	0	0	174	62	236	35	2	80	117	46	102	0	148
Total Volume	0	0	0	0	0	808	315	1123	147	7	330	484	215	484	0	699
% App. Total	0	0	0	0	0	72	28		30.4	1.4	68.2		30.8	69.2	0	
PHF	.000	.000	.000	.000	.000	.856	.847	.867	.750	.875	.833	.896	.881	.877	.000	.915

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

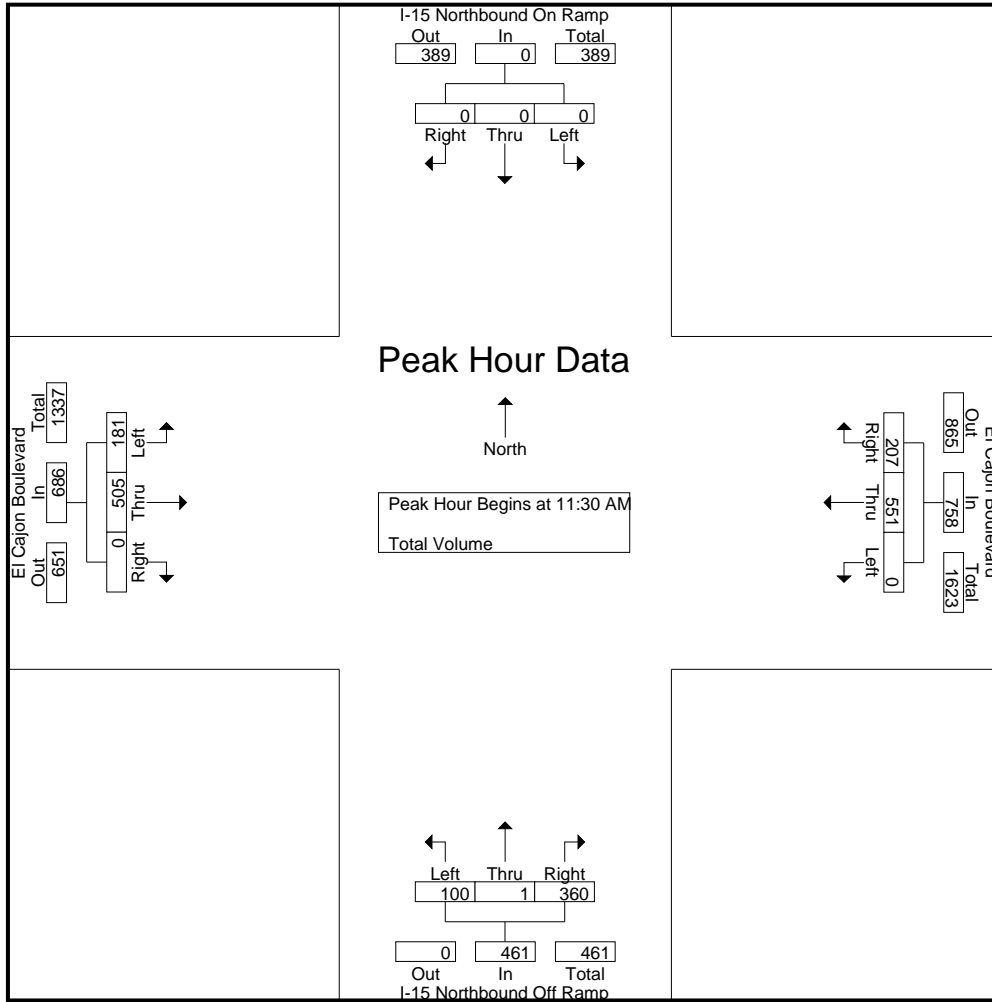
File Name : 09\_SDG\_15N\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	I-15 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-15 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	0	0	0	0	0	138	61	199	27	0	96	123	43	111	0	154	476
11:45 AM	0	0	0	0	0	145	45	190	29	0	80	109	38	137	0	175	474
Total	0	0	0	0	0	283	106	389	56	0	176	232	81	248	0	329	950
12:00 PM	0	0	0	0	0	130	49	179	23	1	104	128	47	111	0	158	465
12:15 PM	0	0	0	0	0	138	52	190	21	0	80	101	53	146	0	199	490
12:30 PM	0	0	0	0	0	138	49	187	18	0	81	99	41	116	0	157	443
12:45 PM	0	0	0	0	0	141	65	206	21	2	93	116	39	119	0	158	480
Total	0	0	0	0	0	547	215	762	83	3	358	444	180	492	0	672	1878
01:00 PM	0	0	0	0	0	112	55	167	31	1	85	117	35	119	0	154	438
01:15 PM	0	0	0	0	0	140	44	184	27	1	93	121	46	129	0	175	480
Grand Total	0	0	0	0	0	1082	420	1502	197	5	712	914	342	988	0	1330	3746
Apprch %	0	0	0	0	0	72	28		21.6	0.5	77.9		25.7	74.3	0		
Total %	0	0	0	0	0	28.9	11.2	40.1	5.3	0.1	19	24.4	9.1	26.4	0	35.5	

Start Time	I-15 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-15 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	0	0	0	0	0	138	<b>61</b>	<b>199</b>	27	0	96	123	43	111	0	154	476
11:45 AM	0	0	0	0	0	<b>145</b>	45	190	<b>29</b>	0	80	109	38	137	0	175	474
12:00 PM	0	0	0	0	0	130	49	179	23	<b>1</b>	<b>104</b>	<b>128</b>	47	111	0	158	465
12:15 PM	0	0	0	0	0	138	52	190	21	0	80	101	<b>53</b>	<b>146</b>	0	<b>199</b>	<b>490</b>
Total Volume	0	0	0	0	0	551	207	758	100	1	360	461	181	505	0	686	1905
% App. Total	0	0	0	0	0	72.7	27.3		21.7	0.2	78.1		26.4	73.6	0		
PHF	.000	.000	.000	.000	.000	.950	.848	.952	.862	.250	.865	.900	.854	.865	.000	.862	.972

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 11:30 AM



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	11:30 AM				12:00 PM				11:30 AM				11:45 AM			
+0 mins.	0	0	0	0	0	130	49	179	27	0	96	123	38	137	0	175
+15 mins.	0	0	0	0	0	138	52	190	<b>29</b>	0	80	109	47	111	0	158
+30 mins.	0	0	0	0	0	138	49	187	23	<b>1</b>	<b>104</b>	<b>128</b>	<b>53</b>	<b>146</b>	0	<b>199</b>
+45 mins.	0	0	0	0	0	<b>141</b>	<b>65</b>	<b>206</b>	21	0	80	101	41	116	0	157
Total Volume	0	0	0	0	0	547	215	762	100	1	360	461	179	510	0	689
% App. Total	0	0	0	0	0	71.8	28.2		21.7	0.2	78.1		26	74	0	
PHF	.000	.000	.000	.000	.000	.970	.827	.925	.862	.250	.865	.900	.844	.873	.000	.866

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 09\_SDG\_15N\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

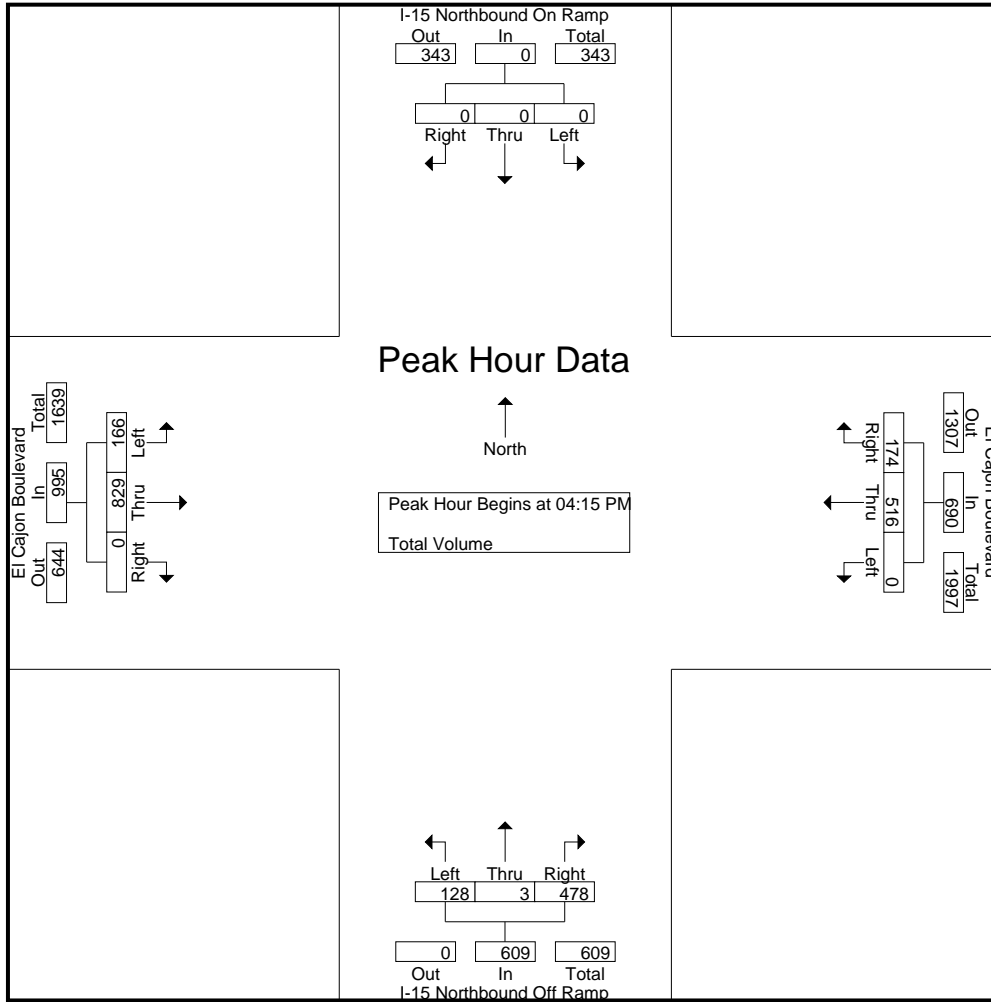
Start Time	I-15 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-15 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	126	48	174	34	0	112	146	37	185	0	222	542
04:15 PM	0	0	0	0	0	135	40	175	22	1	116	139	46	232	0	278	592
04:30 PM	0	0	0	0	0	131	60	191	38	0	115	153	38	198	0	236	580
04:45 PM	0	0	0	0	0	119	30	149	36	1	124	161	43	196	0	239	549
Total	0	0	0	0	0	511	178	689	130	2	467	599	164	811	0	975	2263
05:00 PM	0	0	0	0	0	131	44	175	32	1	123	156	39	203	0	242	573
05:15 PM	0	0	0	0	0	122	44	166	31	1	133	165	46	194	0	240	571
05:30 PM	0	0	0	0	0	121	48	169	29	1	110	140	55	216	0	271	580
05:45 PM	0	0	0	0	0	118	44	162	30	0	118	148	34	201	0	235	545
Total	0	0	0	0	0	492	180	672	122	3	484	609	174	814	0	988	2269
Grand Total	0	0	0	0	0	1003	358	1361	252	5	951	1208	338	1625	0	1963	4532
Apprch %	0	0	0		0	73.7	26.3		20.9	0.4	78.7		17.2	82.8	0		
Total %	0	0	0		0	22.1	7.9	30	5.6	0.1	21	26.7	7.5	35.9	0	43.3	

Start Time	I-15 Northbound On Ramp Southbound				El Cajon Boulevard Westbound				I-15 Northbound Off Ramp Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	<b>135</b>	40	175	22	<b>1</b>	116	139	<b>46</b>	<b>232</b>	0	<b>278</b>	<b>592</b>
04:30 PM	0	0	0	0	0	131	<b>60</b>	<b>191</b>	<b>38</b>	0	115	153	38	198	0	236	580
04:45 PM	0	0	0	0	0	119	30	149	36	1	<b>124</b>	<b>161</b>	43	196	0	239	549
05:00 PM	0	0	0	0	0	131	44	175	32	1	123	156	39	203	0	242	573
Total Volume	0	0	0	0	0	516	174	690	128	3	478	609	166	829	0	995	2294
% App. Total	0	0	0		0	74.8	25.2		21	0.5	78.5		16.7	83.3	0		
PHF	.000	.000	.000	.000	.000	.956	.725	.903	.842	.750	.964	.946	.902	.893	.000	.895	.969

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:15 PM

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 09\_SDG\_15N\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:30 PM				04:45 PM			
+0 mins.	0	0	0	0	0	<b>135</b>	40	175	<b>38</b>	0	115	153	<b>46</b>	<b>232</b>	0	<b>278</b>
+15 mins.	0	0	0	0	0	131	<b>60</b>	<b>191</b>	36	<b>1</b>	124	161	38	198	0	236
+30 mins.	0	0	0	0	0	119	30	149	32	1	123	156	43	196	0	239
+45 mins.	0	0	0	0	0	131	44	175	31	1	<b>133</b>	<b>165</b>	39	203	0	242
Total Volume	0	0	0	0	0	516	174	690	137	3	495	635	166	829	0	995
% App. Total	0	0	0	0	0	74.8	25.2		21.6	0.5	78		16.7	83.3	0	
PHF	.000	.000	.000	.000	.000	.956	.725	.903	.901	.750	.930	.962	.902	.893	.000	.895

Location: San Diego  
 N/S: I-15 NB Ramps  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg I-15 NB Ramps	East Leg El Cajon Boulevard	South Leg I-15 NB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	1	0	8	7	16
7:15 AM	2	0	8	5	15
7:30 AM	0	2	8	3	13
7:45 AM	2	0	6	2	10
8:00 AM	3	2	3	3	11
8:15 AM	4	0	5	4	13
8:30 AM	3	1	2	0	6
8:45 AM	4	1	3	3	11
TOTAL VOLUMES:	19	6	43	27	95

	North Leg I-15 NB Ramps	East Leg El Cajon Boulevard	South Leg I-15 NB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	6	6	1	2	15
11:45 AM	2	2	3	0	7
12:00 PM	9	8	4	0	21
12:15 PM	4	0	2	2	8
12:30 PM	5	1	7	1	14
12:45 PM	9	0	4	1	14
1:00 PM	5	1	6	2	14
1:15 PM	4	2	5	3	14
TOTAL VOLUMES:	44	20	32	11	107

	North Leg I-15 NB Ramps	East Leg El Cajon Boulevard	South Leg I-15 NB Ramps	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	8	6	8	4	26
4:15 PM	7	5	4	3	19
4:30 PM	3	1	14	1	19
4:45 PM	3	3	8	2	16
5:00 PM	6	1	10	3	20
5:15 PM	5	2	5	3	15
5:30 PM	3	1	5	3	12
5:45 PM	0	0	8	2	10
TOTAL VOLUMES:	35	19	62	21	137

Location: San Diego  
 N/S: I-15 NB Ramps  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound I-15 NB Ramps			Westbound El Cajon Boulevard			Northbound I-15 NB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	2	0	3

	Southbound I-15 NB Ramps			Westbound El Cajon Boulevard			Northbound I-15 NB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	1	0	0	0	1	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
TOTAL VOLUMES:	0	0	0	0	2	1	1	0	0	0	4	0	8

	Southbound I-15 NB Ramps			Westbound El Cajon Boulevard			Northbound I-15 NB Ramps			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	5	0	5

20) 43rd St & El Cajon Blvd



City of San Diego  
 N/S: 43rd Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 10\_SDG\_43rd St\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	43rd Street Southbound				El Cajon Boulevard Westbound				43rd Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	20	30	8	58	11	120	0	131	0	0	0	0	0	70	7	77	266
07:15 AM	22	47	6	75	15	186	0	201	0	0	0	0	0	103	5	108	384
07:30 AM	26	47	19	92	18	222	0	240	0	0	0	0	0	116	11	127	459
07:45 AM	51	62	21	134	17	218	0	235	0	0	0	0	0	161	7	168	537
Total	119	186	54	359	61	746	0	807	0	0	0	0	0	450	30	480	1646
08:00 AM	66	65	25	156	23	193	0	216	0	0	0	0	0	176	11	187	559
08:15 AM	55	68	10	133	37	189	0	226	0	0	0	0	0	213	9	222	581
08:30 AM	45	58	13	116	42	203	0	245	0	0	0	0	0	142	16	158	519
08:45 AM	46	40	14	100	25	188	0	213	0	0	0	0	0	116	18	134	447
Total	212	231	62	505	127	773	0	900	0	0	0	0	0	647	54	701	2106
Grand Total	331	417	116	864	188	1519	0	1707	0	0	0	0	0	1097	84	1181	3752
Apprch %	38.3	48.3	13.4		11	89	0		0	0	0	0	0	92.9	7.1		
Total %	8.8	11.1	3.1	23	5	40.5	0	45.5	0	0	0	0	0	29.2	2.2	31.5	

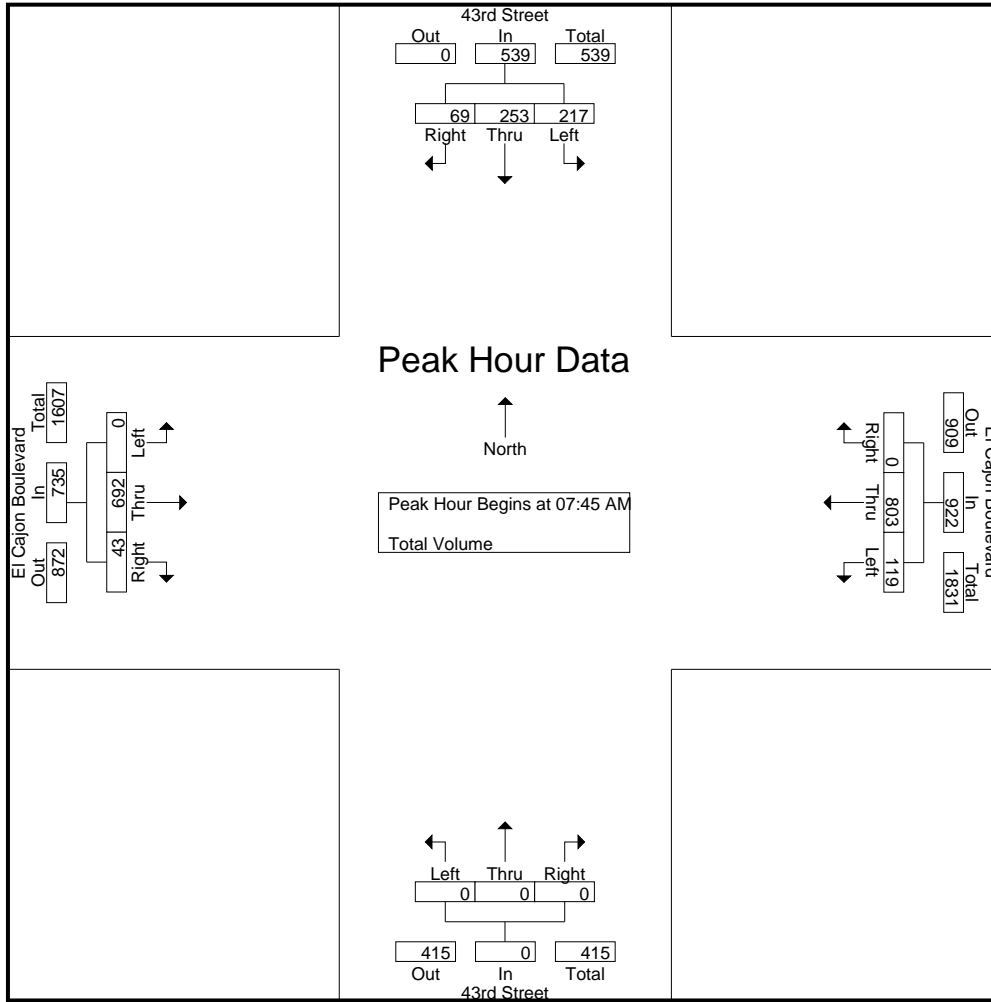
Start Time	43rd Street Southbound				El Cajon Boulevard Westbound				43rd Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	51	62	21	134	17	<b>218</b>	0	235	0	0	0	0	0	161	7	168	537
08:00 AM	<b>66</b>	65	<b>25</b>	<b>156</b>	23	193	0	216	0	0	0	0	0	176	11	187	559
08:15 AM	55	<b>68</b>	10	133	37	189	0	226	0	0	0	0	0	<b>213</b>	9	<b>222</b>	<b>581</b>
08:30 AM	45	58	13	116	<b>42</b>	203	0	<b>245</b>	0	0	0	0	0	142	<b>16</b>	158	519
Total Volume	217	253	69	539	119	803	0	922	0	0	0	0	0	692	43	735	2196
% App. Total	40.3	46.9	12.8		12.9	87.1	0		0	0	0	0	0	94.1	5.9		
PHF	.822	.930	.690	.864	.708	.921	.000	.941	.000	.000	.000	.000	.000	.812	.672	.828	.945

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of San Diego  
 N/S: 43rd Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 10\_SDG\_43rd St\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:00 AM				07:45 AM			
+0 mins.	51	62	21	134	17	<b>218</b>	0	235	0	0	0	0	0	161	7	168
+15 mins.	<b>66</b>	65	<b>25</b>	<b>156</b>	23	193	0	216	0	0	0	0	0	176	11	187
+30 mins.	55	<b>68</b>	10	133	37	189	0	226	0	0	0	0	0	<b>213</b>	9	<b>222</b>
+45 mins.	45	58	13	116	<b>42</b>	203	0	<b>245</b>	0	0	0	0	0	142	<b>16</b>	158
Total Volume	217	253	69	539	119	803	0	922	0	0	0	0	0	692	43	735
% App. Total	40.3	46.9	12.8		12.9	87.1	0		0	0	0	0	0	94.1	5.9	
PHF	.822	.930	.690	.864	.708	.921	.000	.941	.000	.000	.000	.000	.000	.812	.672	.828

City of San Diego  
 N/S: 43rd Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 10\_SDG\_43rd St\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

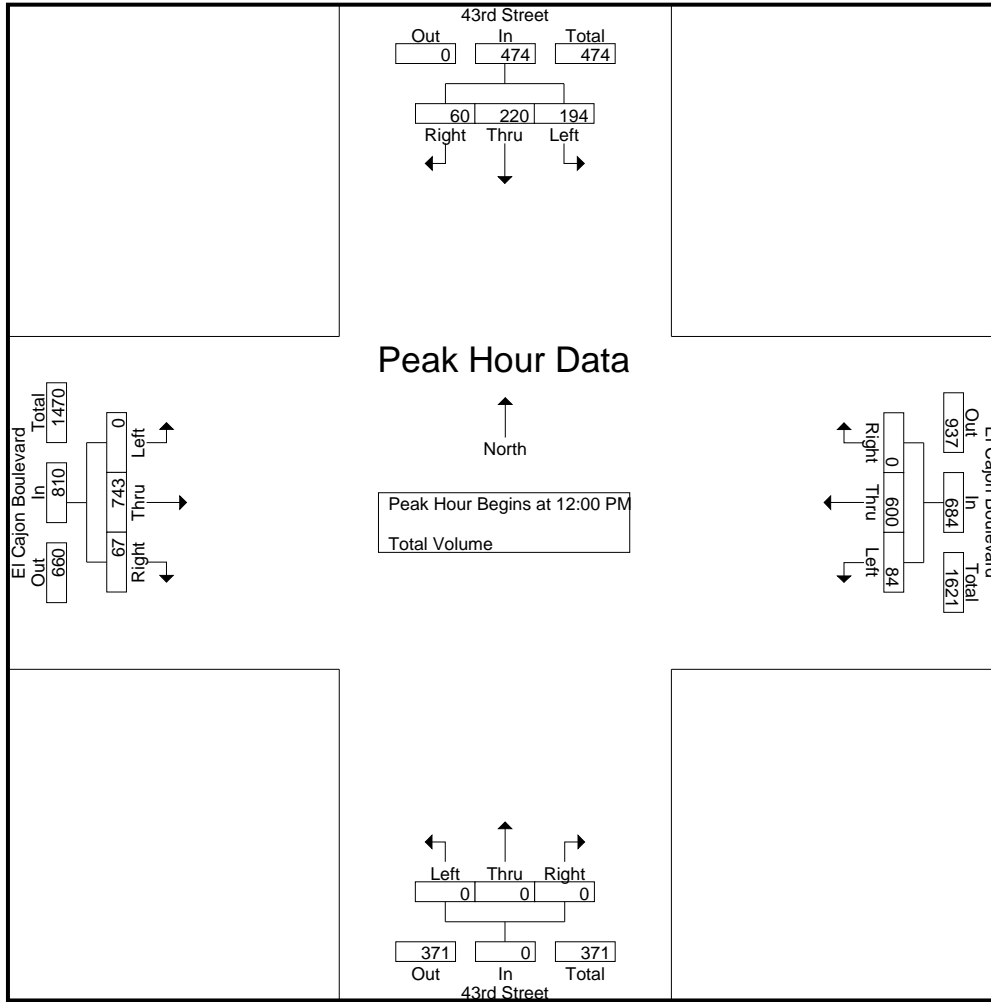
Groups Printed- Total Volume

Start Time	43rd Street Southbound				El Cajon Boulevard Westbound				43rd Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	39	52	17	108	16	147	0	163	0	0	0	0	0	171	15	186	457
11:45 AM	53	51	18	122	20	144	0	164	0	0	0	0	0	174	18	192	478
Total	92	103	35	230	36	291	0	327	0	0	0	0	0	345	33	378	935
12:00 PM	46	46	14	106	20	163	0	183	0	0	0	0	0	179	15	194	483
12:15 PM	56	59	18	133	21	134	0	155	0	0	0	0	0	205	17	222	510
12:30 PM	47	56	15	118	22	154	0	176	0	0	0	0	0	176	26	202	496
12:45 PM	45	59	13	117	21	149	0	170	0	0	0	0	0	183	9	192	479
Total	194	220	60	474	84	600	0	684	0	0	0	0	0	743	67	810	1968
01:00 PM	40	70	6	116	23	142	0	165	0	0	0	0	0	162	12	174	455
01:15 PM	52	65	11	128	29	149	0	178	0	0	0	0	0	200	8	208	514
Grand Total	378	458	112	948	172	1182	0	1354	0	0	0	0	0	1450	120	1570	3872
Apprch %	39.9	48.3	11.8		12.7	87.3	0		0	0	0	0	0	92.4	7.6		
Total %	9.8	11.8	2.9	24.5	4.4	30.5	0	35	0	0	0	0	0	37.4	3.1	40.5	

Start Time	43rd Street Southbound				El Cajon Boulevard Westbound				43rd Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	46	46	14	106	20	<b>163</b>	0	<b>183</b>	0	0	0	0	0	179	15	194	483
12:15 PM	<b>56</b>	<b>59</b>	<b>18</b>	<b>133</b>	21	134	0	155	0	0	0	0	0	<b>205</b>	17	<b>222</b>	<b>510</b>
12:30 PM	47	56	15	118	<b>22</b>	154	0	176	0	0	0	0	0	176	<b>26</b>	202	496
12:45 PM	45	59	13	117	21	149	0	170	0	0	0	0	0	183	9	192	479
Total Volume	194	220	60	474	84	600	0	684	0	0	0	0	0	743	67	810	1968
% App. Total	40.9	46.4	12.7		12.3	87.7	0		0	0	0	0	0	91.7	8.3		
PHF	.866	.932	.833	.891	.955	.920	.000	.934	.000	.000	.000	.000	.000	.906	.644	.912	.965

City of San Diego  
 N/S: 43rd Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 10\_SDG\_43rd St\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:15 PM				12:30 PM				11:30 AM				11:45 AM			
+0 mins.	56	59	18	133	22	154	0	176	0	0	0	0	0	174	18	192
+15 mins.	47	56	15	118	21	149	0	170	0	0	0	0	0	179	15	194
+30 mins.	45	59	13	117	23	142	0	165	0	0	0	0	0	205	17	222
+45 mins.	40	70	6	116	29	149	0	178	0	0	0	0	0	176	26	202
Total Volume	188	244	52	484	95	594	0	689	0	0	0	0	0	734	76	810
% App. Total	38.8	50.4	10.7		13.8	86.2	0		0	0	0	0	0	90.6	9.4	
PHF	.839	.871	.722	.910	.819	.964	.000	.968	.000	.000	.000	.000	.000	.895	.731	.912

City of San Diego  
 N/S: 43rd Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 10\_SDG\_43rd St\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	43rd Street Southbound				El Cajon Boulevard Westbound				43rd Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	62	124	8	194	21	142	0	163	0	0	0	0	0	251	26	277	634
04:15 PM	65	118	23	206	28	124	0	152	0	0	0	0	0	232	26	258	616
04:30 PM	64	116	9	189	25	161	0	186	0	0	0	0	0	246	32	278	653
04:45 PM	69	133	7	209	35	117	0	152	0	0	0	0	0	251	47	298	659
Total	260	491	47	798	109	544	0	653	0	0	0	0	0	980	131	1111	2562
05:00 PM	63	128	12	203	28	135	0	163	0	0	0	0	0	253	35	288	654
05:15 PM	66	106	13	185	28	140	0	168	0	0	0	0	0	250	23	273	626
05:30 PM	70	112	21	203	26	125	0	151	0	0	0	0	0	268	23	291	645
05:45 PM	80	129	5	214	35	140	0	175	0	0	0	0	0	250	31	281	670
Total	279	475	51	805	117	540	0	657	0	0	0	0	0	1021	112	1133	2595
Grand Total	539	966	98	1603	226	1084	0	1310	0	0	0	0	0	2001	243	2244	5157
Apprch %	33.6	60.3	6.1		17.3	82.7	0		0	0	0	0	0	89.2	10.8		
Total %	10.5	18.7	1.9	31.1	4.4	21	0	25.4	0	0	0	0	0	38.8	4.7	43.5	

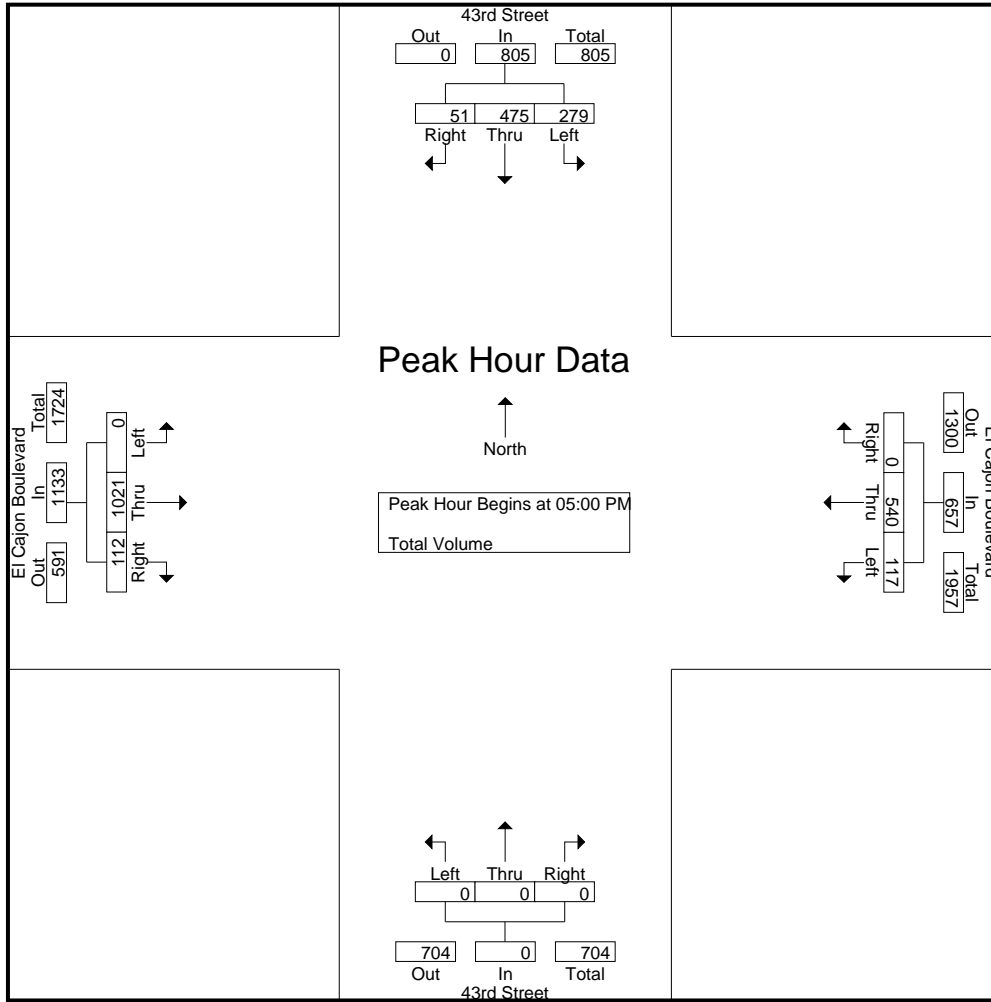
Start Time	43rd Street Southbound				El Cajon Boulevard Westbound				43rd Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	63	128	12	203	28	135	0	163	0	0	0	0	0	253	<b>35</b>	288	654
05:15 PM	66	106	13	185	28	<b>140</b>	0	168	0	0	0	0	0	250	23	273	626
05:30 PM	70	112	<b>21</b>	203	26	125	0	151	0	0	0	0	0	<b>268</b>	23	<b>291</b>	645
05:45 PM	<b>80</b>	<b>129</b>	5	<b>214</b>	<b>35</b>	140	0	<b>175</b>	0	0	0	0	0	250	31	281	<b>670</b>
Total Volume	279	475	51	805	117	540	0	657	0	0	0	0	0	1021	112	1133	2595
% App. Total	34.7	59	6.3		17.8	82.2	0		0	0	0	0	0	90.1	9.9		
PHF	.872	.921	.607	.940	.836	.964	.000	.939	.000	.000	.000	.000	.000	.952	.800	.973	.968

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

City of San Diego  
 N/S: 43rd Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 10\_SDG\_43rd St\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	65	118	<b>23</b>	206	25	<b>161</b>	0	<b>186</b>	0	0	0	0	0	251	<b>47</b>	<b>298</b>
+15 mins.	64	116	9	189	<b>35</b>	117	0	152	0	0	0	0	0	253	35	288
+30 mins.	<b>69</b>	<b>133</b>	7	<b>209</b>	28	135	0	163	0	0	0	0	0	250	23	273
+45 mins.	63	128	12	203	28	140	0	168	0	0	0	0	0	<b>268</b>	23	291
Total Volume	261	495	51	807	116	553	0	669	0	0	0	0	0	1022	128	1150
% App. Total	32.3	61.3	6.3		17.3	82.7	0		0	0	0		0	88.9	11.1	
PHF	.946	.930	.554	.965	.829	.859	.000	.899	.000	.000	.000	.000	.000	.953	.681	.965

Location: San Diego  
 N/S: 43rd Street  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg 43rd Street	East Leg El Cajon Boulevard	South Leg 43rd Street	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	1	2	3	6
7:15 AM	4	3	5	1	13
7:30 AM	8	5	7	0	20
7:45 AM	4	2	5	5	16
8:00 AM	7	20	6	1	34
8:15 AM	15	23	7	5	50
8:30 AM	6	13	7	5	31
8:45 AM	9	12	8	5	34
TOTAL VOLUMES:	53	79	47	25	204

	North Leg 43rd Street	East Leg El Cajon Boulevard	South Leg 43rd Street	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	3	0	1	2	6
11:45 AM	9	15	7	0	31
12:00 PM	1	3	8	5	17
12:15 PM	6	6	14	7	33
12:30 PM	6	5	6	0	17
12:45 PM	7	8	7	4	26
1:00 PM	5	7	10	4	26
1:15 PM	6	6	9	3	24
TOTAL VOLUMES:	43	50	62	25	180

	North Leg 43rd Street	East Leg El Cajon Boulevard	South Leg 43rd Street	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	4	11	5	1	21
4:15 PM	12	10	14	9	45
4:30 PM	15	13	15	1	44
4:45 PM	3	10	10	4	27
5:00 PM	12	16	6	4	38
5:15 PM	3	19	7	1	30
5:30 PM	4	19	4	1	28
5:45 PM	12	7	6	5	30
TOTAL VOLUMES:	65	105	67	26	263

Location: San Diego  
 N/S: 43rd Street  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound 43rd Street			Westbound El Cajon Boulevard			Northbound 43rd Street			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	1	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1	0	0	0	0	0	2	1	5

	Southbound 43rd Street			Westbound El Cajon Boulevard			Northbound 43rd Street			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
11:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
TOTAL VOLUMES:	0	2	0	0	3	0	0	0	0	0	2	1	8

	Southbound 43rd Street			Westbound El Cajon Boulevard			Northbound 43rd Street			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	2	0	0	0	0	0	0	0	3



221) Fairmount Ave & El Cajon Blvd

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 11\_SDG\_Fair\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Fairmount Avenue Southbound				El Cajon Boulevard Westbound				Fairmount Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	114	39	153	14	104	9	127	15	67	11	93	373
07:15 AM	0	0	0	0	0	183	69	252	17	130	7	154	10	96	20	126	532
07:30 AM	0	0	0	0	0	219	128	347	21	170	13	204	23	103	17	143	694
07:45 AM	0	0	0	0	0	219	122	341	20	198	26	244	32	173	16	221	806
Total	0	0	0	0	0	735	358	1093	72	602	55	729	80	439	64	583	2405
08:00 AM	0	0	0	0	0	189	72	261	24	157	31	212	26	202	27	255	728
08:15 AM	0	0	0	0	0	207	70	277	18	132	62	212	21	234	17	272	761
08:30 AM	0	0	0	0	0	217	69	286	20	125	48	193	16	158	21	195	674
08:45 AM	0	0	0	0	0	181	67	248	22	120	30	172	15	121	23	159	579
Total	0	0	0	0	0	794	278	1072	84	534	171	789	78	715	88	881	2742
Grand Total	0	0	0	0	0	1529	636	2165	156	1136	226	1518	158	1154	152	1464	5147
Apprch %	0	0	0	0	0	70.6	29.4		10.3	74.8	14.9		10.8	78.8	10.4		
Total %	0	0	0	0	0	29.7	12.4	42.1	3	22.1	4.4	29.5	3.1	22.4	3	28.4	

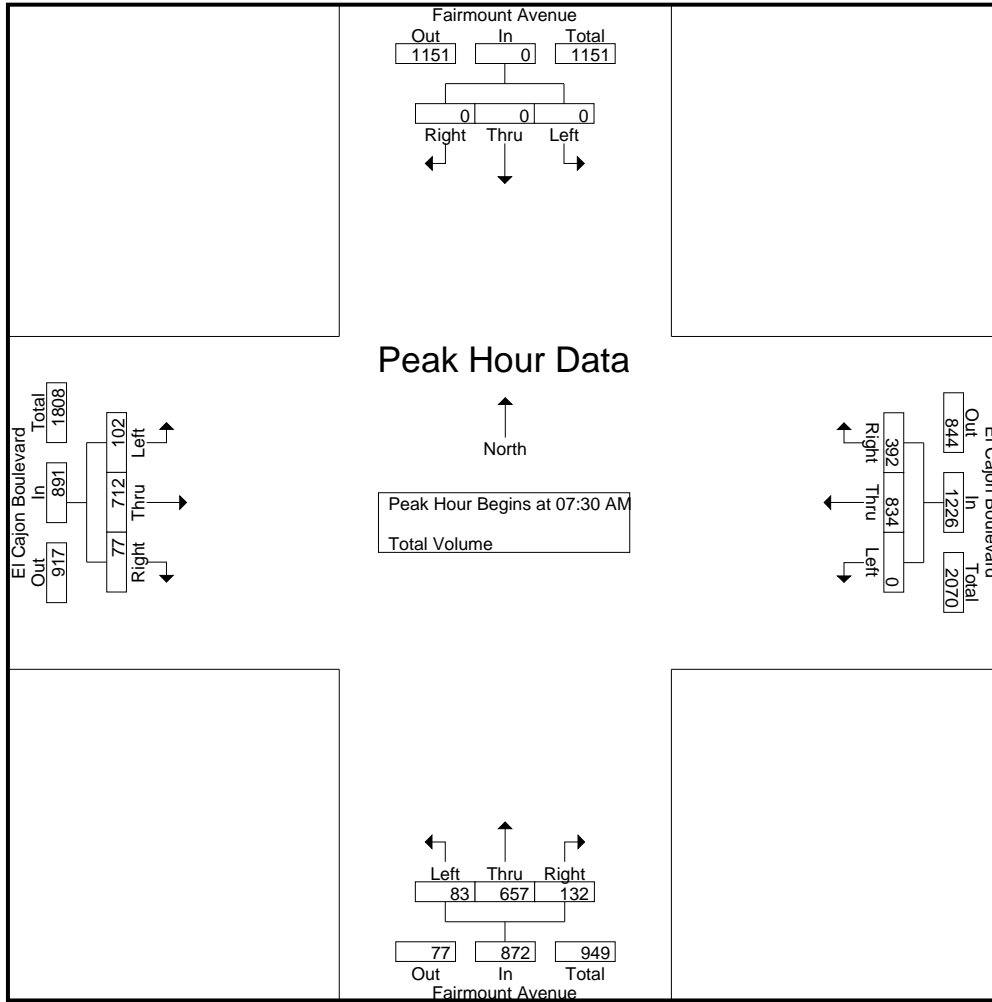
Start Time	Fairmount Avenue Southbound				El Cajon Boulevard Westbound				Fairmount Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	<b>219</b>	<b>128</b>	<b>347</b>	21	170	13	204	23	103	17	143	694
07:45 AM	0	0	0	0	0	219	122	341	20	<b>198</b>	26	<b>244</b>	<b>32</b>	173	16	221	<b>806</b>
08:00 AM	0	0	0	0	0	189	72	261	<b>24</b>	157	31	212	26	202	<b>27</b>	255	728
08:15 AM	0	0	0	0	0	207	70	277	18	132	<b>62</b>	212	21	<b>234</b>	17	<b>272</b>	761
Total Volume	0	0	0	0	0	834	392	1226	83	657	132	872	102	712	77	891	2989
% App. Total	0	0	0	0	0	68	32		9.5	75.3	15.1		11.4	79.9	8.6		
PHF	.000	.000	.000	.000	.000	.952	.766	.883	.865	.830	.532	.893	.797	.761	.713	.819	.927

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 11\_SDG\_Fair\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:30 AM				07:45 AM			
+0 mins.	0	0	0	0	0	<b>219</b>	<b>128</b>	<b>347</b>	21	170	13	204	<b>32</b>	173	16	221
+15 mins.	0	0	0	0	0	219	122	341	20	<b>198</b>	26	<b>244</b>	26	202	<b>27</b>	255
+30 mins.	0	0	0	0	0	189	72	261	<b>24</b>	157	31	212	21	<b>234</b>	17	<b>272</b>
+45 mins.	0	0	0	0	0	207	70	277	18	132	<b>62</b>	212	16	158	21	195
Total Volume	0	0	0	0	0	834	392	1226	83	657	132	872	95	767	81	943
% App. Total	0	0	0	0	0	68	32		9.5	75.3	15.1		10.1	81.3	8.6	
PHF	.000	.000	.000	.000	.000	.952	.766	.883	.865	.830	.532	.893	.742	.819	.750	.867

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 11\_SDG\_Fair\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

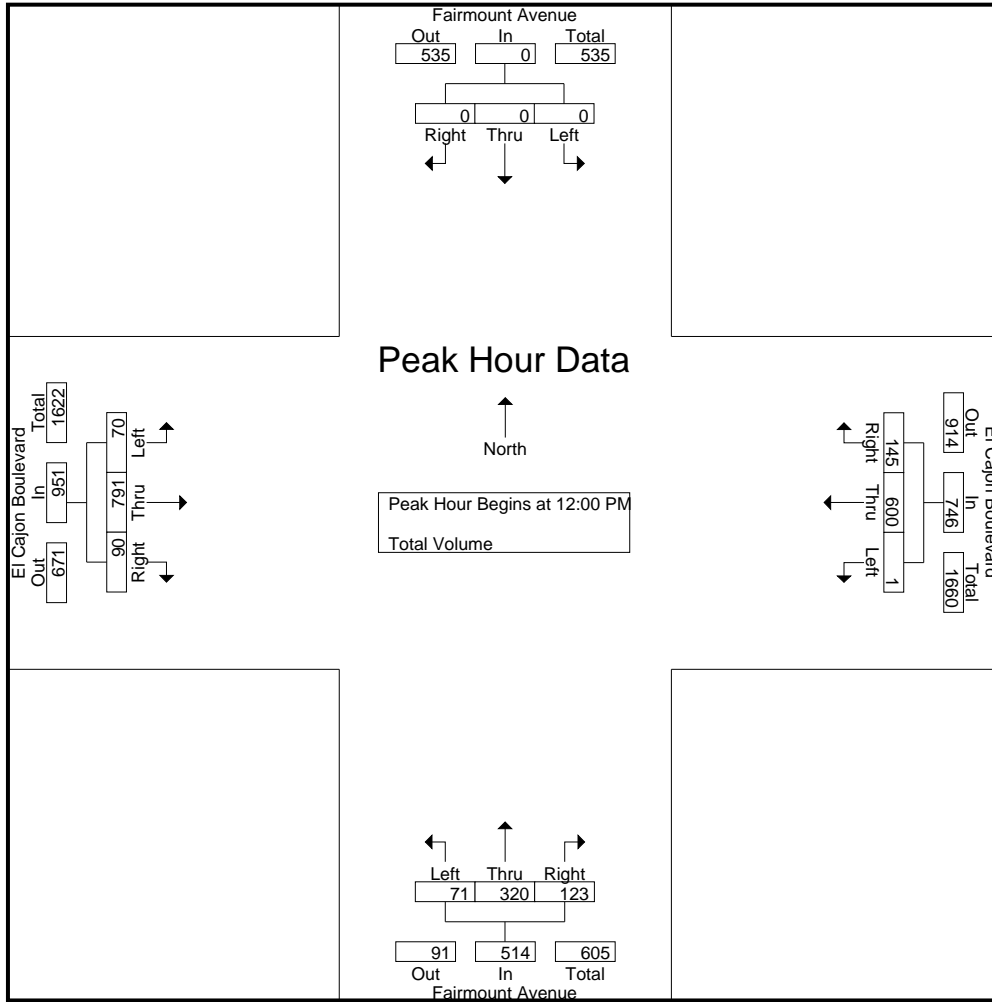
Groups Printed- Total Volume

Start Time	Fairmount Avenue Southbound				El Cajon Boulevard Westbound				Fairmount Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	0	0	0	0	1	130	41	172	25	68	24	117	15	179	17	211	500
11:45 AM	0	0	0	0	0	147	46	193	15	61	18	94	13	194	28	235	522
Total	0	0	0	0	1	277	87	365	40	129	42	211	28	373	45	446	1022
12:00 PM	0	0	0	0	0	158	35	193	20	85	31	136	25	185	14	224	553
12:15 PM	0	0	0	0	0	140	39	179	13	83	34	130	20	203	29	252	561
12:30 PM	0	0	0	0	1	155	36	192	17	77	22	116	12	200	26	238	546
12:45 PM	0	0	0	0	0	147	35	182	21	75	36	132	13	203	21	237	551
Total	0	0	0	0	1	600	145	746	71	320	123	514	70	791	90	951	2211
01:00 PM	0	0	0	0	0	153	34	187	19	70	31	120	17	181	19	217	524
01:15 PM	0	0	0	0	0	152	47	199	19	69	30	118	15	207	22	244	561
Grand Total	0	0	0	0	2	1182	313	1497	149	588	226	963	130	1552	176	1858	4318
Apprch %	0	0	0	0	0.1	79	20.9		15.5	61.1	23.5		7	83.5	9.5		
Total %	0	0	0	0	0	27.4	7.2	34.7	3.5	13.6	5.2	22.3	3	35.9	4.1	43	

Start Time	Fairmount Avenue Southbound				El Cajon Boulevard Westbound				Fairmount Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	0	0	0	0	0	<b>158</b>	35	<b>193</b>	20	<b>85</b>	31	<b>136</b>	<b>25</b>	185	14	224	553
12:15 PM	0	0	0	0	0	140	<b>39</b>	179	13	83	34	130	20	<b>203</b>	<b>29</b>	<b>252</b>	<b>561</b>
12:30 PM	0	0	0	0	1	155	36	192	17	77	22	116	12	200	26	238	546
12:45 PM	0	0	0	0	0	147	35	182	<b>21</b>	75	<b>36</b>	132	13	203	21	237	551
Total Volume	0	0	0	0	1	600	145	746	71	320	123	514	70	791	90	951	2211
% App. Total	0	0	0	0	0.1	80.4	19.4		13.8	62.3	23.9		7.4	83.2	9.5		
PHF	.000	.000	.000	.000	.250	.949	.929	.966	.845	.941	.854	.945	.700	.974	.776	.943	.985

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 11\_SDG\_Fair\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	11:30 AM				12:30 PM				12:00 PM				12:00 PM			
+0 mins.	0	0	0	0	<b>1</b>	<b>155</b>	36	192	20	<b>85</b>	31	<b>136</b>	<b>25</b>	185	14	224
+15 mins.	0	0	0	0	0	147	35	182	13	83	34	130	20	<b>203</b>	<b>29</b>	<b>252</b>
+30 mins.	0	0	0	0	0	153	34	187	17	77	22	116	12	200	26	238
+45 mins.	0	0	0	0	0	152	<b>47</b>	<b>199</b>	<b>21</b>	75	<b>36</b>	132	13	203	21	237
Total Volume	0	0	0	0	1	607	152	760	71	320	123	514	70	791	90	951
% App. Total	0	0	0	0	0.1	79.9	20		13.8	62.3	23.9		7.4	83.2	9.5	
PHF	.000	.000	.000	.000	.250	.979	.809	.955	.845	.941	.854	.945	.700	.974	.776	.943

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 11\_SDG\_Fair\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

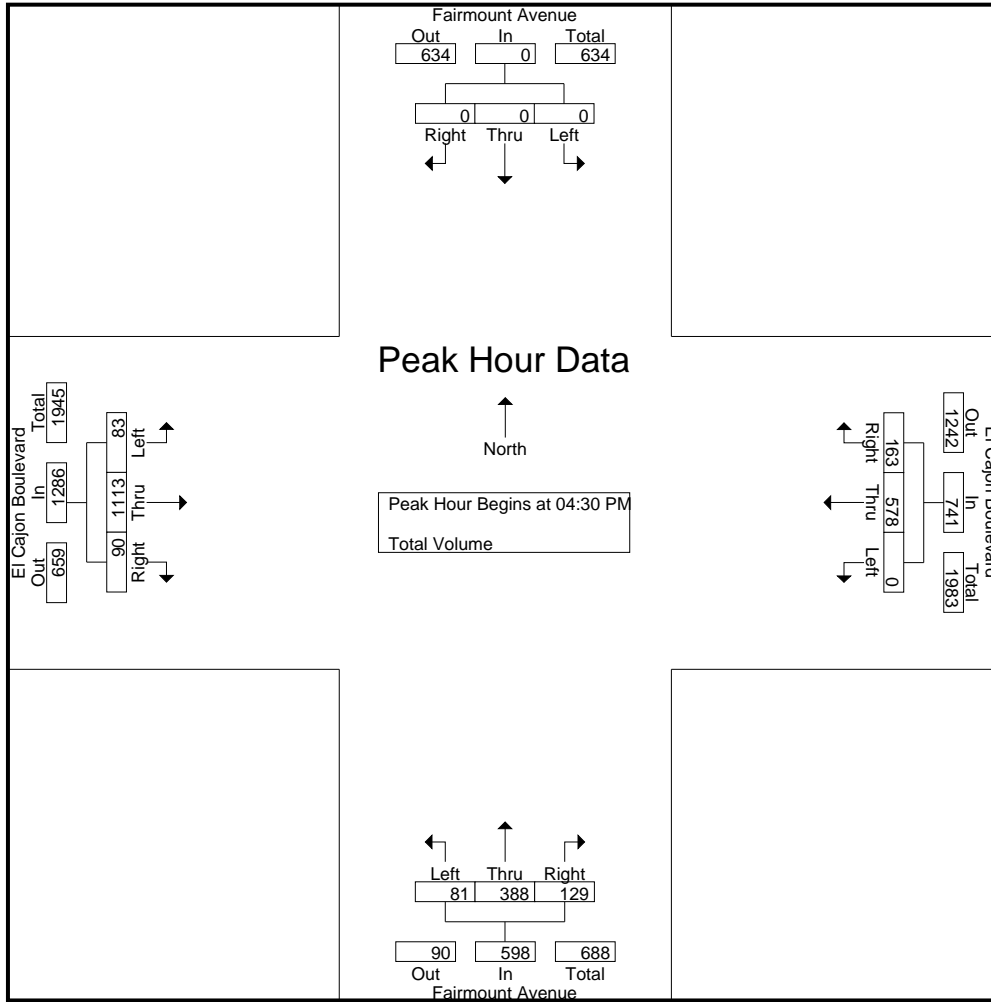
Start Time	Fairmount Avenue Southbound				El Cajon Boulevard Westbound				Fairmount Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	143	43	186	19	77	43	139	24	270	25	319	644
04:15 PM	0	0	0	0	0	138	31	169	11	72	40	123	20	256	24	300	592
04:30 PM	0	0	0	0	0	162	49	211	25	99	29	153	21	260	25	306	670
04:45 PM	0	0	0	0	0	134	40	174	18	110	35	163	24	287	23	334	671
Total	0	0	0	0	0	577	163	740	73	358	147	578	89	1073	97	1259	2577
05:00 PM	0	0	0	0	0	141	37	178	19	87	39	145	18	280	19	317	640
05:15 PM	0	0	0	0	0	141	37	178	19	92	26	137	20	286	23	329	644
05:30 PM	0	0	0	0	0	141	36	177	14	86	23	123	30	297	16	343	643
05:45 PM	0	0	0	0	0	151	30	181	19	88	29	136	21	281	38	340	657
Total	0	0	0	0	0	574	140	714	71	353	117	541	89	1144	96	1329	2584
Grand Total	0	0	0	0	0	1151	303	1454	144	711	264	1119	178	2217	193	2588	5161
Apprch %	0	0	0	0	0	79.2	20.8		12.9	63.5	23.6		6.9	85.7	7.5		
Total %	0	0	0	0	0	22.3	5.9	28.2	2.8	13.8	5.1	21.7	3.4	43	3.7	50.1	

Start Time	Fairmount Avenue Southbound				El Cajon Boulevard Westbound				Fairmount Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	<b>162</b>	<b>49</b>	<b>211</b>	<b>25</b>	99	29	153	21	260	<b>25</b>	306	670
04:45 PM	0	0	0	0	0	134	40	174	18	<b>110</b>	35	<b>163</b>	<b>24</b>	<b>287</b>	23	<b>334</b>	<b>671</b>
05:00 PM	0	0	0	0	0	141	37	178	19	87	<b>39</b>	145	18	280	19	317	640
05:15 PM	0	0	0	0	0	141	37	178	19	92	26	137	20	286	23	329	644
Total Volume	0	0	0	0	0	578	163	741	81	388	129	598	83	1113	90	1286	2625
% App. Total	0	0	0	0	0	78	22		13.5	64.9	21.6		6.5	86.5	7		
PHF	.000	.000	.000	.000	.000	.892	.832	.878	.810	.882	.827	.917	.865	.970	.900	.963	.978

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 11\_SDG\_Fair\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				05:00 PM							
+0 mins.	0	0	0	0	0	<b>162</b>	<b>49</b>	<b>211</b>	<b>25</b>	99	29	153	18	280	19	317
+15 mins.	0	0	0	0	0	134	40	174	18	<b>110</b>	35	<b>163</b>	20	286	23	329
+30 mins.	0	0	0	0	0	141	37	178	19	87	<b>39</b>	145	<b>30</b>	<b>297</b>	16	<b>343</b>
+45 mins.	0	0	0	0	0	141	37	178	19	92	26	137	21	281	<b>38</b>	340
Total Volume	0	0	0	0	0	578	163	741	81	388	129	598	89	1144	96	1329
% App. Total	0	0	0	0	0	78	22		13.5	64.9	21.6		6.7	86.1	7.2	
PHF	.000	.000	.000	.000	.000	.892	.832	.878	.810	.882	.827	.917	.742	.963	.632	.969

Location: San Diego  
 N/S: Fairmount Avenue  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

**PEDESTRIANS**

	North Leg Fairmount Avenue	East Leg El Cajon Boulevard	South Leg Fairmount Avenue	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	4	0	6	2	12
7:15 AM	9	1	8	7	25
7:30 AM	18	1	6	0	25
7:45 AM	8	5	13	1	27
8:00 AM	20	19	28	7	74
8:15 AM	42	29	21	14	106
8:30 AM	17	8	17	4	46
8:45 AM	15	8	19	4	46
<b>TOTAL VOLUMES:</b>	133	71	118	39	361

	North Leg Fairmount Avenue	East Leg El Cajon Boulevard	South Leg Fairmount Avenue	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	8	8	4	4	24
11:45 AM	9	2	13	6	30
12:00 PM	5	8	8	5	26
12:15 PM	13	7	12	7	39
12:30 PM	19	10	16	12	57
12:45 PM	11	7	5	0	23
1:00 PM	10	13	10	3	36
1:15 PM	15	4	11	10	40
<b>TOTAL VOLUMES:</b>	90	59	79	47	275

	North Leg Fairmount Avenue	East Leg El Cajon Boulevard	South Leg Fairmount Avenue	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	18	6	10	11	45
4:15 PM	24	4	24	15	67
4:30 PM	20	7	19	12	58
4:45 PM	13	8	8	2	31
5:00 PM	23	2	9	11	45
5:15 PM	21	15	17	6	59
5:30 PM	15	8	8	2	33
5:45 PM	11	4	5	6	26
<b>TOTAL VOLUMES:</b>	145	54	100	65	364



Location: San Diego  
 N/S: Fairmount Avenue  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Fairmount Avenue			Westbound El Cajon Boulevard			Northbound Fairmount Avenue			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	1	0	0	1	0	2	0	4
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	1	1	0	2	2	0	3	0	9

	Southbound Fairmount Avenue			Westbound El Cajon Boulevard			Northbound Fairmount Avenue			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	1	0	0	0	1	0	0	0	2
1:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	2
TOTAL VOLUMES:	0	0	0	0	4	0	0	2	1	0	2	0	9

	Southbound Fairmount Avenue			Westbound El Cajon Boulevard			Northbound Fairmount Avenue			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	0	0	0	1	1	0	1	0	0	7	0	10

22) El Cajon Blvd & Euclid Ave

City of San Diego  
 N/S: Euclid Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 12\_SDG\_Euc\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

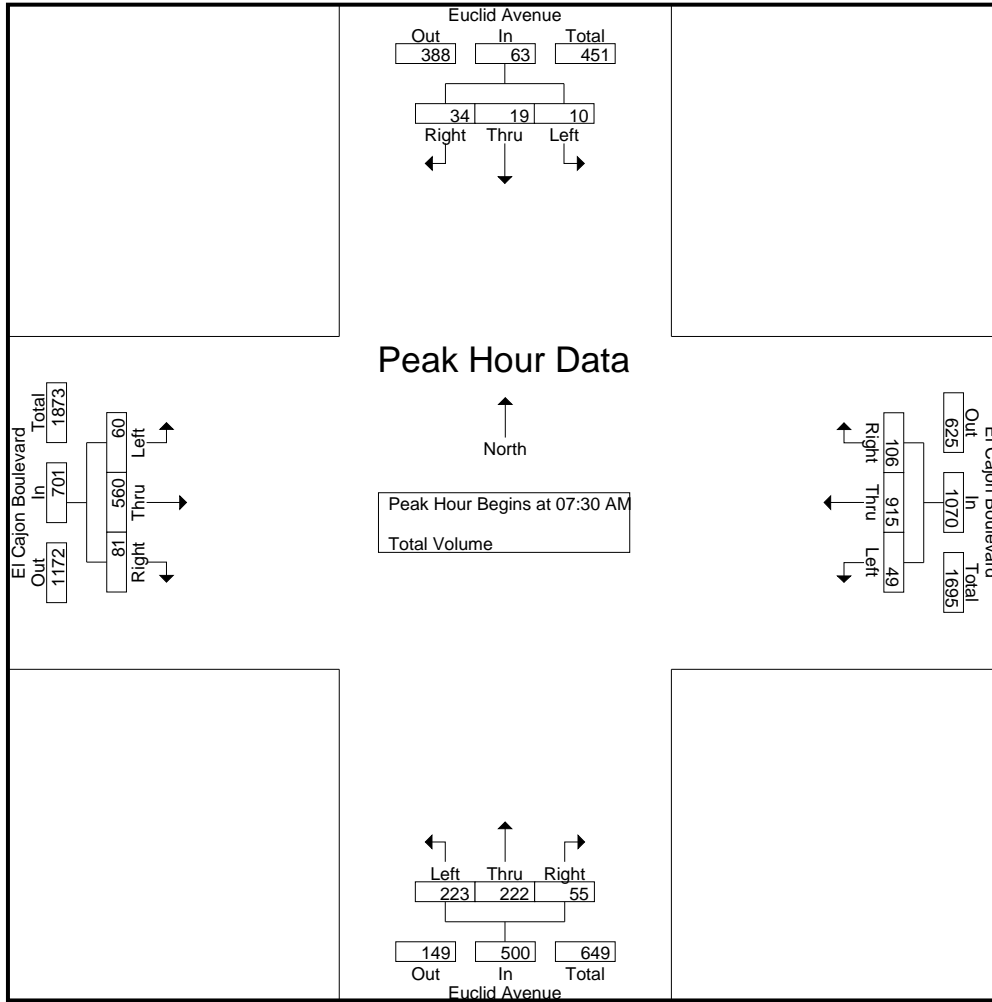
Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				El Cajon Boulevard Westbound				Euclid Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	7	6	13	5	133	15	153	16	61	7	84	19	79	18	116	366
07:15 AM	3	5	6	14	8	185	21	214	33	97	8	138	10	80	12	102	468
07:30 AM	4	2	10	16	10	280	23	313	77	59	12	148	10	97	9	116	593
07:45 AM	2	4	8	14	12	232	23	267	49	57	16	122	14	126	23	163	566
Total	9	18	30	57	35	830	82	947	175	274	43	492	53	382	62	497	1993
08:00 AM	2	6	6	14	12	201	29	242	41	60	15	116	22	171	14	207	579
08:15 AM	2	7	10	19	15	202	31	248	56	46	12	114	14	166	35	215	596
08:30 AM	2	7	5	14	22	180	33	235	46	66	15	127	23	159	34	216	592
08:45 AM	5	8	11	24	9	158	17	184	32	50	14	96	23	134	25	182	486
Total	11	28	32	71	58	741	110	909	175	222	56	453	82	630	108	820	2253
Grand Total	20	46	62	128	93	1571	192	1856	350	496	99	945	135	1012	170	1317	4246
Apprch %	15.6	35.9	48.4		5	84.6	10.3		37	52.5	10.5		10.3	76.8	12.9		
Total %	0.5	1.1	1.5	3	2.2	37	4.5	43.7	8.2	11.7	2.3	22.3	3.2	23.8	4	31	

Start Time	Euclid Avenue Southbound				El Cajon Boulevard Westbound				Euclid Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	2	10	16	10	280	23	313	77	59	12	148	10	97	9	116	593
07:45 AM	2	4	8	14	12	232	23	267	49	57	16	122	14	126	23	163	566
08:00 AM	2	6	6	14	12	201	29	242	41	60	15	116	22	171	14	207	579
08:15 AM	2	7	10	19	15	202	31	248	56	46	12	114	14	166	35	215	596
Total Volume	10	19	34	63	49	915	106	1070	223	222	55	500	60	560	81	701	2334
% App. Total	15.9	30.2	54		4.6	85.5	9.9		44.6	44.4	11		8.6	79.9	11.6		
PHF	.625	.679	.850	.829	.817	.817	.855	.855	.724	.925	.859	.845	.682	.819	.579	.815	.979

City of San Diego  
 N/S: Euclid Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 12\_SDG\_Euc\_EI C AM  
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	08:00 AM				07:30 AM				07:15 AM				08:00 AM			
+0 mins.	2	6	6	14	10	<b>280</b>	23	<b>313</b>	33	<b>97</b>	8	138	22	<b>171</b>	14	207
+15 mins.	2	7	10	19	12	232	23	267	<b>77</b>	59	12	<b>148</b>	14	166	<b>35</b>	215
+30 mins.	2	7	5	14	12	201	29	242	49	57	<b>16</b>	122	<b>23</b>	159	34	<b>216</b>
+45 mins.	<b>5</b>	<b>8</b>	<b>11</b>	<b>24</b>	<b>15</b>	202	<b>31</b>	248	41	60	15	116	23	134	25	182
Total Volume	11	28	32	71	49	915	106	1070	200	273	51	524	82	630	108	820
% App. Total	15.5	39.4	45.1		4.6	85.5	9.9		38.2	52.1	9.7		10	76.8	13.2	
PHF	.550	.875	.727	.740	.817	.817	.855	.855	.649	.704	.797	.885	.891	.921	.771	.949

City of San Diego  
 N/S: Euclid Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

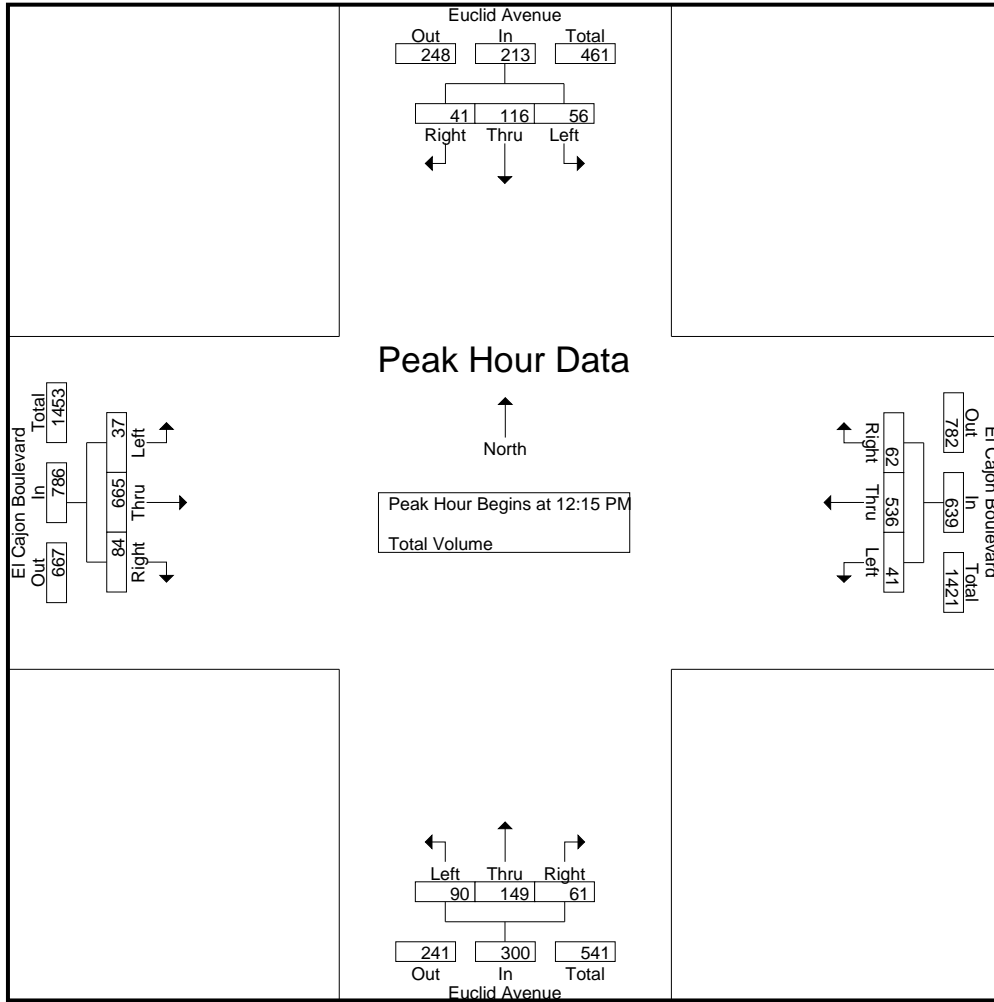
File Name : 12\_SDG\_Euc\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				El Cajon Boulevard Westbound				Euclid Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	6	20	5	31	13	113	16	142	19	43	19	81	14	140	31	185	439
11:45 AM	11	22	13	46	6	144	9	159	23	31	17	71	16	159	17	192	468
Total	17	42	18	77	19	257	25	301	42	74	36	152	30	299	48	377	907
12:00 PM	14	16	8	38	9	134	20	163	18	42	18	78	10	138	20	168	447
12:15 PM	13	31	7	51	13	151	14	178	24	39	10	73	6	181	22	209	511
12:30 PM	19	21	8	48	9	132	14	155	28	32	9	69	15	174	21	210	482
12:45 PM	11	28	15	54	9	123	15	147	22	35	28	85	4	169	19	192	478
Total	57	96	38	191	40	540	63	643	92	148	65	305	35	662	82	779	1918
01:00 PM	13	36	11	60	10	130	19	159	16	43	14	73	12	141	22	175	467
01:15 PM	15	23	7	45	15	156	16	187	30	42	12	84	9	157	19	185	501
Grand Total	102	197	74	373	84	1083	123	1290	180	307	127	614	86	1259	171	1516	3793
Apprch %	27.3	52.8	19.8		6.5	84	9.5		29.3	50	20.7		5.7	83	11.3		
Total %	2.7	5.2	2	9.8	2.2	28.6	3.2	34	4.7	8.1	3.3	16.2	2.3	33.2	4.5	40	

Start Time	Euclid Avenue Southbound				El Cajon Boulevard Westbound				Euclid Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:15 PM	13	31	7	51	13	151	14	178	24	39	10	73	6	181	22	209	511
12:30 PM	19	21	8	48	9	132	14	155	28	32	9	69	15	174	21	210	482
12:45 PM	11	28	15	54	9	123	15	147	22	35	28	85	4	169	19	192	478
01:00 PM	13	36	11	60	10	130	19	159	16	43	14	73	12	141	22	175	467
Total Volume	56	116	41	213	41	536	62	639	90	149	61	300	37	665	84	786	1938
% App. Total	26.3	54.5	19.2		6.4	83.9	9.7		30	49.7	20.3		4.7	84.6	10.7		
PHF	.737	.806	.683	.888	.788	.887	.816	.897	.804	.866	.545	.882	.617	.919	.955	.936	.948

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:15 PM



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:15 PM				11:45 AM				12:30 PM				12:15 PM			
+0 mins.	13	31	7	51	6	144	9	159	28	32	9	69	6	<b>181</b>	<b>22</b>	209
+15 mins.	<b>19</b>	21	8	48	9	134	<b>20</b>	163	22	35	<b>28</b>	<b>85</b>	<b>15</b>	174	21	<b>210</b>
+30 mins.	11	28	<b>15</b>	54	<b>13</b>	<b>151</b>	14	<b>178</b>	16	<b>43</b>	14	73	4	169	19	192
+45 mins.	13	<b>36</b>	11	<b>60</b>	9	132	14	155	<b>30</b>	42	12	84	12	141	22	175
Total Volume	56	116	41	213	37	561	57	655	96	152	63	311	37	665	84	786
% App. Total	26.3	54.5	19.2		5.6	85.6	8.7		30.9	48.9	20.3		4.7	84.6	10.7	
PHF	.737	.806	.683	.888	.712	.929	.713	.920	.800	.884	.563	.915	.617	.919	.955	.936

City of San Diego  
 N/S: Euclid Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 12\_SDG\_Euc\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				El Cajon Boulevard Westbound				Euclid Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	19	57	9	85	23	154	10	187	10	54	19	83	10	217	29	256	611
04:15 PM	16	61	15	92	16	136	7	159	19	43	16	78	10	202	29	241	570
04:30 PM	27	49	11	87	13	150	16	179	20	42	15	77	10	210	45	265	608
04:45 PM	33	49	7	89	17	139	14	170	19	31	7	57	17	220	30	267	583
Total	95	216	42	353	69	579	47	695	68	170	57	295	47	849	133	1029	2372
05:00 PM	28	53	9	90	18	125	15	158	12	43	11	66	15	232	31	278	592
05:15 PM	19	60	7	86	22	138	18	178	19	48	14	81	12	225	29	266	611
05:30 PM	14	58	7	79	11	141	14	166	15	48	21	84	10	232	29	271	600
05:45 PM	22	56	13	91	16	135	17	168	20	36	22	78	6	225	23	254	591
Total	83	227	36	346	67	539	64	670	66	175	68	309	43	914	112	1069	2394
Grand Total	178	443	78	699	136	1118	111	1365	134	345	125	604	90	1763	245	2098	4766
Apprch %	25.5	63.4	11.2		10	81.9	8.1		22.2	57.1	20.7		4.3	84	11.7		
Total %	3.7	9.3	1.6	14.7	2.9	23.5	2.3	28.6	2.8	7.2	2.6	12.7	1.9	37	5.1	44	

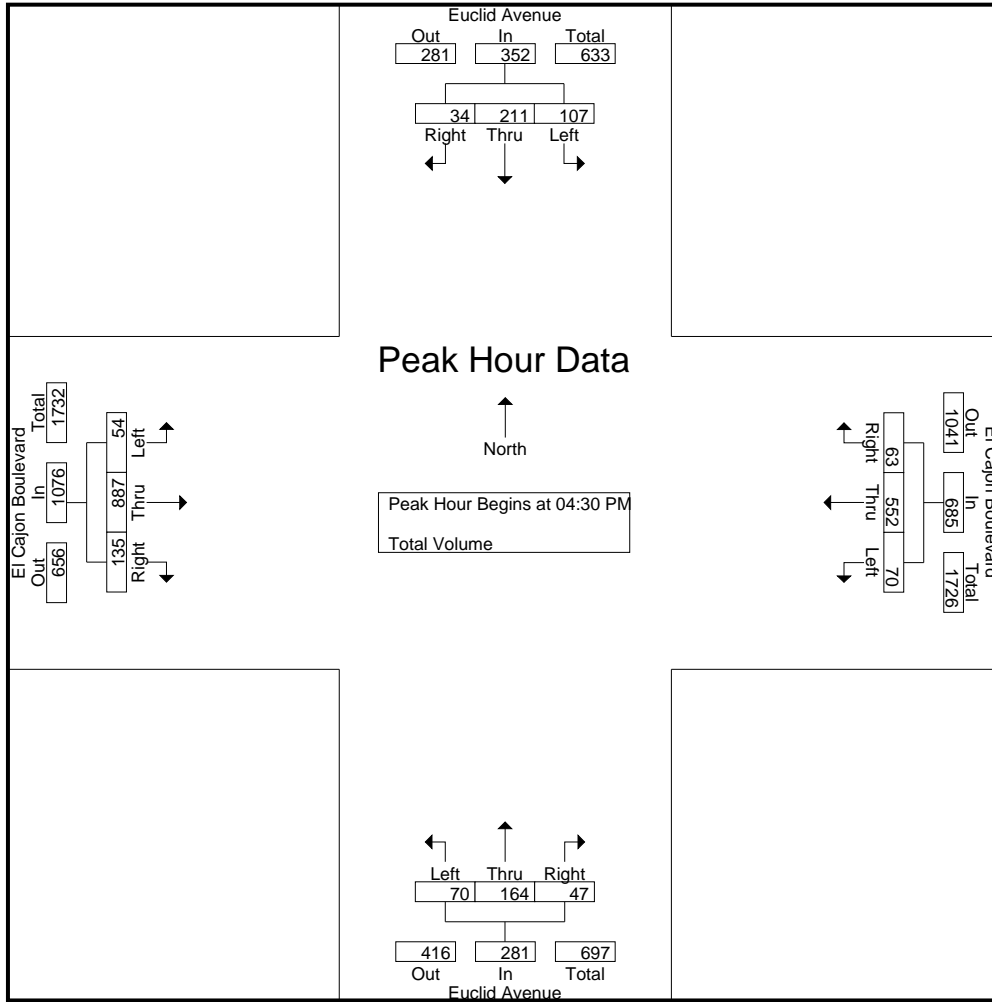
Start Time	Euclid Avenue Southbound				El Cajon Boulevard Westbound				Euclid Avenue Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	27	49	<b>11</b>	87	13	<b>150</b>	16	<b>179</b>	<b>20</b>	42	<b>15</b>	77	10	210	<b>45</b>	265	608
04:45 PM	<b>33</b>	49	7	89	17	139	14	170	19	31	7	57	<b>17</b>	220	30	267	583
05:00 PM	28	53	9	<b>90</b>	18	125	15	158	12	43	11	66	15	<b>232</b>	31	<b>278</b>	592
05:15 PM	19	<b>60</b>	7	86	<b>22</b>	138	<b>18</b>	178	19	<b>48</b>	14	<b>81</b>	12	225	29	266	<b>611</b>
Total Volume	107	211	34	352	70	552	63	685	70	164	47	281	54	887	135	1076	2394
% App. Total	30.4	59.9	9.7		10.2	80.6	9.2		24.9	58.4	16.7		5	82.4	12.5		
PHF	.811	.879	.773	.978	.795	.920	.875	.957	.875	.854	.783	.867	.794	.956	.750	.968	.980

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of San Diego  
 N/S: Euclid Avenue  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 12\_SDG\_Euc\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				05:00 PM				04:45 PM			
+0 mins.	16	<b>61</b>	<b>15</b>	<b>92</b>	<b>23</b>	<b>154</b>	10	<b>187</b>	12	43	11	66	<b>17</b>	220	30	267
+15 mins.	27	49	11	87	16	136	7	159	19	<b>48</b>	14	81	15	<b>232</b>	<b>31</b>	<b>278</b>
+30 mins.	<b>33</b>	49	7	89	13	150	<b>16</b>	179	15	48	21	<b>84</b>	12	225	29	266
+45 mins.	28	53	9	90	17	139	14	170	<b>20</b>	36	<b>22</b>	78	10	232	29	271
Total Volume	104	212	42	358	69	579	47	695	66	175	68	309	54	909	119	1082
% App. Total	29.1	59.2	11.7		9.9	83.3	6.8		21.4	56.6	22		5	84	11	
PHF	.788	.869	.700	.973	.750	.940	.734	.929	.825	.911	.773	.920	.794	.980	.960	.973



Location: San Diego  
 N/S: Euclid Avenue  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Euclid Avenue	East Leg El Cajon Boulevard	South Leg Euclid Avenue	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	3	1	4	2	10
7:15 AM	1	2	4	1	8
7:30 AM	2	0	2	3	7
7:45 AM	5	2	7	5	19
8:00 AM	5	6	4	5	20
8:15 AM	8	4	11	11	34
8:30 AM	5	2	9	7	23
8:45 AM	5	4	10	4	23
TOTAL VOLUMES:	34	21	51	38	144

	North Leg Euclid Avenue	East Leg El Cajon Boulevard	South Leg Euclid Avenue	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	18	8	7	3	36
11:45 AM	13	2	11	5	31
12:00 PM	11	13	10	8	42
12:15 PM	7	6	11	6	30
12:30 PM	6	2	7	6	21
12:45 PM	3	2	12	5	22
1:00 PM	5	4	11	3	23
1:15 PM	5	2	11	3	21
TOTAL VOLUMES:	68	39	80	39	226

	North Leg Euclid Avenue	East Leg El Cajon Boulevard	South Leg Euclid Avenue	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	3	3	6	10	22
4:15 PM	4	9	13	4	30
4:30 PM	5	0	4	15	24
4:45 PM	7	3	7	8	25
5:00 PM	4	5	11	5	25
5:15 PM	1	0	6	7	14
5:30 PM	9	6	11	10	36
5:45 PM	8	8	17	7	40
TOTAL VOLUMES:	41	34	75	66	216

Location: San Diego  
 N/S: Euclid Avenue  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Euclid Avenue			Westbound El Cajon Boulevard			Northbound Euclid Avenue			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:30 AM	0	0	0	0	0	1	0	0	0	0	1	0	2
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
8:15 AM	0	0	0	0	1	0	0	0	0	1	0	0	2
8:30 AM	0	0	0	0	2	0	0	1	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
TOTAL VOLUMES:	0	0	0	0	6	1	0	4	0	1	2	0	14

	Southbound Euclid Avenue			Westbound El Cajon Boulevard			Northbound Euclid Avenue			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	1	0	0	0	0	0	2	0	3
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
1:00 PM	0	1	0	0	1	0	0	0	0	1	1	0	4
1:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	2	0	1	2	0	0	0	0	1	3	1	10

	Southbound Euclid Avenue			Westbound El Cajon Boulevard			Northbound Euclid Avenue			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	1	0	0	3	0	0	0	0	0	3	1	8

23) Winona Ave & El Cajon Blvd

## El Cajon Blvd / Winona Ave

If intersection turning movements can be calculated using adjacent studied intersections, use that method

If they cannot, consult Replica and SANDAG TFC to find the segment ADT for all legs of the intersection

Use these ADTs, and percentages of 7% and 9% for AM/PM respectively, to determine estimate of intersection turning movements

Fine-tune these volumes based upon surrounding study intersections

PM	AM
54	60
887	560
135	81

AM	34	19	10
PM	34	211	107

### Study Intersection West

AM	223	222	55
PM	70	164	47

AM	PM
106	63
915	552
49	70

PM	AM
20	16
81	63
101	79

PM	AM
39	30
1000	546
30	30

AM	151	76	25
PM	194	97	32

### Study Intersection North

AM	101	17	50
PM	130	22	65

347 270

AM	50	170	50
PM	80	180	80

### El Cajon Blvd / Winona Ave

AM	78	100	78
PM	60	130	60

AM	PM
23	30
92	118
115	148

AM	PM
30	40
950	550
30	39

PM	AM

AM	PM

### Study Intersection East

AM	PM

AM	PM

## Methodology

This is a Replica count, the volumes were manually adjusted to better match the Existing count to the west and the calculated count to the north. AM: EBL/EBR/SB Approach/WB Approach/NBT/NBR all manually adjusted. PM: EBT/EBR/NB Approach/WBT/WBR/SB Approach all manually adjusted.

PM	AM

AM	PM

### Study Intersection South

AM	PM

AM	PM

24) 52nd St & El Cajon Blvd

## El Cajon Blvd / 52nd St

If Intersection turning movements can be calculated using adjacent studied intersections, use that method

If they cannot, consult Replica and SANDAG TFIG to find the segment ADT for all legs of the intersection

Use these ADTs, and percentages of 7% and 9% for AM/PM respectively, to determine estimate of intersection turning movements

Fine-tune these volumes based upon surrounding study intersections

PM	AM
41	32
82	64
82	64

AM	34	39	39
PM	43	50	50
<b>Study Intersection North</b>			
AM	67	45	112
PM	86	58	144

AM	PM
45	58
67	86
112	144

PM	AM
39	30
1000	546
30	30

AM	50	170	50
PM	80	180	80
<b>Study Intersection West</b>			
AM	78	100	78
PM	60	130	60

AM	PM
30	40
950	550
30	39

PM	AM
70	60
950	550
39	60

AM	39	70	100
PM	39	150	78
<b>El Cajon Blvd / 52nd St</b>			
AM	78	110	80
PM	30	170	30

AM	PM
50	40
900	600
50	78

PM	AM
101	62
582	373
244	157

AM	86	439	182
PM	67	767	223
<b>Study Intersection East</b>			
AM	328	577	211
PM	145	395	104

AM	PM
283	253
582	500
130	172

## Methodology

This is a Replica count, the volumes were manually adjusted to better match the Existing count to the east and the calculated counts to the north and west. AM: EB Approach/NBT/NBR/WB Approach/SBL/SBT all manually adjusted. PM: EBL/EBT/NBT/NBR/WB Approach/SBT all manually adjusted.

PM	AM

AM			
PM			
<b>Study Intersection South</b>			
AM			
PM			

AM	PM

25) 54th St & El Cajon Blvd

City of San Diego  
 N/S: 54th Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 13\_SDG\_54th St\_EI C AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

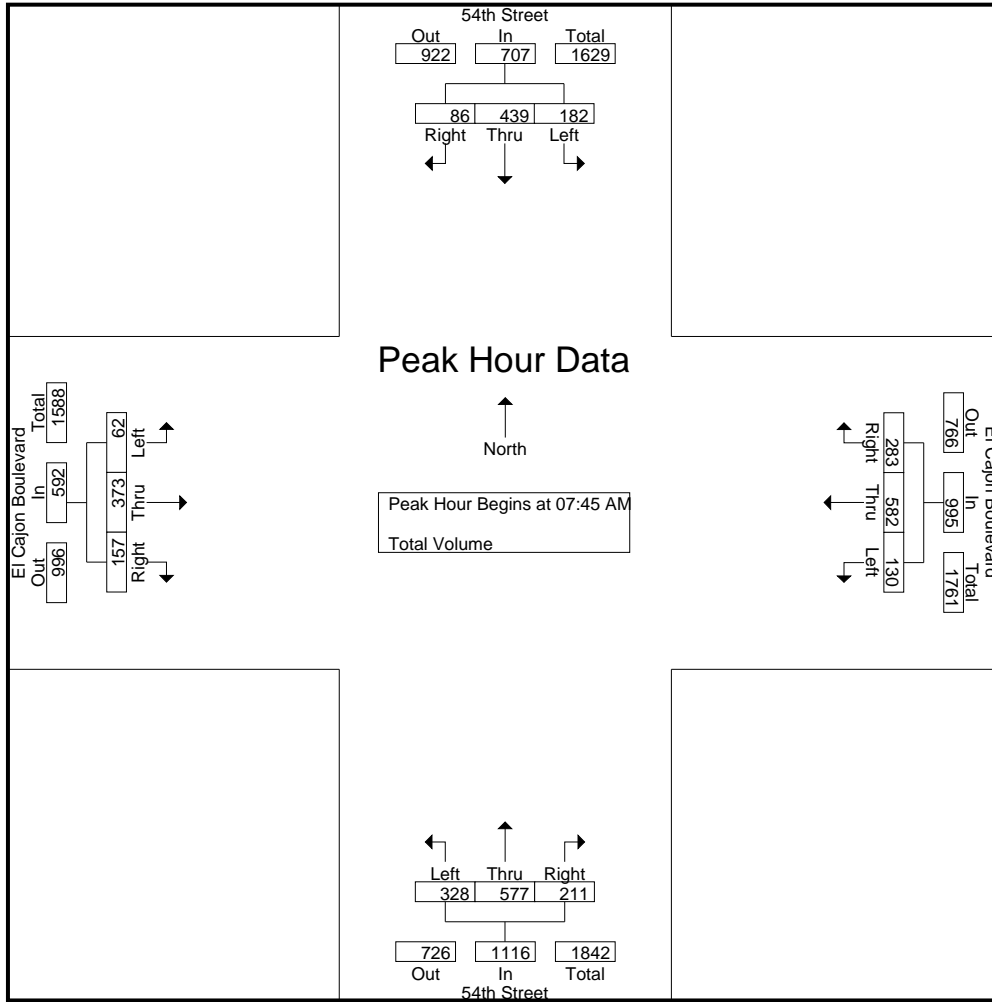
Start Time	54th Street Southbound				El Cajon Boulevard Westbound				54th Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	23	48	8	79	2	76	73	151	48	183	19	250	14	38	22	74	554
07:15 AM	13	68	16	97	20	119	72	211	52	204	20	276	16	70	20	106	690
07:30 AM	29	87	23	139	14	178	54	246	75	184	29	288	12	73	21	106	779
07:45 AM	52	109	27	188	24	159	55	238	76	128	46	250	10	90	27	127	803
Total	117	312	74	503	60	532	254	846	251	699	114	1064	52	271	90	413	2826
08:00 AM	43	121	23	187	34	152	96	282	68	153	49	270	13	86	48	147	886
08:15 AM	47	117	22	186	40	146	68	254	98	150	54	302	14	86	50	150	892
08:30 AM	40	92	14	146	32	125	64	221	86	146	62	294	25	111	32	168	829
08:45 AM	39	101	15	155	33	107	54	194	56	121	40	217	15	91	40	146	712
Total	169	431	74	674	139	530	282	951	308	570	205	1083	67	374	170	611	3319
Grand Total	286	743	148	1177	199	1062	536	1797	559	1269	319	2147	119	645	260	1024	6145
Apprch %	24.3	63.1	12.6		11.1	59.1	29.8		26	59.1	14.9		11.6	63	25.4		
Total %	4.7	12.1	2.4	19.2	3.2	17.3	8.7	29.2	9.1	20.7	5.2	34.9	1.9	10.5	4.2	16.7	

Start Time	54th Street Southbound				El Cajon Boulevard Westbound				54th Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	<b>52</b>	109	<b>27</b>	<b>188</b>	24	<b>159</b>	55	238	76	128	46	250	10	90	27	127	803
08:00 AM	43	<b>121</b>	23	187	34	152	<b>96</b>	<b>282</b>	68	<b>153</b>	49	270	13	86	48	147	886
08:15 AM	47	117	22	186	<b>40</b>	146	68	254	<b>98</b>	150	54	<b>302</b>	14	86	<b>50</b>	150	<b>892</b>
08:30 AM	40	92	14	146	32	125	64	221	86	146	<b>62</b>	294	<b>25</b>	<b>111</b>	32	<b>168</b>	829
Total Volume	182	439	86	707	130	582	283	995	328	577	211	1116	62	373	157	592	3410
% App. Total	25.7	62.1	12.2		13.1	58.5	28.4		29.4	51.7	18.9		10.5	63	26.5		
PHF	.875	.907	.796	.940	.813	.915	.737	.882	.837	.943	.851	.924	.620	.840	.785	.881	.956



City of San Diego  
 N/S: 54th Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 13\_SDG\_54th St\_EI C AM  
 Site Code : 22924058  
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:30 AM				07:45 AM				08:00 AM			
+0 mins.	52	109	27	188	14	178	54	246	76	128	46	250	13	86	48	147
+15 mins.	43	121	23	187	24	159	55	238	68	153	49	270	14	86	50	150
+30 mins.	47	117	22	186	34	152	96	282	98	150	54	302	25	111	32	168
+45 mins.	40	92	14	146	40	146	68	254	86	146	62	294	15	91	40	146
Total Volume	182	439	86	707	112	635	273	1020	328	577	211	1116	67	374	170	611
% App. Total	25.7	62.1	12.2		11	62.3	26.8		29.4	51.7	18.9		11	61.2	27.8	
PHF	.875	.907	.796	.940	.700	.892	.711	.904	.837	.943	.851	.924	.670	.842	.850	.909

City of San Diego  
 N/S: 54th Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 13\_SDG\_54th St\_EI C MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

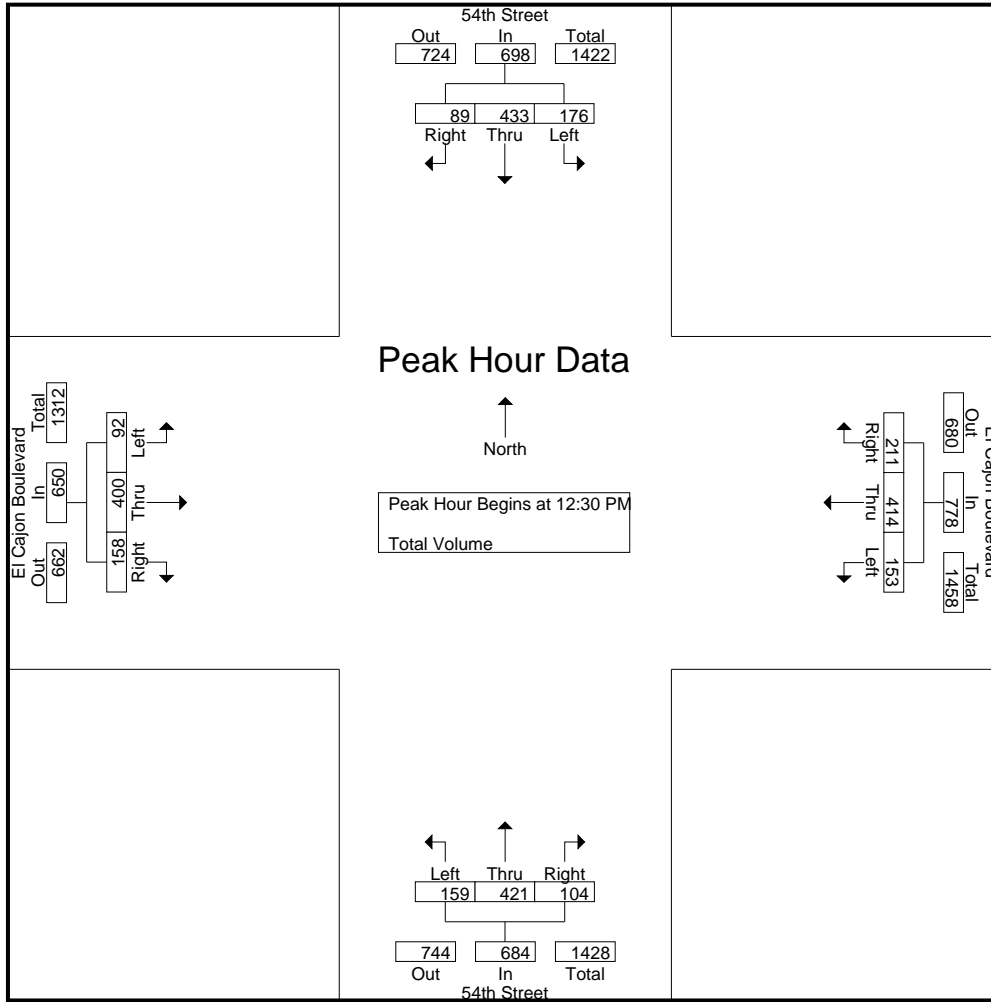
Groups Printed- Total Volume

Start Time	54th Street Southbound				El Cajon Boulevard Westbound				54th Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	35	88	13	136	31	101	40	172	28	114	21	163	24	110	36	170	641
11:45 AM	37	88	28	153	32	99	55	186	28	109	22	159	17	106	47	170	668
Total	72	176	41	289	63	200	95	358	56	223	43	322	41	216	83	340	1309
12:00 PM	42	97	17	156	27	93	59	179	41	98	33	172	19	99	35	153	660
12:15 PM	30	90	20	140	21	129	61	211	37	82	29	148	16	122	42	180	679
12:30 PM	41	119	16	176	42	90	48	180	30	122	18	170	32	110	46	188	714
12:45 PM	37	100	26	163	33	109	50	192	40	86	28	154	22	103	31	156	665
Total	150	406	79	635	123	421	218	762	148	388	108	644	89	434	154	677	2718
01:00 PM	51	101	24	176	43	101	57	201	39	94	24	157	19	104	39	162	696
01:15 PM	47	113	23	183	35	114	56	205	50	119	34	203	19	83	42	144	735
Grand Total	320	796	167	1283	264	836	426	1526	293	824	209	1326	168	837	318	1323	5458
Apprch %	24.9	62	13		17.3	54.8	27.9		22.1	62.1	15.8		12.7	63.3	24		
Total %	5.9	14.6	3.1	23.5	4.8	15.3	7.8	28	5.4	15.1	3.8	24.3	3.1	15.3	5.8	24.2	

Start Time	54th Street Southbound				El Cajon Boulevard Westbound				54th Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:30 PM																	
12:30 PM	41	<b>119</b>	16	176	42	90	48	180	30	<b>122</b>	18	170	<b>32</b>	<b>110</b>	<b>46</b>	<b>188</b>	714
12:45 PM	37	100	<b>26</b>	163	33	109	50	192	40	86	28	154	22	103	31	156	665
01:00 PM	<b>51</b>	101	24	176	<b>43</b>	101	<b>57</b>	201	39	94	24	157	19	104	39	162	696
01:15 PM	47	113	23	<b>183</b>	35	<b>114</b>	56	<b>205</b>	<b>50</b>	119	<b>34</b>	<b>203</b>	19	83	42	144	<b>735</b>
Total Volume	176	433	89	698	153	414	211	778	159	421	104	684	92	400	158	650	2810
% App. Total	25.2	62	12.8		19.7	53.2	27.1		23.2	61.5	15.2		14.2	61.5	24.3		
PHF	.863	.910	.856	.954	.890	.908	.925	.949	.795	.863	.765	.842	.719	.909	.859	.864	.956

City of San Diego  
 N/S: 54th Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 13\_SDG\_54th St\_EI C MD  
 Site Code : 22924058  
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:30 PM				12:15 PM				12:30 PM				11:45 AM			
+0 mins.	41	<b>119</b>	16	176	21	<b>129</b>	61	<b>211</b>	30	<b>122</b>	18	170	17	106	<b>47</b>	170
+15 mins.	37	100	<b>26</b>	163	42	90	48	180	40	86	28	154	19	99	35	153
+30 mins.	<b>51</b>	101	24	176	33	109	50	192	39	94	24	157	16	<b>122</b>	42	180
+45 mins.	47	113	23	<b>183</b>	<b>43</b>	101	57	201	<b>50</b>	119	<b>34</b>	<b>203</b>	<b>32</b>	110	46	<b>188</b>
Total Volume	176	433	89	698	139	429	216	784	159	421	104	684	84	437	170	691
% App. Total	25.2	62	12.8		17.7	54.7	27.6		23.2	61.5	15.2		12.2	63.2	24.6	
PHF	.863	.910	.856	.954	.808	.831	.885	.929	.795	.863	.765	.842	.656	.895	.904	.919

City of San Diego  
 N/S: 54th Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 13\_SDG\_54th St\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	54th Street Southbound				El Cajon Boulevard Westbound				54th Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	50	174	22	246	44	122	52	218	44	102	33	179	20	140	62	222	865
04:15 PM	65	217	14	296	32	110	52	194	32	114	30	176	14	145	62	221	887
04:30 PM	58	191	24	273	37	112	49	198	38	91	30	159	14	143	59	216	846
04:45 PM	53	179	20	252	46	113	67	226	35	107	33	175	20	142	65	227	880
Total	226	761	80	1067	159	457	220	836	149	414	126	689	68	570	248	886	3478
05:00 PM	51	190	10	251	52	139	67	258	28	84	27	139	24	151	63	238	886
05:15 PM	62	194	20	276	39	121	63	223	50	112	23	185	28	129	60	217	901
05:30 PM	57	204	17	278	35	127	56	218	32	92	21	145	29	160	56	245	886
05:45 PM	38	188	14	240	32	124	29	185	28	88	22	138	26	130	56	212	775
Total	208	776	61	1045	158	511	215	884	138	376	93	607	107	570	235	912	3448
Grand Total	434	1537	141	2112	317	968	435	1720	287	790	219	1296	175	1140	483	1798	6926
Apprch %	20.5	72.8	6.7		18.4	56.3	25.3		22.1	61	16.9		9.7	63.4	26.9		
Total %	6.3	22.2	2	30.5	4.6	14	6.3	24.8	4.1	11.4	3.2	18.7	2.5	16.5	7	26	

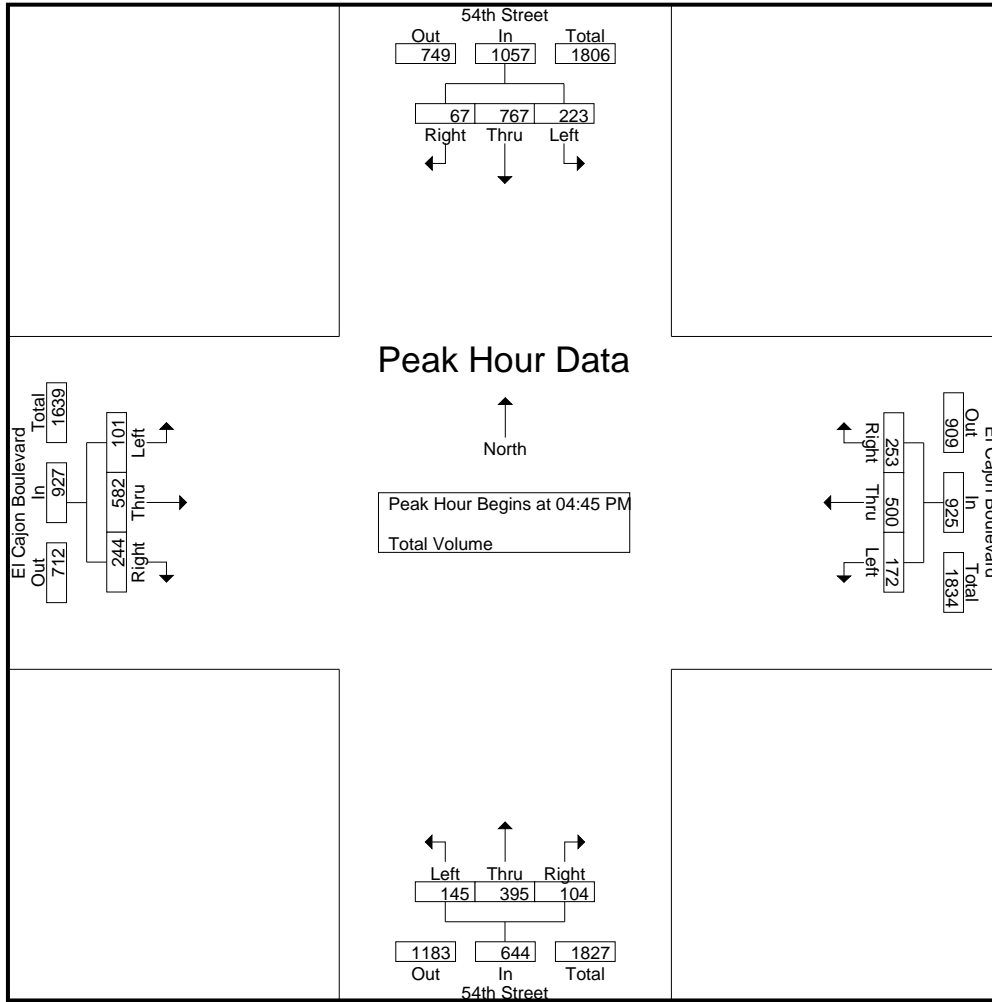
Start Time	54th Street Southbound				El Cajon Boulevard Westbound				54th Street Northbound				El Cajon Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	53	179	<b>20</b>	252	46	113	<b>67</b>	226	35	107	<b>33</b>	175	20	142	<b>65</b>	227	880
05:00 PM	51	190	10	251	<b>52</b>	<b>139</b>	67	<b>258</b>	28	84	27	139	24	151	63	238	886
05:15 PM	<b>62</b>	194	20	276	39	121	63	223	<b>50</b>	<b>112</b>	23	<b>185</b>	28	129	60	217	<b>901</b>
05:30 PM	57	<b>204</b>	17	<b>278</b>	35	127	56	218	32	92	21	145	<b>29</b>	<b>160</b>	56	<b>245</b>	886
Total Volume	223	767	67	1057	172	500	253	925	145	395	104	644	101	582	244	927	3553
% App. Total	21.1	72.6	6.3		18.6	54.1	27.4		22.5	61.3	16.1		10.9	62.8	26.3		
PHF	.899	.940	.838	.951	.827	.899	.944	.896	.725	.882	.788	.870	.871	.909	.938	.946	.986

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

City of San Diego  
 N/S: 54th Street  
 E/W: El Cajon Boulevard  
 Weather: Clear

File Name : 13\_SDG\_54th St\_EI C PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:45 PM				04:00 PM				04:45 PM			
+0 mins.	65	217	14	296	46	113	67	226	44	102	33	179	20	142	65	227
+15 mins.	58	191	24	273	52	139	67	258	32	114	30	176	24	151	63	238
+30 mins.	53	179	20	252	39	121	63	223	38	91	30	159	28	129	60	217
+45 mins.	51	190	10	251	35	127	56	218	35	107	33	175	29	160	56	245
Total Volume	227	777	68	1072	172	500	253	925	149	414	126	689	101	582	244	927
% App. Total	21.2	72.5	6.3		18.6	54.1	27.4		21.6	60.1	18.3		10.9	62.8	26.3	
PHF	.873	.895	.708	.905	.827	.899	.944	.896	.847	.908	.955	.962	.871	.909	.938	.946

Location: San Diego  
 N/S: 54th Street  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg 54th Street	East Leg El Cajon Boulevard	South Leg 54th Street	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	6	1	2	6	15
7:15 AM	3	4	1	1	9
7:30 AM	7	5	3	2	17
7:45 AM	2	3	15	9	29
8:00 AM	5	6	9	3	23
8:15 AM	12	7	7	1	27
8:30 AM	9	4	13	2	28
8:45 AM	6	5	9	7	27
TOTAL VOLUMES:	50	35	59	31	175

	North Leg 54th Street	East Leg El Cajon Boulevard	South Leg 54th Street	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	4	3	10	1	18
11:45 AM	7	3	12	7	29
12:00 PM	15	2	5	16	38
12:15 PM	2	0	8	2	12
12:30 PM	6	4	12	6	28
12:45 PM	7	5	10	2	24
1:00 PM	12	4	10	7	33
1:15 PM	11	17	16	6	50
TOTAL VOLUMES:	64	38	83	47	232

	North Leg 54th Street	East Leg El Cajon Boulevard	South Leg 54th Street	West Leg El Cajon Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	7	7	14	11	39
4:15 PM	17	7	14	4	42
4:30 PM	8	2	4	2	16
4:45 PM	10	3	7	7	27
5:00 PM	9	5	12	2	28
5:15 PM	7	7	13	2	29
5:30 PM	11	7	6	3	27
5:45 PM	7	3	13	6	29
TOTAL VOLUMES:	76	41	83	37	237

Location: San Diego  
 N/S: 54th Street  
 E/W: El Cajon Boulevard



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound 54th Street			Westbound El Cajon Boulevard			Northbound 54th Street			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	4	0	0	0	0	0	0	0	4

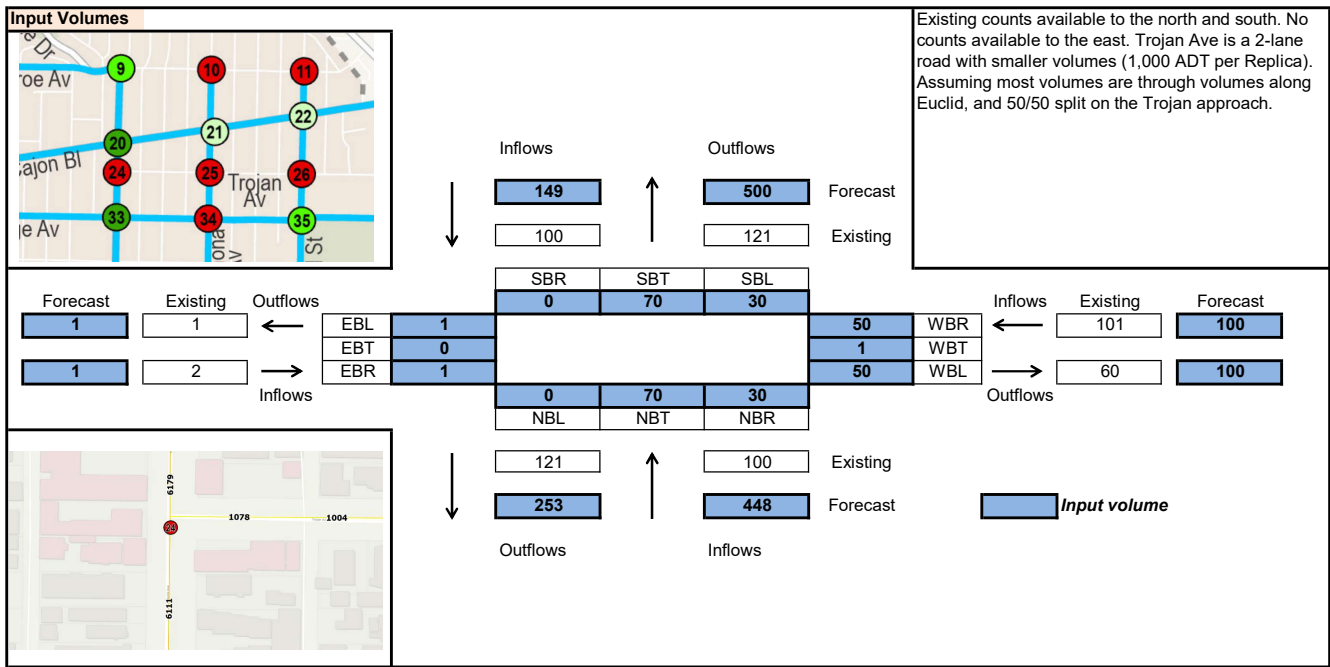
	Southbound 54th Street			Westbound El Cajon Boulevard			Northbound 54th Street			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
TOTAL VOLUMES:	0	0	0	0	4	0	0	2	0	1	0	0	7

	Southbound 54th Street			Westbound El Cajon Boulevard			Northbound 54th Street			Eastbound El Cajon Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	1	0	1

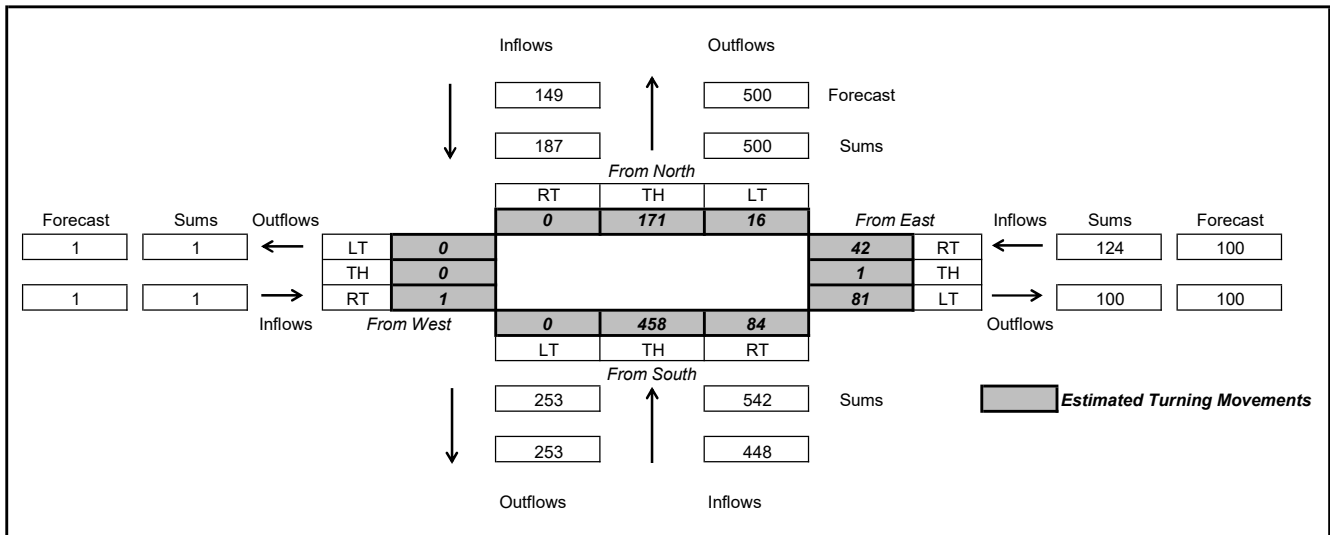
26) Euclid Ave & Trojan Ave



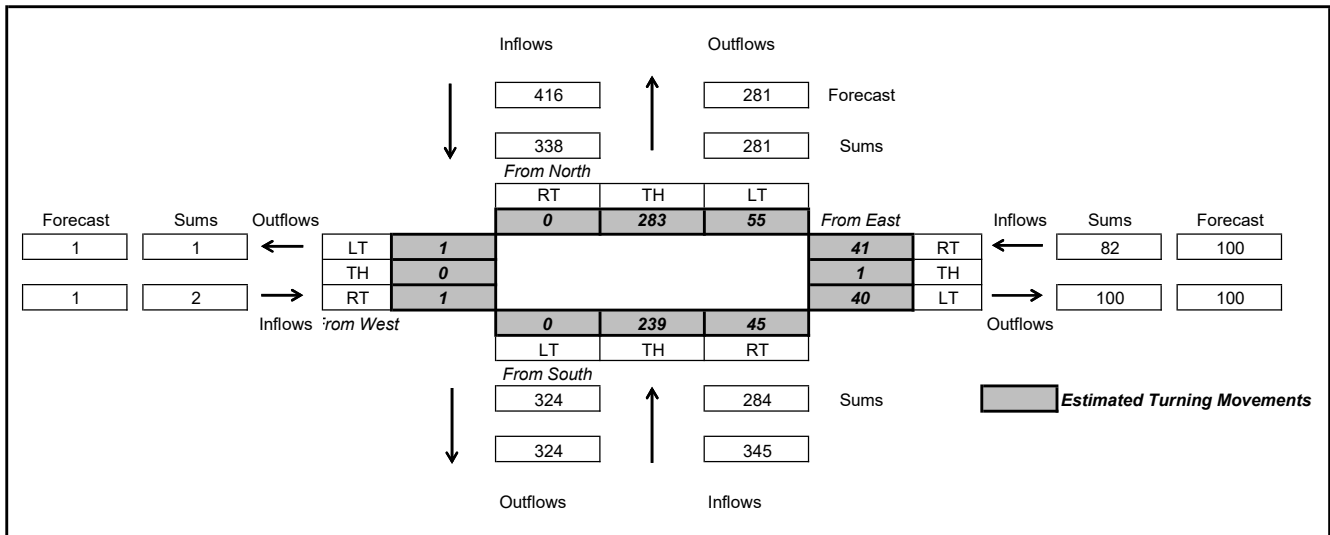
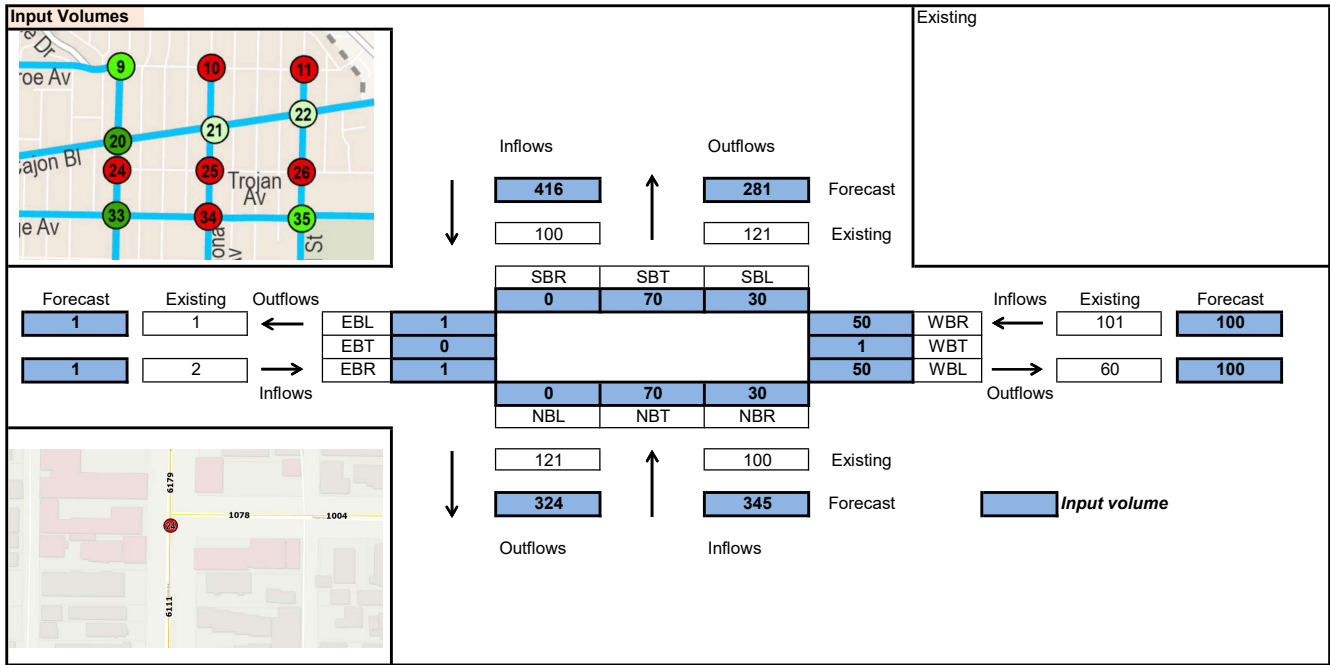
### Iterative Method Estimated Turning Movements



### Estimated Turning Movements

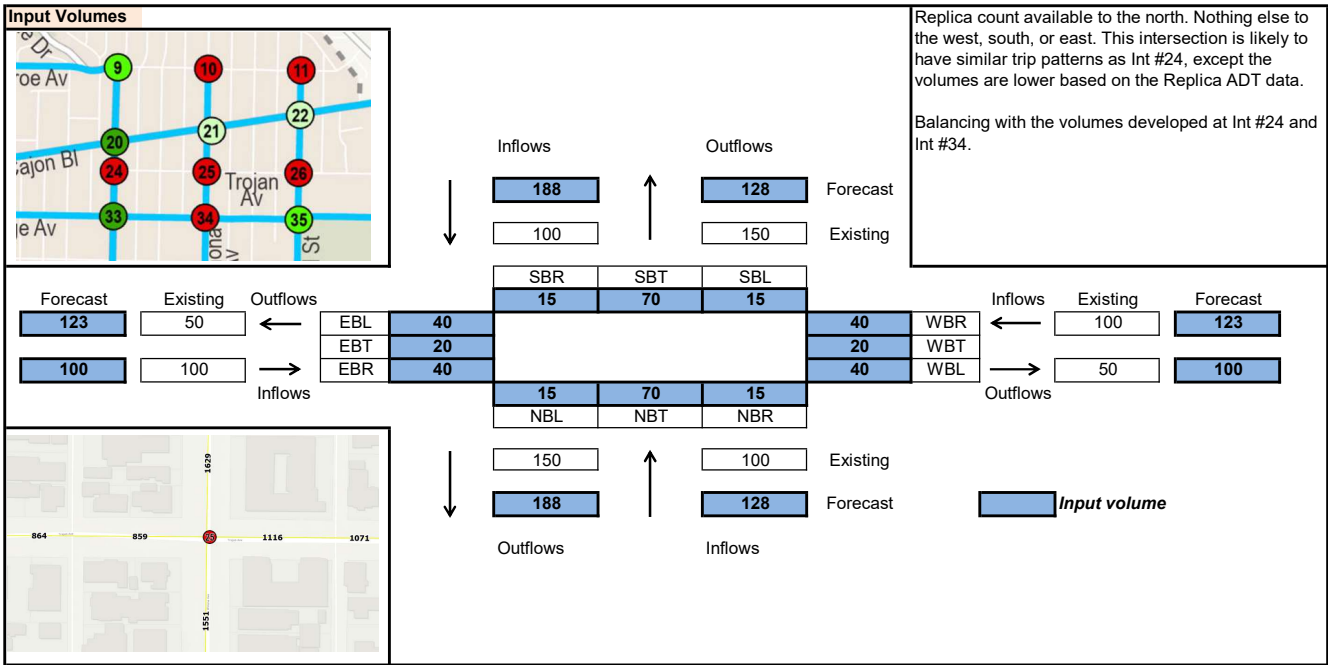


### Iterative Method Estimated Turning Movements

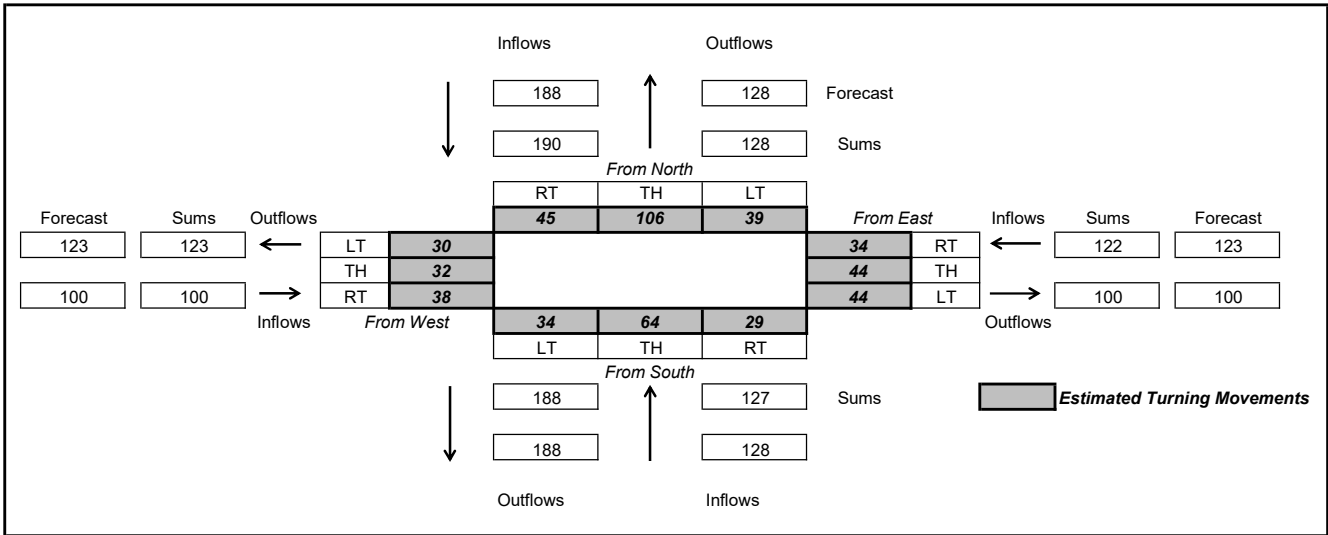


27) Winona Ave & Trojan Ave

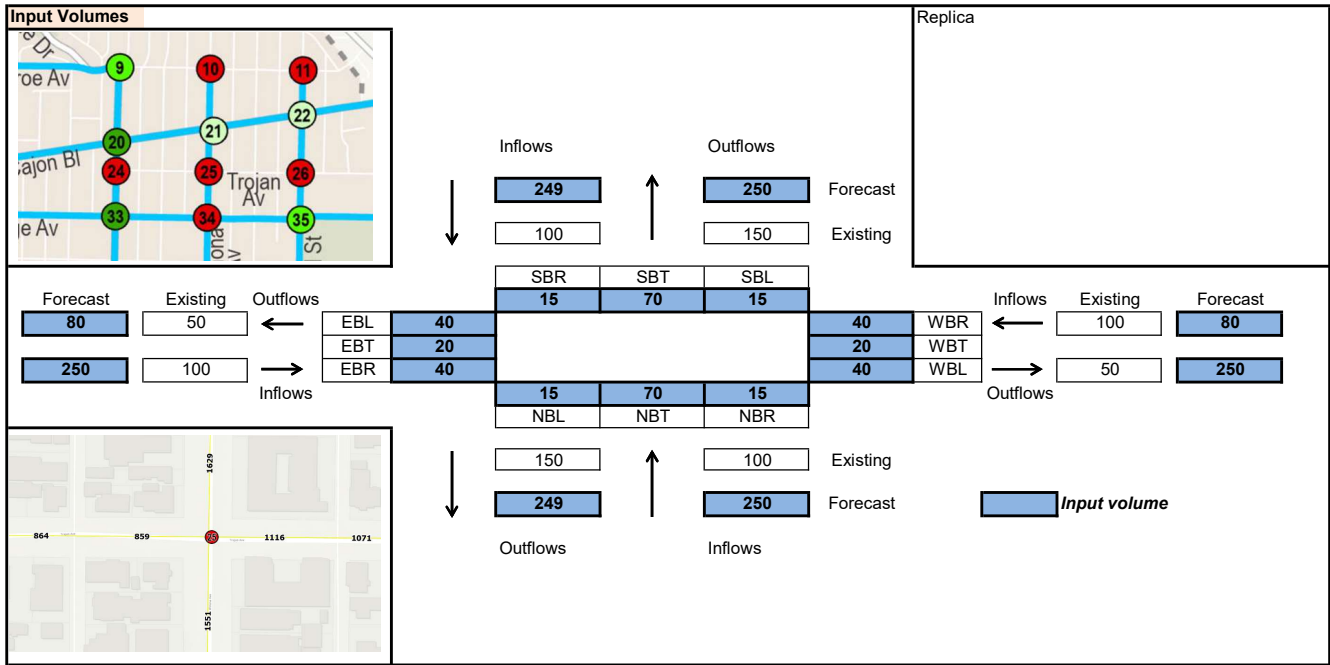
### Iterative Method Estimated Turning Movements



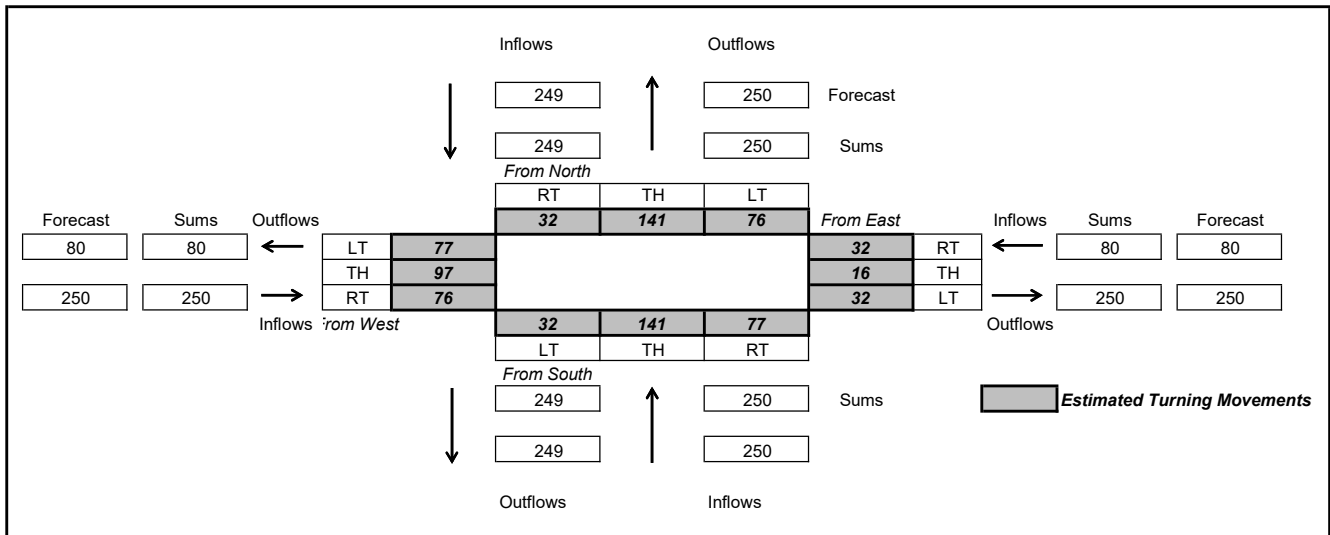
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements

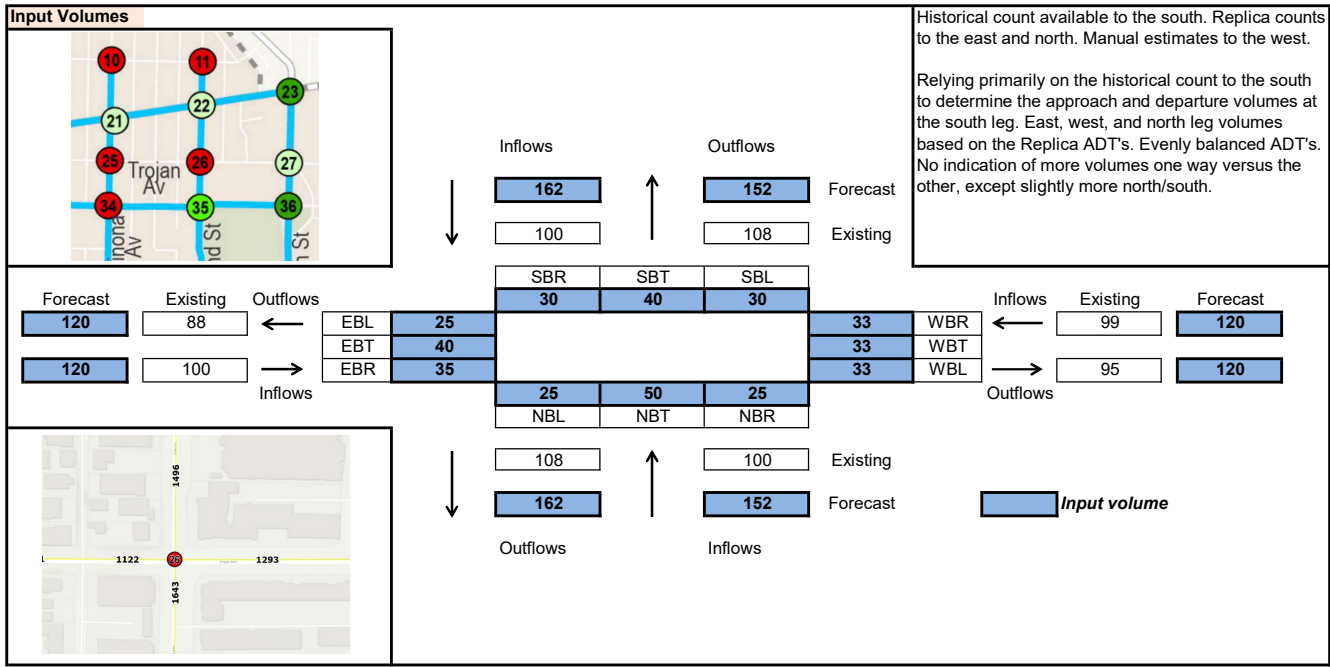


Estimated Turning Movements

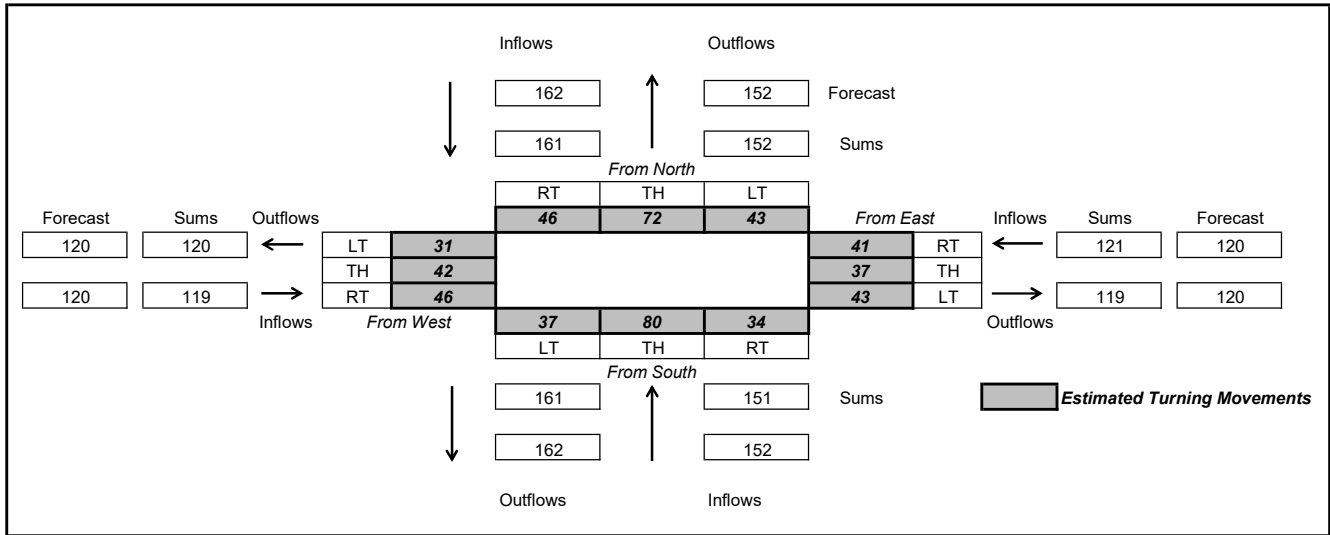


28) 52nd St & Trojan Ave

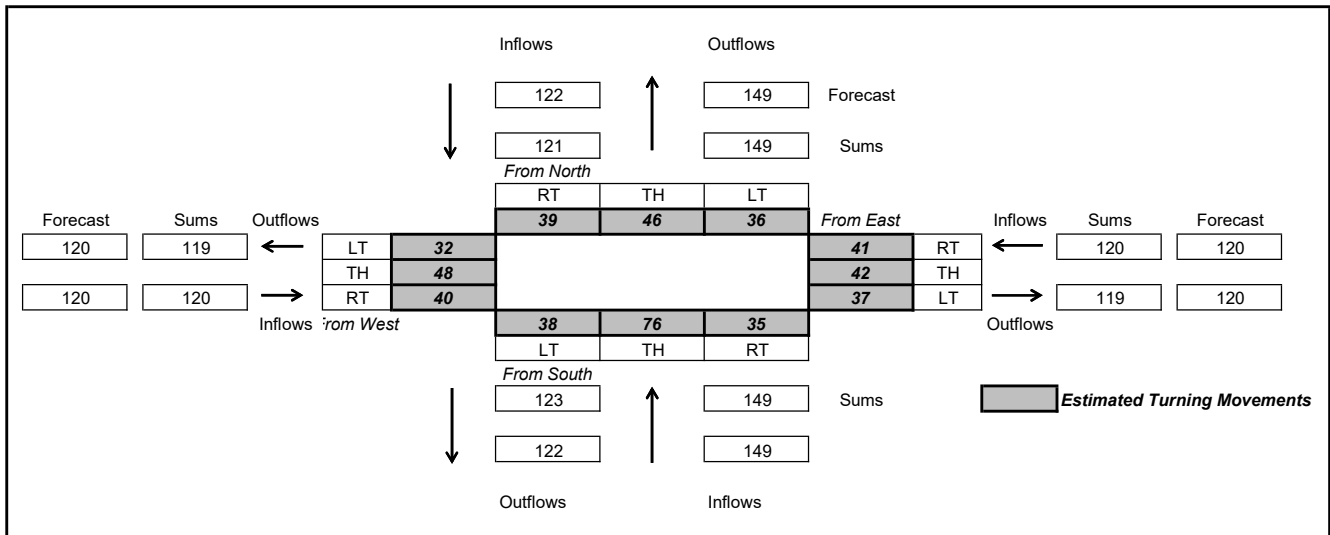
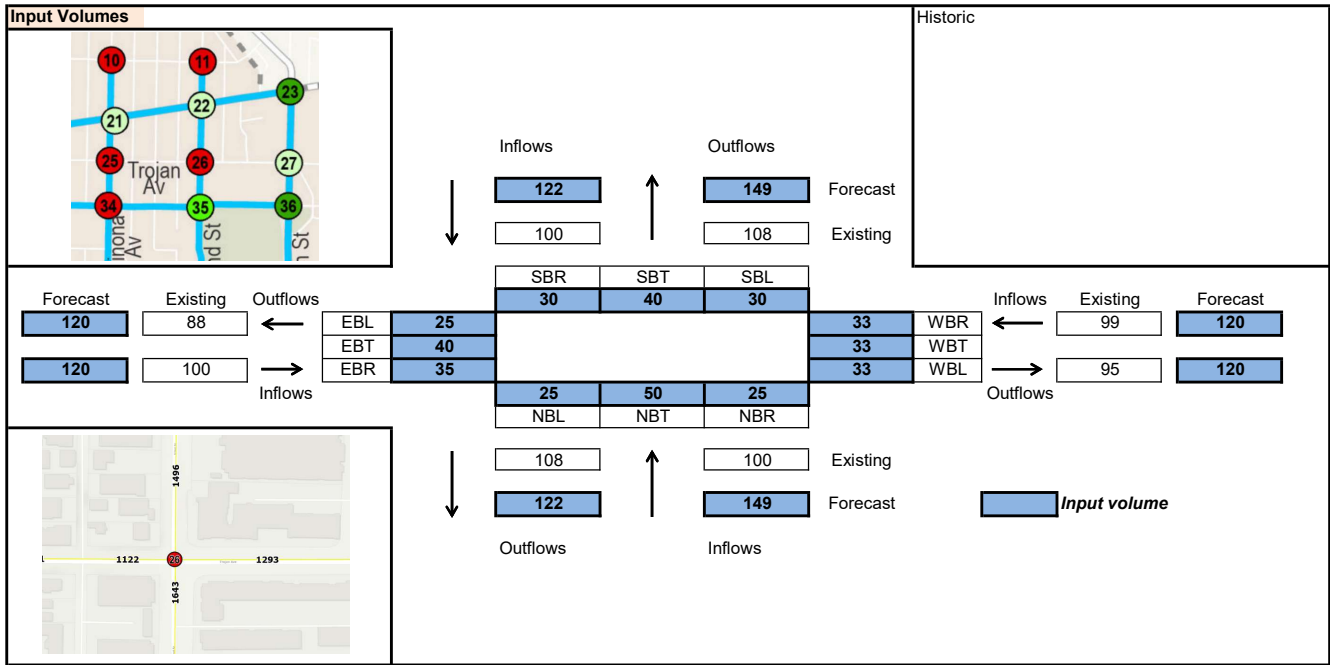
### Iterative Method Estimated Turning Movements



### Estimated Turning Movements



### Iterative Method Estimated Turning Movements





29) 54th St & Trojan Ave

## 54th St / Trojan Ave

If intersection turning movements can be calculated using adjacent studied intersections, use that method  
 If they cannot, consult Replica and SANDAG TFC to find the segment ADT for all legs of the intersection  
 Use these ADTs, and percentages of 7% and 9% for AM/PM respectively, to determine estimate of intersection turning movements  
 Fine-tune these volumes based upon surrounding study intersections

	AM	40	100	40			
	PM	60	100	80			
PM	AM				AM	PM	
30	20				40	30	
60	50				40	30	
30	20				40	30	

**Study Intersection West**

AM	20	120	10
PM	20	120	10

	AM		
	PM		
PM	AM		

**Study Intersection North**

AM		
AM		
PM		

	AM	60	906	30		
	PM	30	966	30		
PM	AM				AM	PM
50	50				90	210
60	60				30	30
40	30				140	90

**54th St / Trojan Ave**

AM	30	875	30
PM	30	723	30

	AM		
	PM		
PM	AM		

**Study Intersection East**

AM		
AM		
PM		

## Methodology

This is a Replica count, the volumes were manually adjusted to better match the Existing count to the south and north and the calculated count to the west. AM: EBL/NBR/WBL/SBR all manually adjusted. PM: EB Approach/NBR/WBL all manually adjusted.

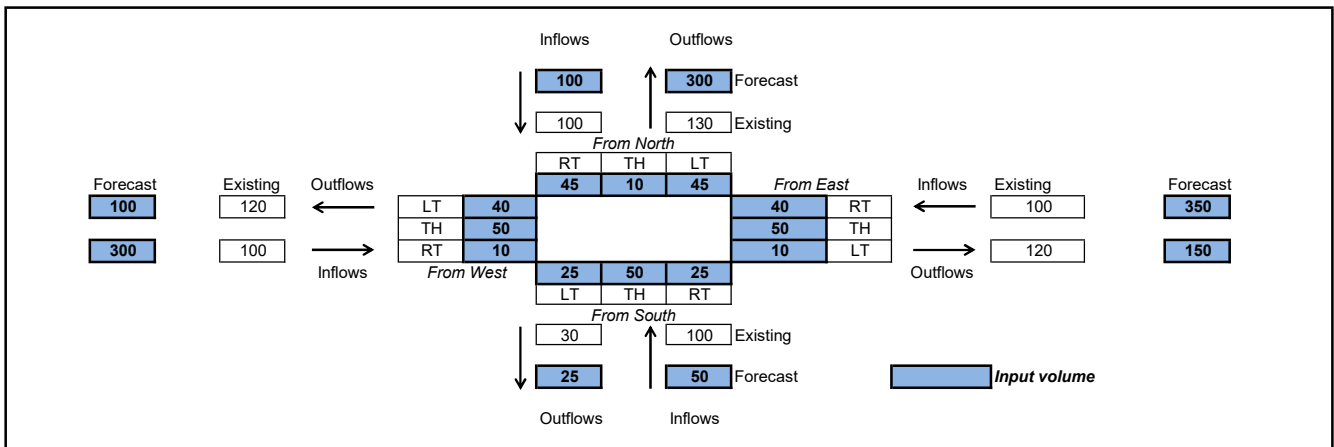
	AM		
	PM		
PM	AM		

**Study Intersection South**

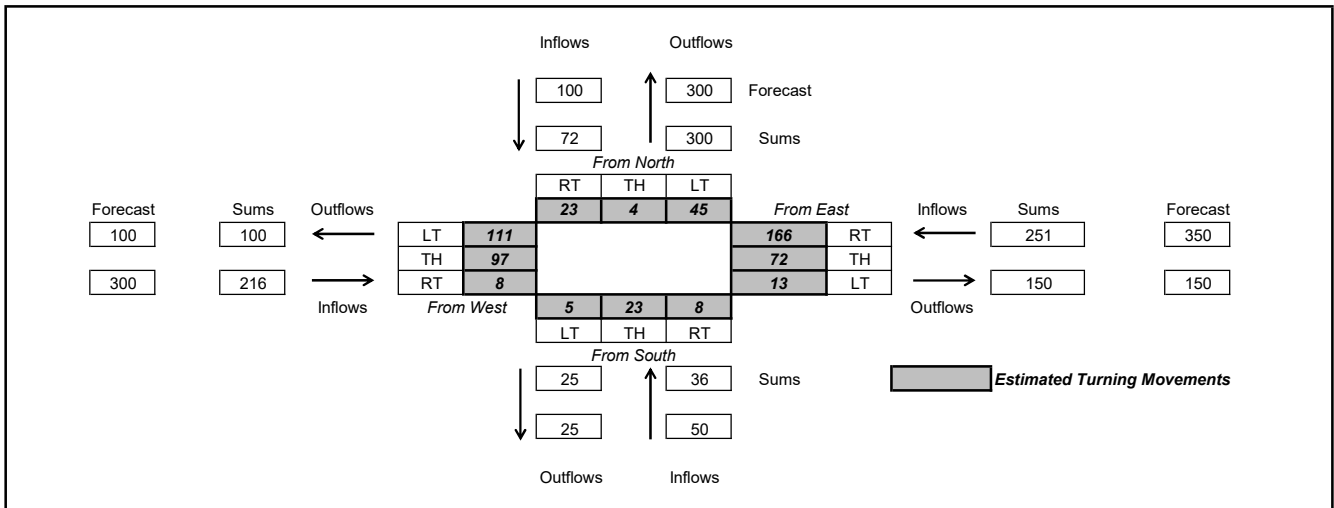
AM		
AM		
PM		

30) Orange Ave & 33rd St

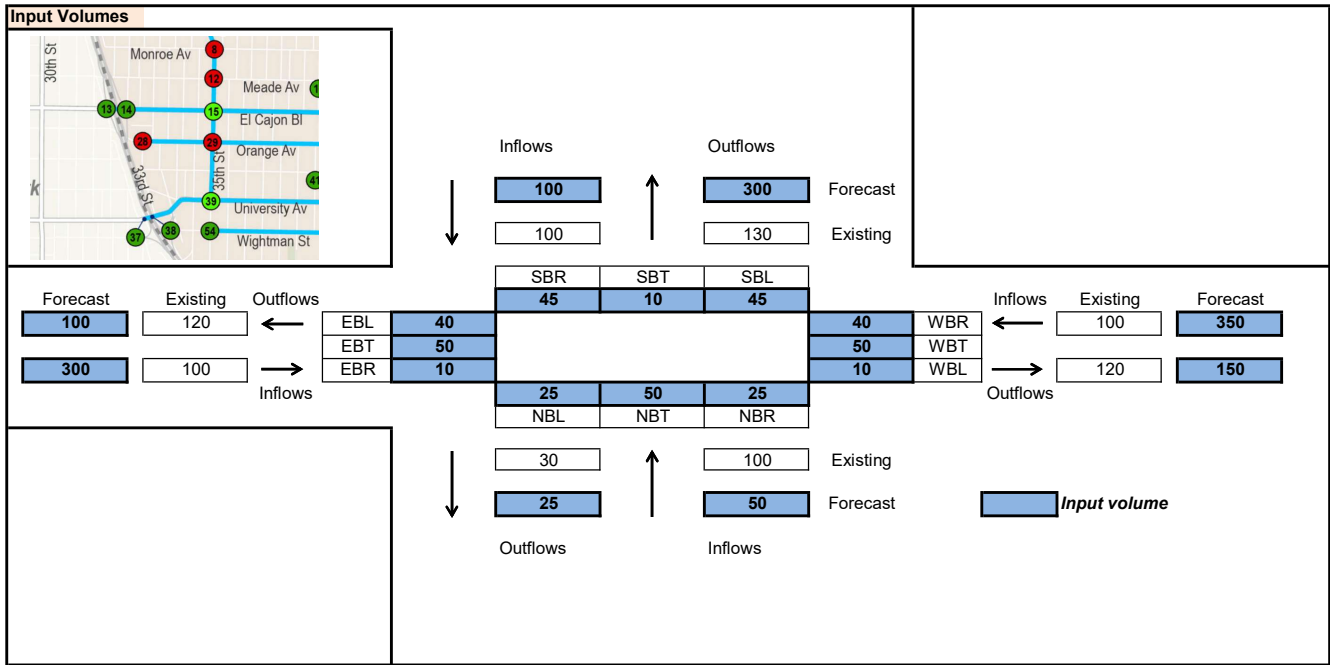
### Iterative Method Estimated Turning Movements



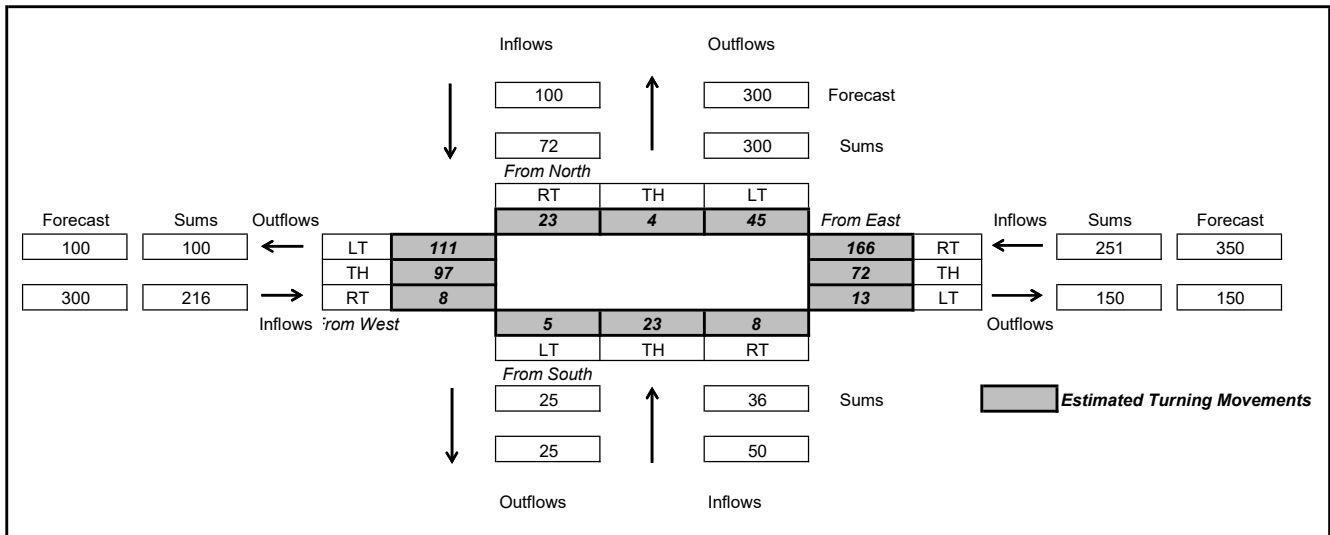
Estimated Turning Movements



### Iterative Method Estimated Turning Movements

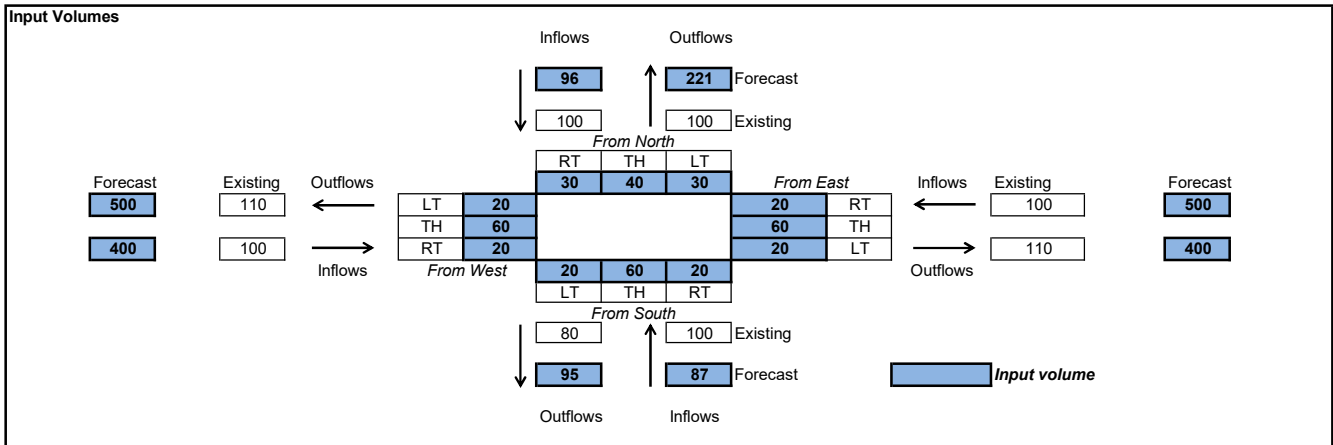


### Estimated Turning Movements

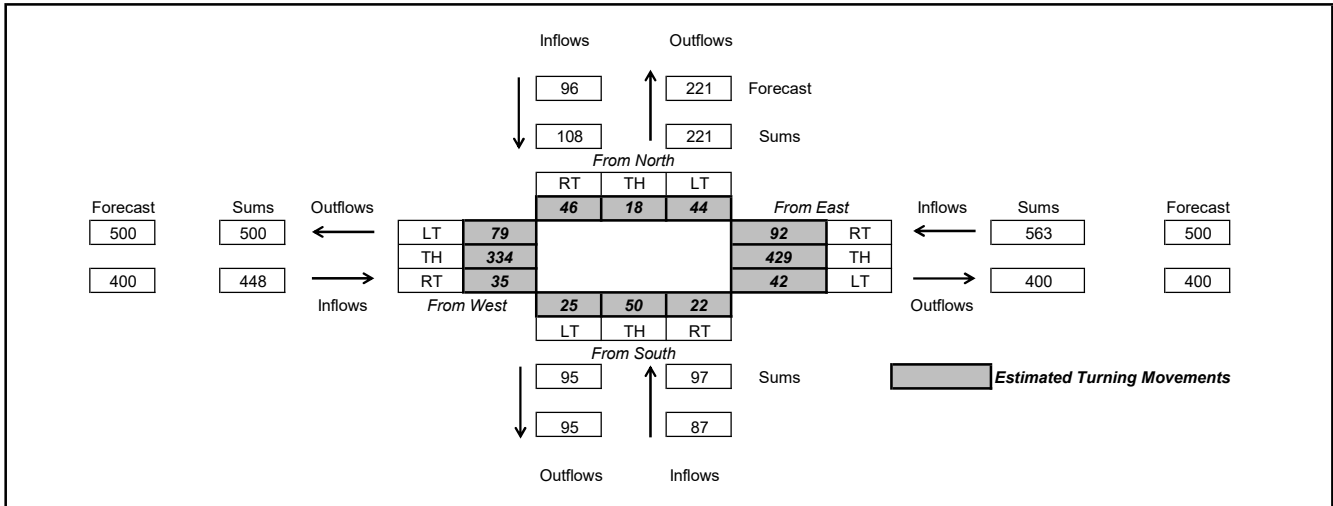


331) 35th St & Orange Ave

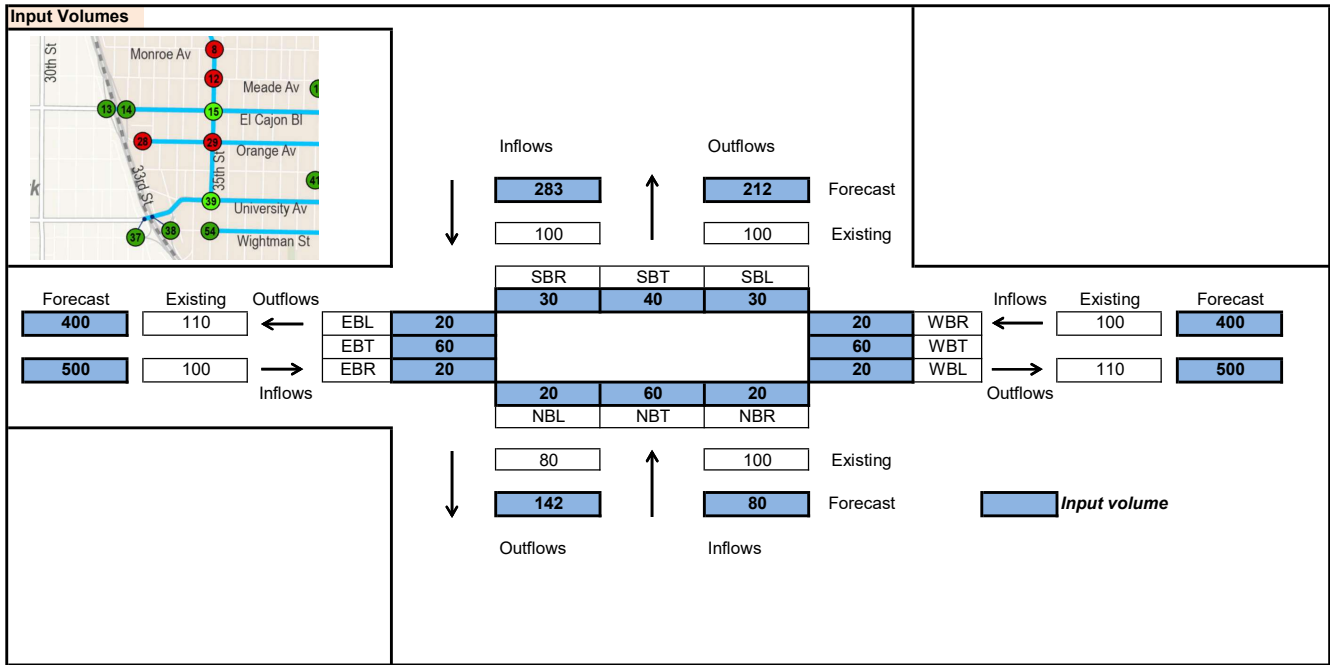
### Iterative Method Estimated Turning Movements



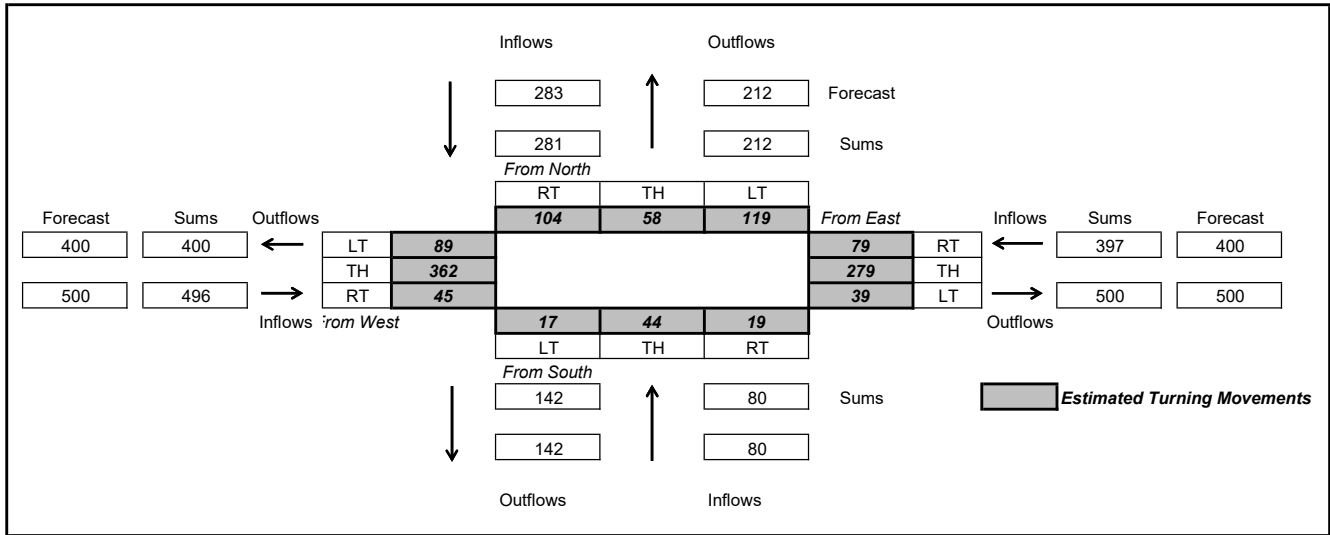
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



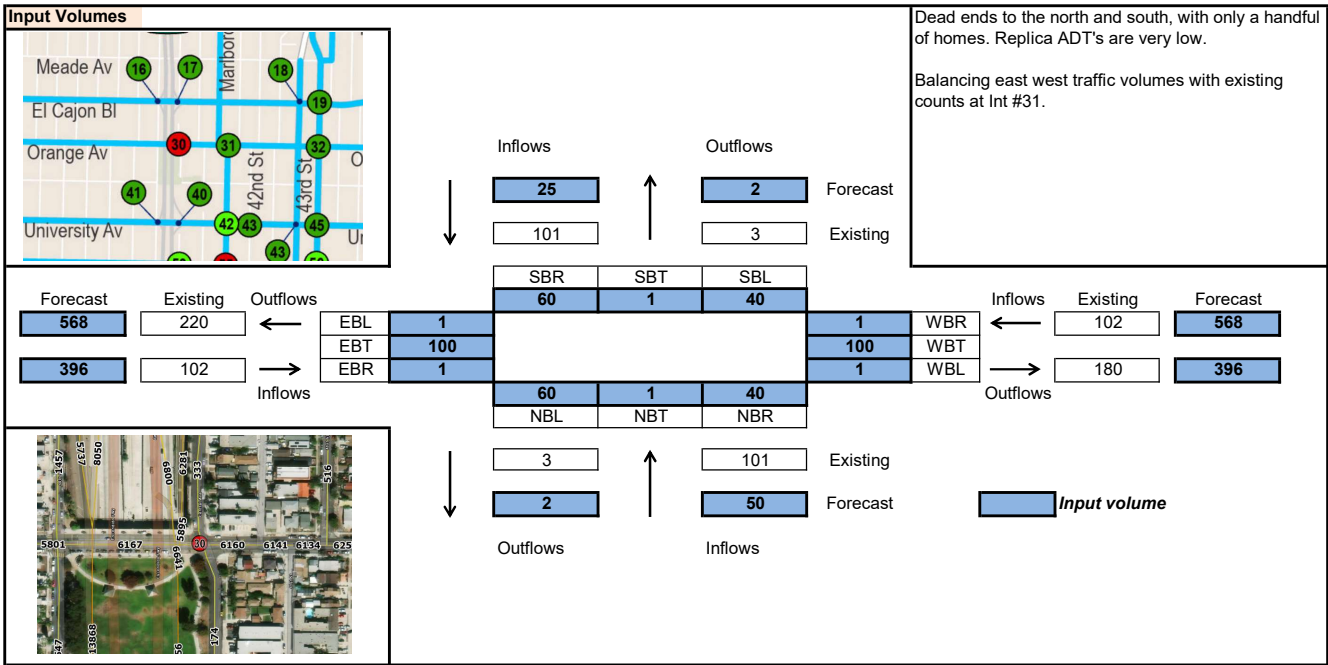
### Estimated Turning Movements



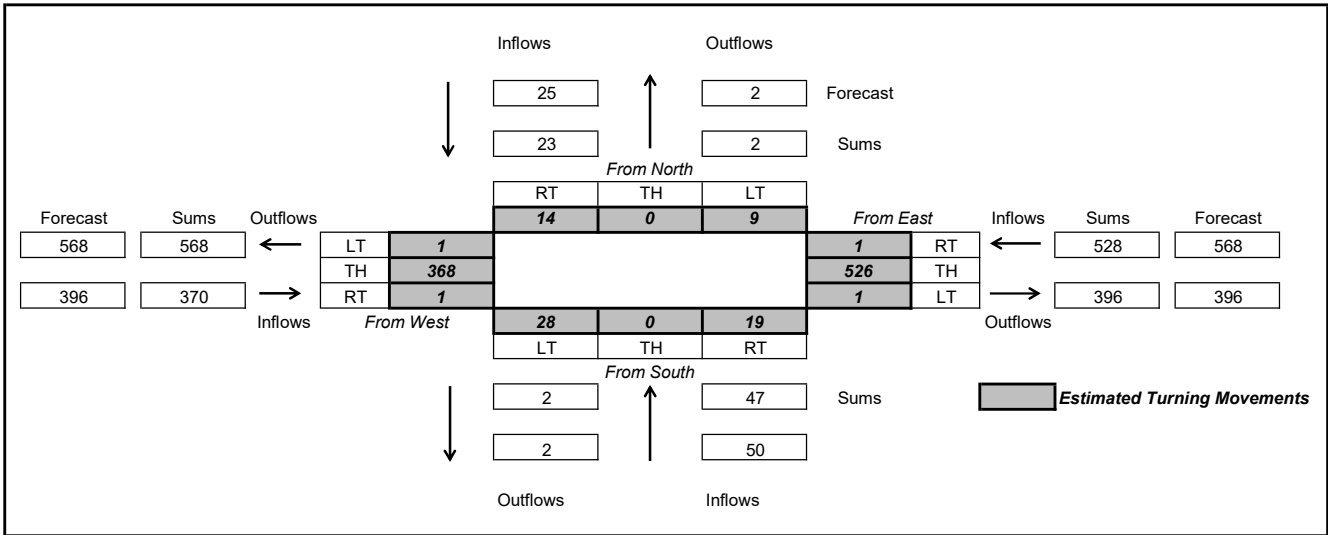


32) Orange Ave & Central Ave

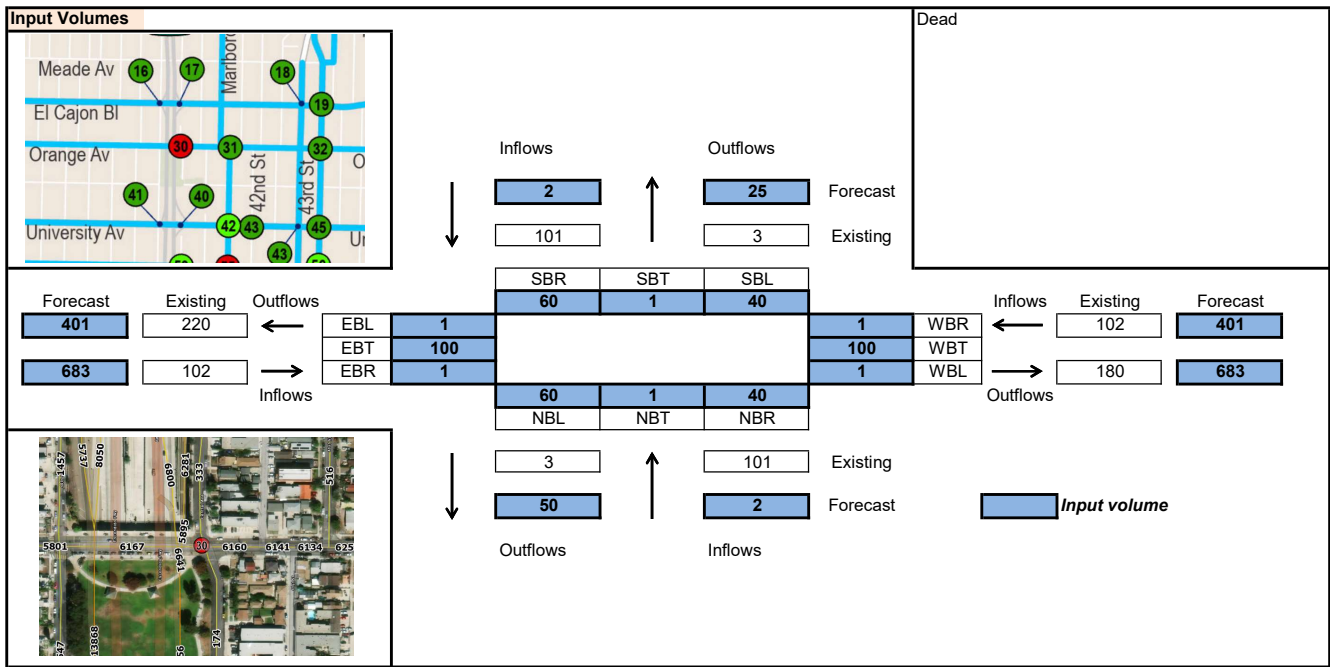
### Iterative Method Estimated Turning Movements



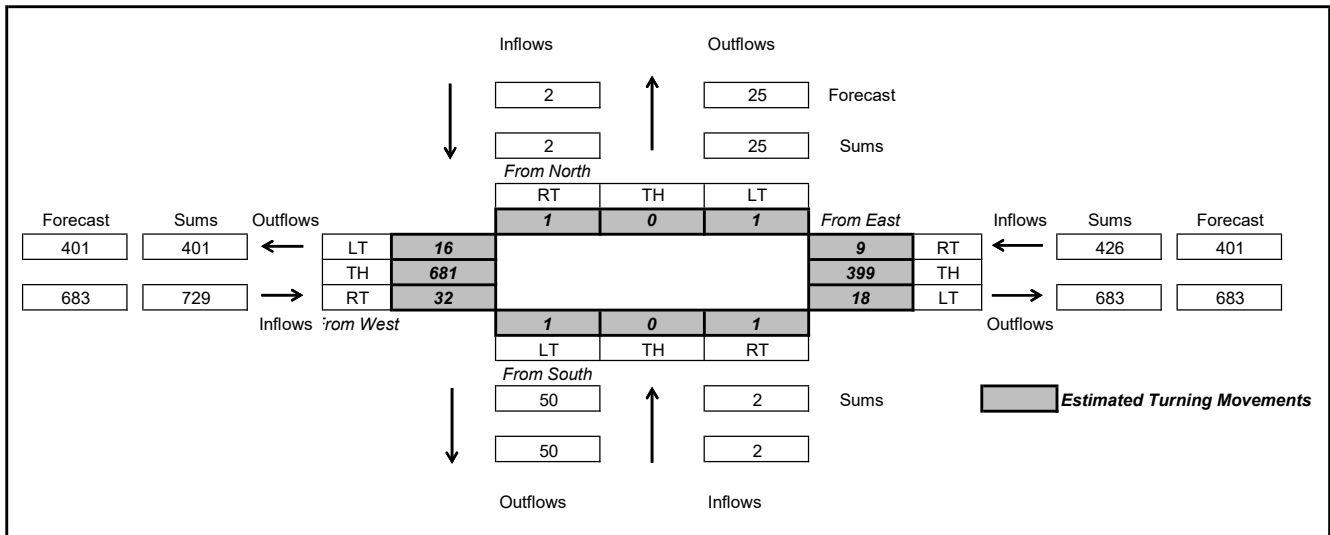
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



### Estimated Turning Movements



33) Marlborough Dr & Orange Ave



34) Fairmount Ave & Orange Ave

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

DATE:  
4/18/24  
THURSDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:  
EAST SAN DIEGO  
FAIRMOUNT AVE  
ORANGE AVE

PROJECT #:  
LOCATION #:  
CONTROL:  
ETD24-0419-01  
2  
SIGNAL

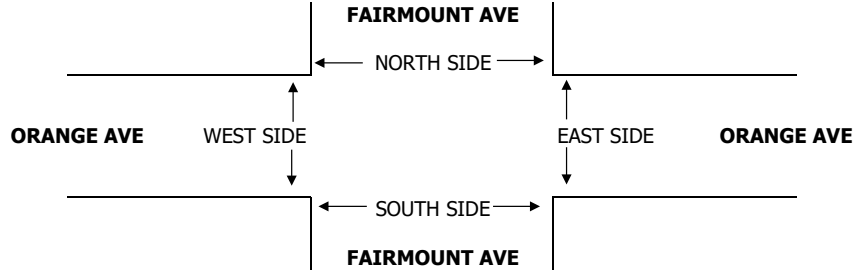
NOTES:

INCLUDES BIKE & PED

AM	PM	MD	OTHER	OTHER	▲ N	◀ W	▶ E	▼ S
----	----	----	-------	-------	-----	-----	-----	-----

LANES:	NORTHBOUND FAIRMOUNT AVE			SOUTHBOUND FAIRMOUNT AVE			EASTBOUND ORANGE AVE			WESTBOUND ORANGE AVE			TOTAL	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		
AM	7:00 AM	16	100	5	3	15	5	9	21	5	7	41	47	274
	7:15 AM	23	105	3	2	19	1	14	26	3	9	54	58	317
	7:30 AM	25	86	6	0	13	0	8	30	8	12	88	53	329
	7:45 AM	28	84	5	4	13	2	21	64	16	15	81	54	387
	8:00 AM	19	85	9	6	17	1	22	55	20	8	78	44	364
	8:15 AM	14	84	5	2	21	0	22	78	9	13	88	32	368
	8:30 AM	21	91	7	2	21	1	20	70	11	21	89	32	386
	8:45 AM	30	68	7	3	16	0	16	56	15	19	83	36	349
	VOLUMES	176	703	47	22	135	10	132	400	87	104	602	356	2,774
	APPROACH %	19%	76%	5%	13%	81%	6%	21%	65%	14%	10%	57%	34%	
	APP/DEPART	926	/	1,191	167	/	326	619	/	469	1,062	/	788	0
	BEGIN PEAK HR	7:45 AM												
	VOLUMES	82	344	26	14	72	4	85	267	56	57	336	162	1,505
	APPROACH %	18%	76%	6%	16%	80%	4%	21%	65%	14%	10%	61%	29%	
	PEAK HR FACTOR	0.950			0.938			0.936			0.925			0.972
	APP/DEPART	452	/	591	90	/	185	408	/	307	555	/	422	0
PM	4:00 PM	22	72	28	6	20	3	31	100	20	19	64	30	415
	4:15 PM	16	73	17	8	27	2	18	110	29	18	61	21	400
	4:30 PM	37	117	24	10	31	1	24	105	21	12	44	22	448
	4:45 PM	25	100	11	5	27	2	17	177	15	13	61	23	476
	5:00 PM	15	98	14	7	26	0	25	105	21	17	61	30	419
	5:15 PM	25	95	8	7	23	1	20	95	28	14	70	19	405
	5:30 PM	24	93	12	10	33	2	22	104	19	13	66	25	423
	5:45 PM	16	94	15	7	24	0	16	96	27	13	72	18	398
	VOLUMES	180	742	129	60	211	11	173	892	180	119	499	188	3,384
	APPROACH %	17%	71%	12%	21%	75%	4%	14%	72%	14%	15%	62%	23%	
	APP/DEPART	1,051	/	1,103	282	/	510	1,245	/	1,081	806	/	690	0
	BEGIN PEAK HR	4:30 PM												
	VOLUMES	102	410	57	29	107	4	86	482	85	56	236	94	1,748
	APPROACH %	18%	72%	10%	21%	76%	3%	13%	74%	13%	15%	61%	24%	
	PEAK HR FACTOR	0.799			0.833			0.781			0.894			0.918
	APP/DEPART	569	/	590	140	/	248	653	/	568	386	/	342	0

U-TURNS				
NB	SB	EB	WB	TTL
X	X	X	X	
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0
0	0	0	0	0



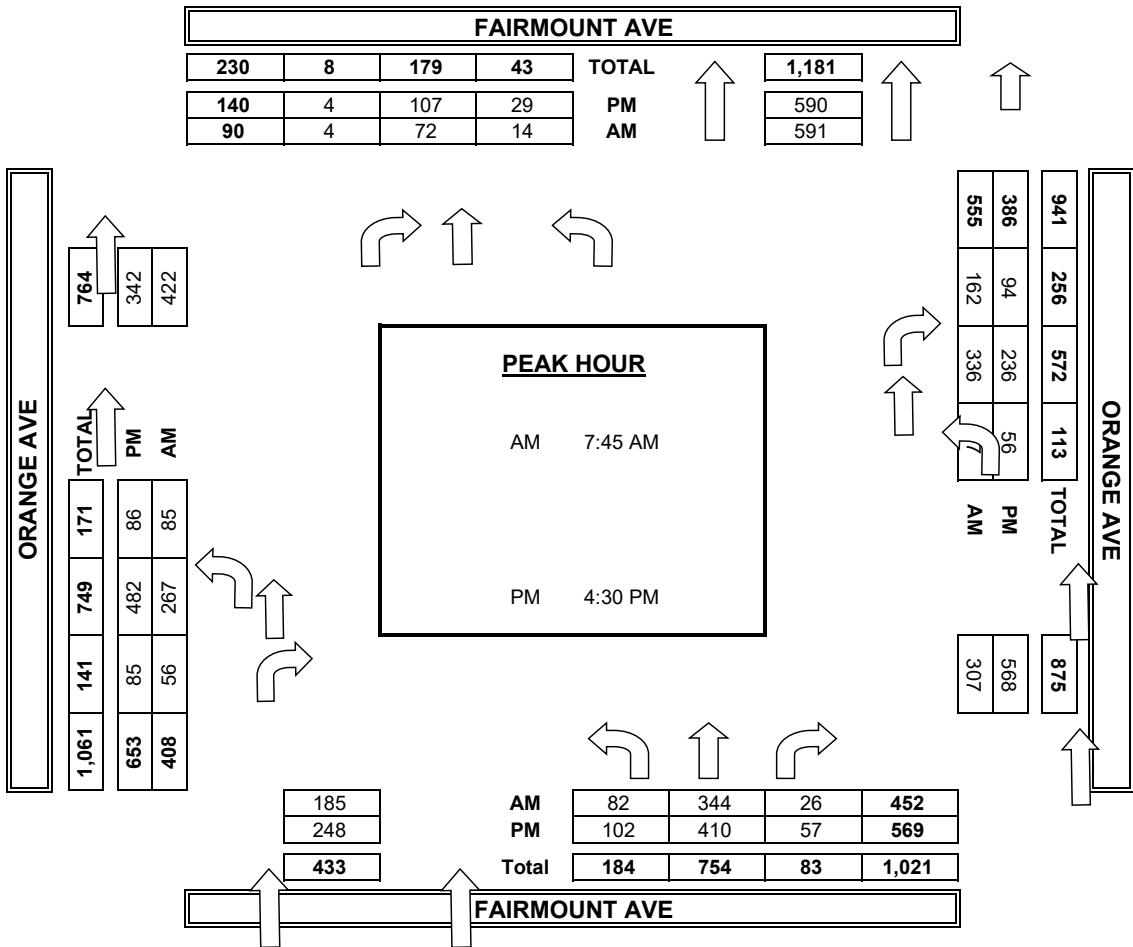
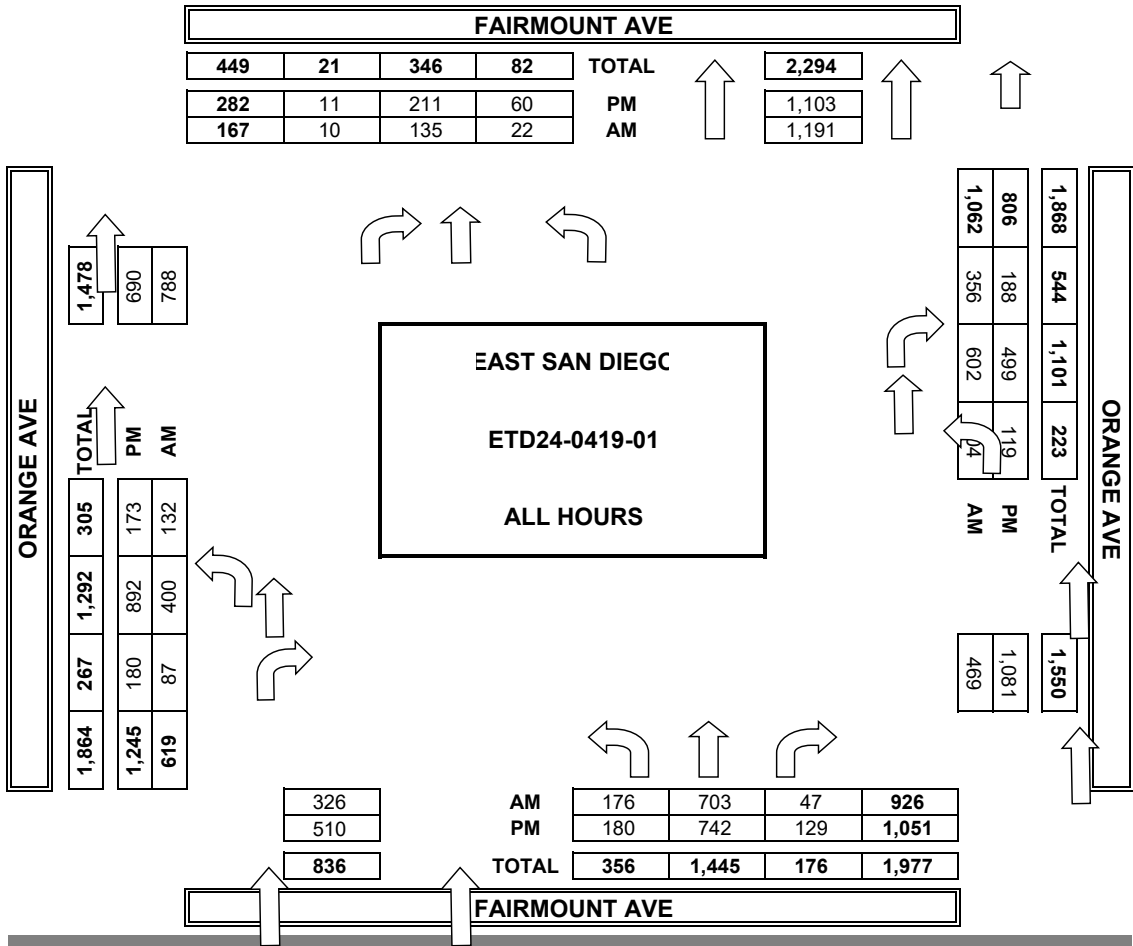
AM	PM
7:00 AM	4:00 PM
7:15 AM	4:15 PM
7:30 AM	4:30 PM
7:45 AM	4:45 PM
8:00 AM	5:00 PM
8:15 AM	5:15 PM
8:30 AM	5:30 PM
8:45 AM	5:45 PM
TOTAL	TOTAL

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
	3	4	2	9
7	3	3	3	16
8	8	6	7	29
3	11	7	9	30
18	13	22	8	61
24	17	25	10	76
7	6	13	9	35
2	6	6	8	22
69	67	86	56	278
11	5	11	8	35
2	18	5	17	42
10	8	3	2	23
9	7	9	12	37
3	6	11	9	29
6	6	5	9	26
7	10	5	6	28
9	3	15	8	35
57	63	64	71	255

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
			1	1
	1	2		3
				0
1	2	1	1	5
	3	1	2	6
	1			1
1	2		1	4
				0
2	9	4	5	20
1	1			2
				0
1	3			4
3	1			4
		1		1
		1	1	2
	2			2
1	1			2
6	8	2	1	17

**PACIFIC TECHNICAL DATA**  
TURNING MOVEMENT COUNTS





35) Euclid Ave & Orange Ave

# INTERSECTION TURNING MOVEMENT COUNTS

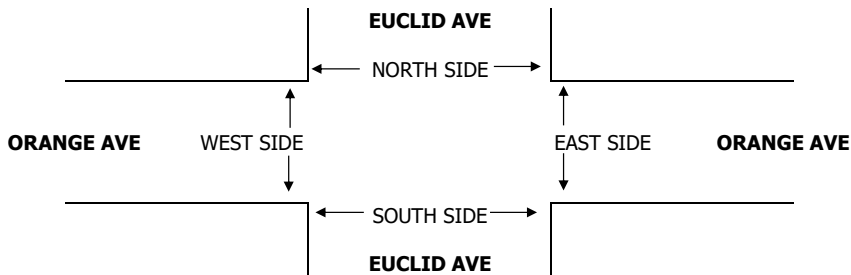
PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

<b>DATE:</b> 4/18/24 THURSDAY	<b>LOCATION:</b> NORTH & SOUTH: EAST & WEST:	<b>EAST SAN DIEGO</b> EUCLID AVE ORANGE AVE	<b>PROJECT #:</b> <b>LOCATION #:</b> <b>CONTROL:</b>	ETD24-0419-01 3 SIGNAL
-------------------------------------	--	---	--	------------------------------

<b>NOTES:</b>		AM		▲	
INCLUDES BIKE & PED		PM		N	
		MD	◀	W	E ▶
		OTHER		S	
		OTHER		▼	

LANES:	NORTHBOUND EUCLID AVE			SOUTHBOUND EUCLID AVE			EASTBOUND ORANGE AVE			WESTBOUND ORANGE AVE			TOTAL	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		
AM	7:00 AM	8	78	6	2	22	2	7	14	7	16	32	19	213
	7:15 AM	23	85	8	3	21	13	1	26	6	12	54	25	277
	7:30 AM	16	113	5	3	23	10	3	27	10	17	66	28	321
	7:45 AM	30	86	14	10	25	12	5	48	14	21	79	20	364
	8:00 AM	22	100	13	8	42	14	9	46	11	14	62	22	363
	8:15 AM	26	72	15	4	61	12	8	39	18	12	68	23	358
	8:30 AM	23	69	7	5	48	12	14	55	22	19	67	20	361
	8:45 AM	31	84	7	4	40	18	15	40	32	21	59	11	362
	VOLUMES	179	687	75	39	282	93	62	295	120	132	487	168	2,619
	APPROACH %	19%	73%	8%	9%	68%	22%	13%	62%	25%	17%	62%	21%	
	APP/DEPART	941	/	917	414	/	534	477	/	409	787	/	759	0
	BEGIN PEAK HR VOLUMES	101	327	49	27	176	50	36	188	65	66	276	85	1,446
	APPROACH %	21%	69%	10%	11%	70%	20%	12%	65%	22%	15%	65%	20%	
	PEAK HR FACTOR		0.883			0.821			0.794			0.890		0.993
APP/DEPART	477	/	448	253	/	307	289	/	264	427	/	427	0	
PM	4:00 PM	22	54	15	15	68	8	13	80	29	11	46	18	379
	4:15 PM	24	104	28	14	56	10	9	72	28	29	92	22	488
	4:30 PM	21	44	19	10	54	11	7	87	27	11	35	8	334
	4:45 PM	18	47	16	16	53	9	11	87	29	7	44	8	345
	5:00 PM	19	58	13	11	65	12	14	77	32	19	42	9	371
	5:15 PM	16	65	14	15	59	11	16	100	26	14	49	13	398
	5:30 PM	18	48	16	10	53	7	10	97	31	12	39	12	353
	5:45 PM	12	59	20	12	49	12	14	76	22	16	39	18	349
	VOLUMES	150	479	141	103	457	80	94	676	224	119	386	108	3,017
	APPROACH %	19%	62%	18%	16%	71%	13%	9%	68%	23%	19%	63%	18%	
	APP/DEPART	770	/	681	640	/	800	994	/	920	613	/	616	0
	BEGIN PEAK HR VOLUMES	85	249	78	55	231	38	40	326	113	58	217	56	1,546
	APPROACH %	21%	60%	19%	17%	71%	12%	8%	68%	24%	18%	66%	17%	
	PEAK HR FACTOR		0.660			0.890			0.943			0.579		0.792
APP/DEPART	412	/	345	324	/	402	479	/	459	331	/	340	0	

U-TURNS				
NB	SB	EB	WB	TTL
X	X	X	X	
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0



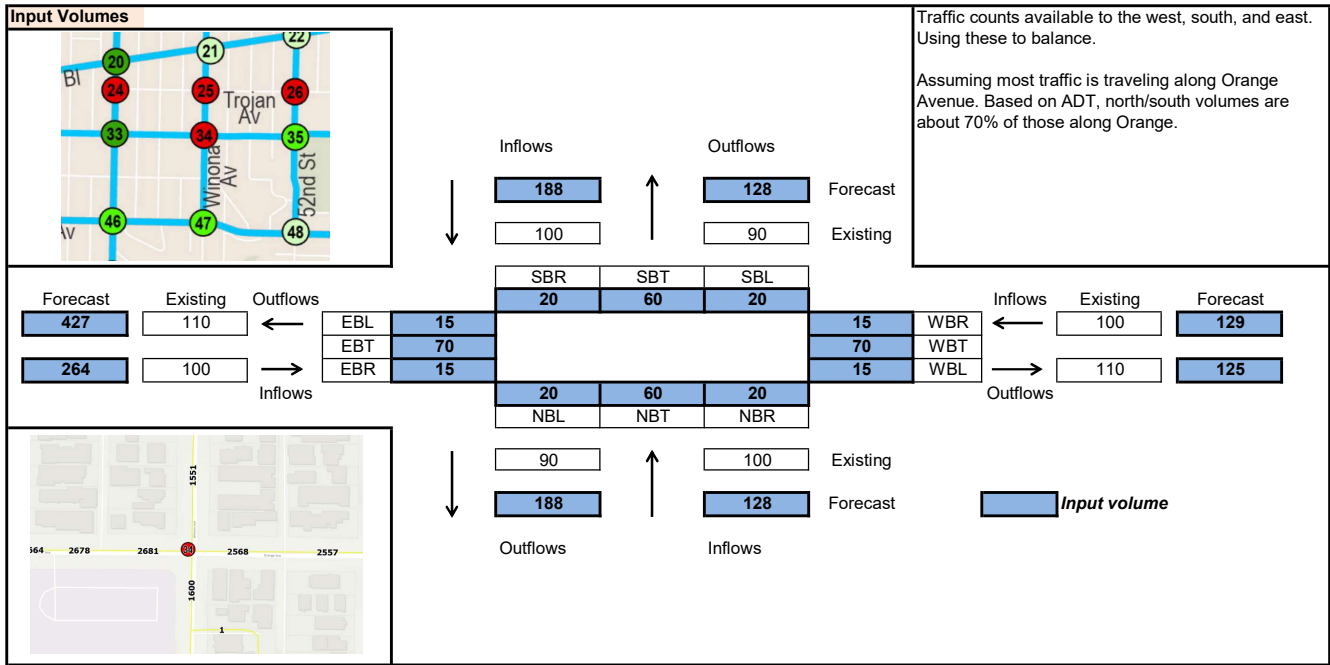
	PEDESTRIAN CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM		5	3	8
	7:15 AM	3	5	1	2
	7:30 AM	5	4		5
	7:45 AM	10	12	4	11
	8:00 AM	6	16	3	7
	8:15 AM	12	4	2	6
	8:30 AM	3	25	1	17
	8:45 AM	4	21	3	13
TOTAL	43	92	17	61	213
PM	4:00 PM	7	11	8	3
	4:15 PM	1	7	1	4
	4:30 PM	3	15	9	4
	4:45 PM	7	4	4	10
	5:00 PM	1	2	1	6
	5:15 PM	3	11	5	3
	5:30 PM	10	1	3	7
	5:45 PM	3	1		5
TOTAL	35	52	31	42	160

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

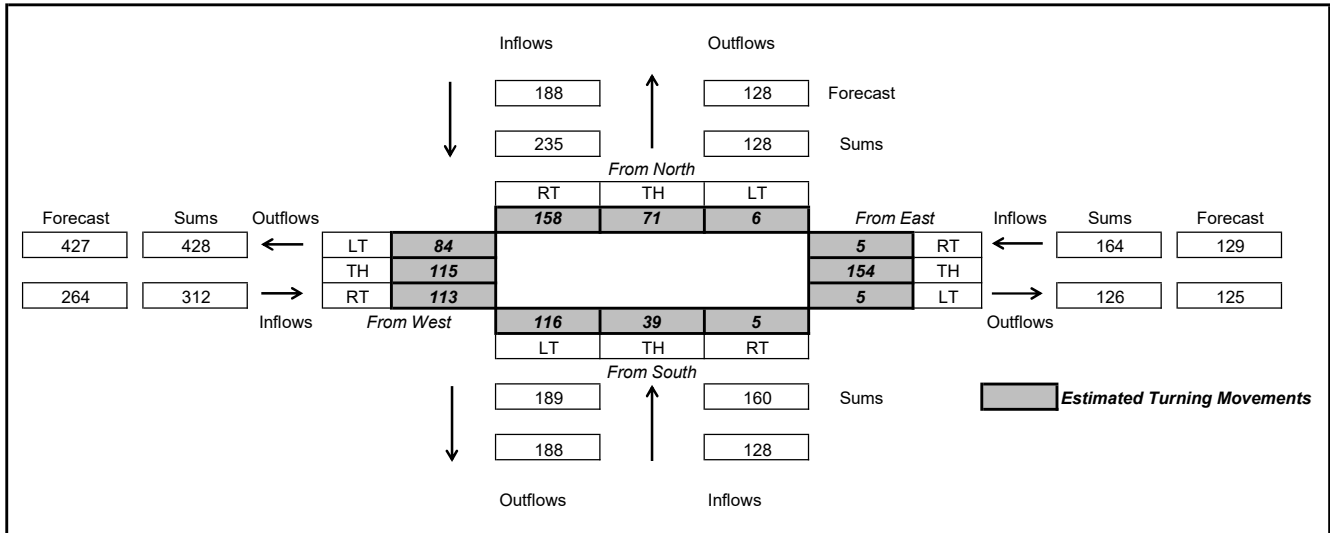
BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
				0
1				1
3	1	1	1	3
			1	1
1				1
	1			1
				0
				0
				0
				0
				0
				0
				0
1			1	2
3	7	4	5	19

36) Orange Ave & Winona Ave

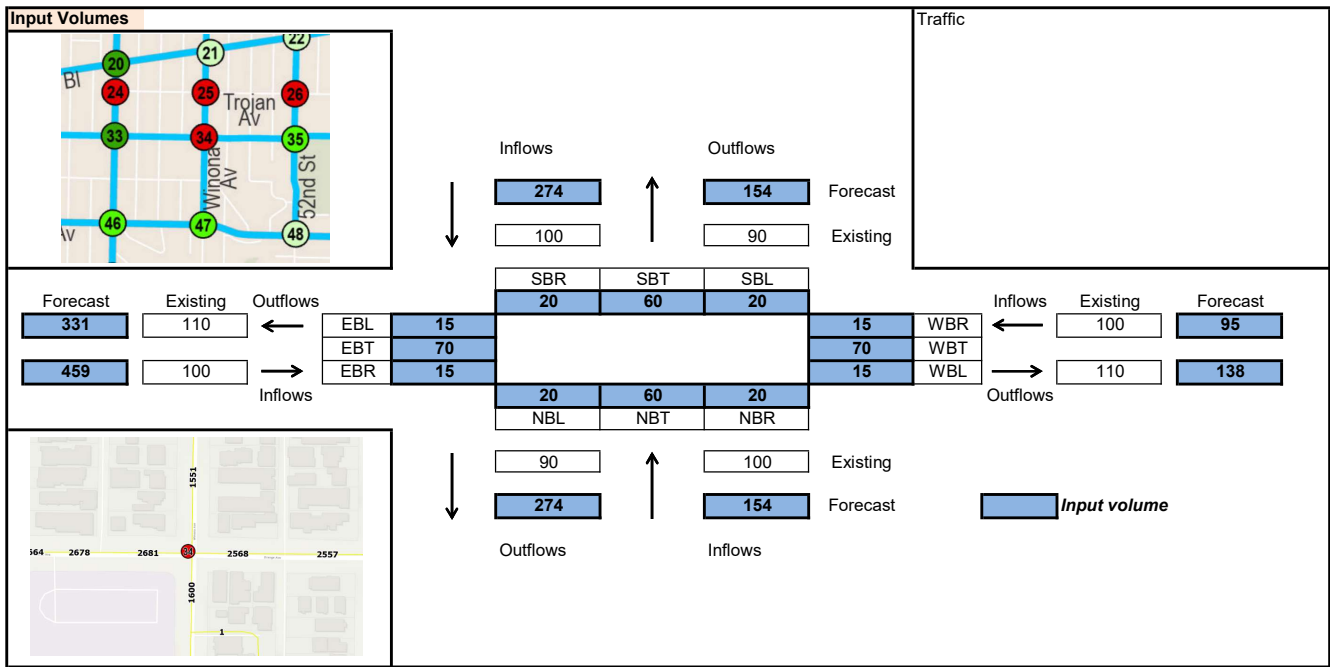
### Iterative Method Estimated Turning Movements



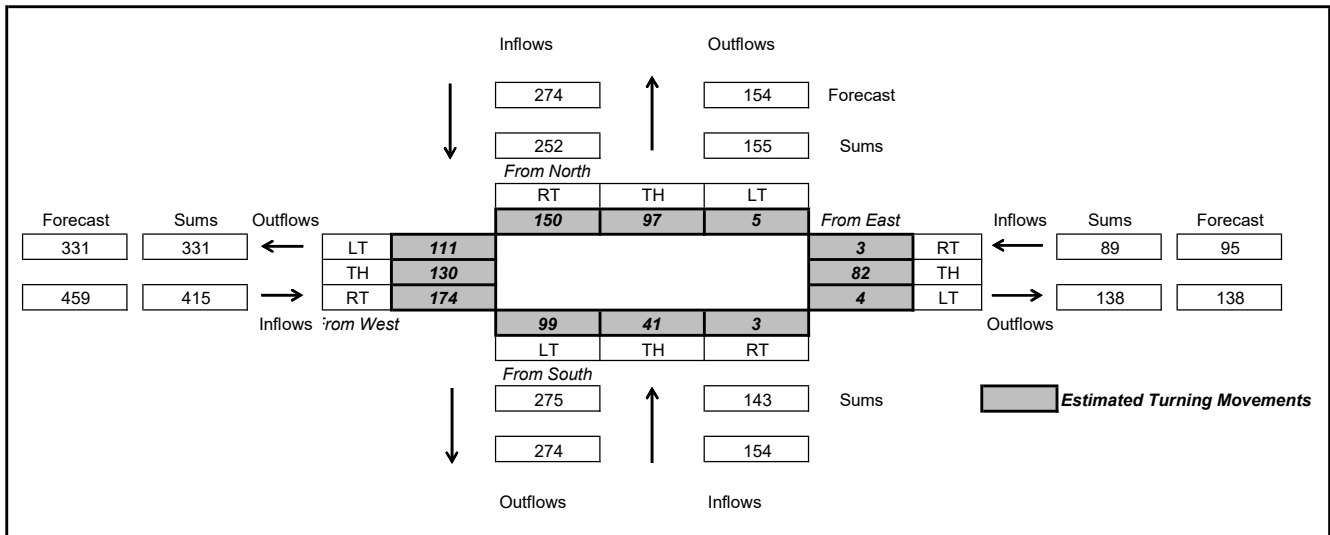
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



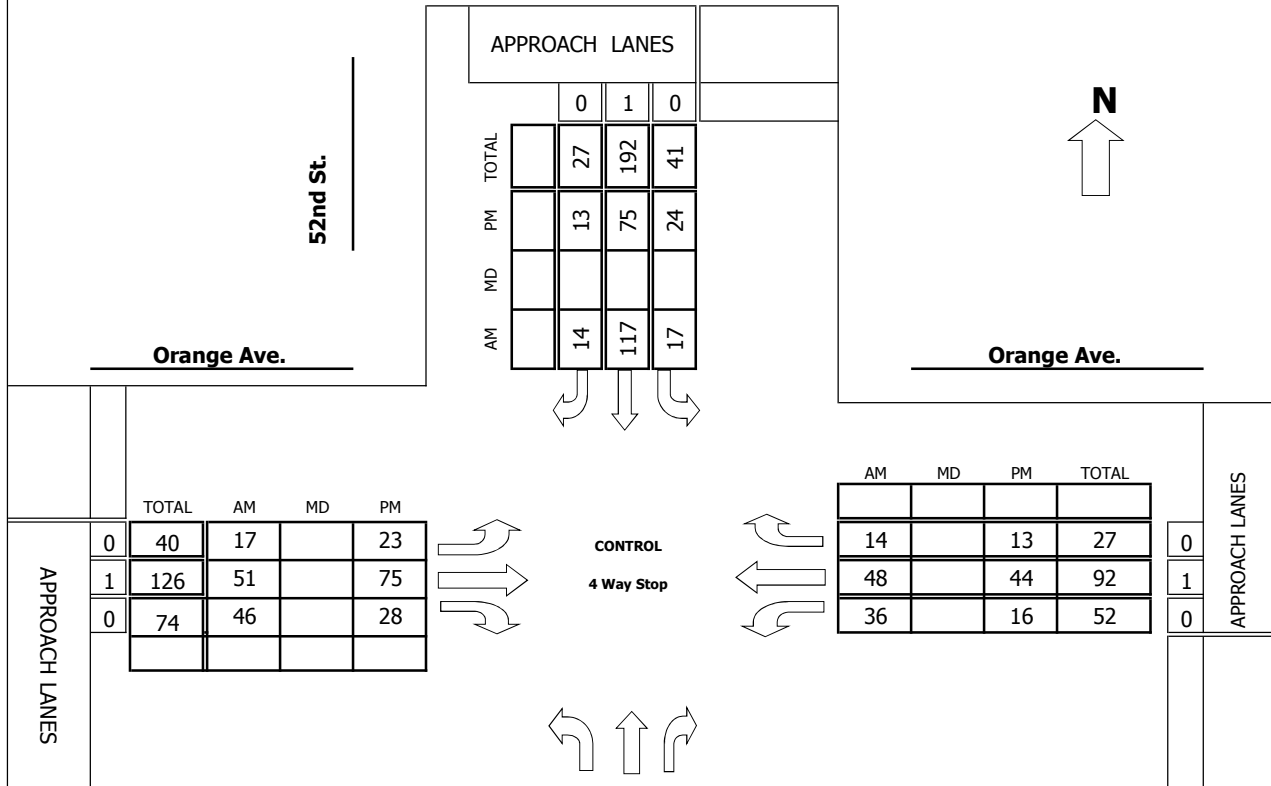
### Estimated Turning Movements



37) Orange Ave & 52nd St

**Project #:** IC 073-15

**TMC SUMMARY OF 52nd St. & Orange Ave.**



**LOCATION #:** IC 073-15

**TURNING MOVEMENT COUNT**

**52nd St. & Orange Ave.**  
 (Intersection Name)

WEDNESDAY  
 Day

03/18/2015  
 Date

**COUNT PERIODS**

<b>AM</b>	700AM	-	900AM
<b>NOON</b>		-	
<b>PM</b>	200PM	-	400PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR \_\_\_\_\_

PM PEAK HOUR 300 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **52nd St.**      DATE: **03/18/2015**      LOCATION: **San Diego**  
 E-W STREET: **Orange Ave.**      DAY: **WEDNESDAY**      PROJECT# **IC 073-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM	0	1	0	0	1	0	0	1	0	0	1	0	
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	8	23	15	6	10	2	3	45	6	5	20	11	154
7:15 AM	21	19	7	8	9	5	2	20	5	10	26	7	139
7:30 AM	20	20	2	2	18	1	4	20	1	1	12	4	105
7:45 AM	19	12	5	3	15	6	8	13	4	5	14	4	108
8:00 AM	19	20	8	4	20	4	7	16	5	8	9	1	121
8:15 AM	14	23	8	4	26	5	0	11	13	8	12	6	130
8:30 AM	12	35	8	3	58	4	6	16	17	18	16	4	197
8:45 AM	12	30	8	6	13	1	4	8	11	2	11	3	109
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	125	182	61	36	169	28	34	149	62	57	120	40	1063
Approach %	33.97	49.46	16.58	15.45	72.53	12.02	13.88	60.82	25.31	26.27	55.30	18.43	
App/Depart	368	/	256	233	/	288	245	/	246	217	/	273	

AM Peak Hr Begins at: 800 AM

**PEAK**

Volumes	57	108	32	17	117	14	17	51	46	36	48	14	557
Approach %	28.93	54.82	16.24	11.49	79.05	9.46	14.91	44.74	40.35	36.73	48.98	14.29	

**PEAK HR.**

FACTOR:	0.895	0.569	0.731	0.645	0.707
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**CONTROL:**

4 Way Stop

**COMMENT 1:**

**GPS:**

32.753141, -117.083748



# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: 52nd St.      DATE: 03/18/2015      LOCATION: San Diego  
 E-W STREET: Orange Ave.      DAY: WEDNESDAY      PROJECT#: IC 073-15  
0

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	1	0	

1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM	5	22	6	6	18	9	3	15	7	2	9	7	109
2:15 PM	7	7	6	4	19	4	4	20	7	4	11	7	100
2:30 PM	3	14	5	4	14	7	4	22	8	2	11	4	98
2:45 PM	11	13	8	10	27	3	3	15	10	5	10	2	117
3:00 PM	5	31	6	7	23	2	7	15	8	7	13	0	124
3:15 PM	6	27	5	4	16	2	5	16	8	4	8	6	107
3:30 PM	10	18	4	7	20	7	7	21	5	2	14	3	118
3:45 PM	9	25	9	6	16	2	4	23	7	3	9	4	117
4:00 PM													
4:15 PM													
4:30 PM													
4:45 PM													
5:00 PM													
5:15 PM													
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	56	157	49	48	153	36	37	147	60	29	85	33	890
Approach %	21.37	59.92	18.70	20.25	64.56	15.19	15.16	60.25	24.59	19.73	57.82	22.45	
App/Depart	262	/	227	237	/	242	244	/	244	147	/	177	

PM Peak Hr Begins at: 300 PM

PEAK													
Volumes	30	101	24	24	75	13	23	75	28	16	44	13	466
Approach %	19.35	65.16	15.48	21.43	66.96	11.61	18.25	59.52	22.22	21.92	60.27	17.81	

PEAK HR. FACTOR:	0.901	0.824	0.926	0.913	0.940
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CONTROL: 4 Way Stop  
 COMMENT 1: 0  
 GPS: 32.753141, -117.083748

## Pedestrian & Bicycle Study

**N-S STREET:** 52nd St.  
**E-W STREET:** Orange Ave.

**Date:** 03/18/2015  
**Day:** WEDNESDAY

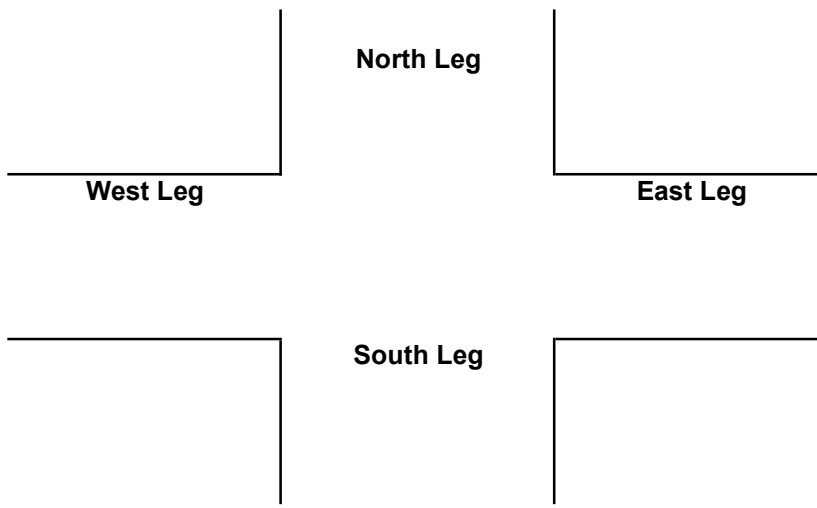
**City:** San Diego  
**Project #:** IC 073-15

PEDESTRIANS				
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	3	3	1	2
7:15 AM	0	2	2	1
7:30 AM	0	6	1	3
7:45 AM	2	3	1	2
8:00 AM	3	2	4	4
8:15 AM	4	5	4	9
8:30 AM	6	3	5	13
8:45 AM	3	3	4	6
<b>TOTAL</b>	<b>21</b>	<b>27</b>	<b>22</b>	<b>40</b>

BICYCLES				
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

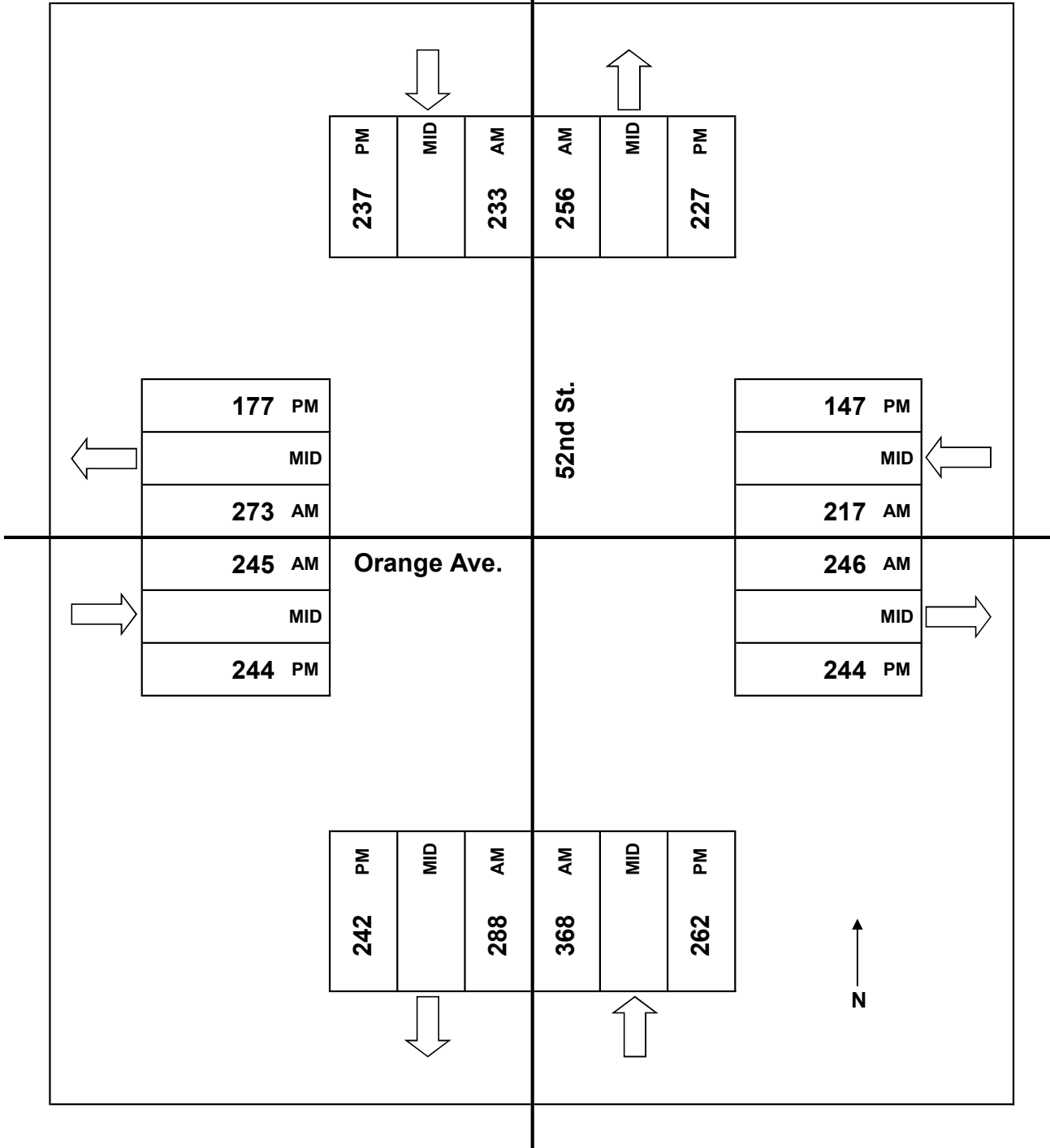
PEDESTRIANS				
	N-LEG	S-LEG	E-LEG	W-LEG
2:00 PM	2	2	2	3
2:15 PM	3	1	2	1
2:30 PM	0	1	4	2
2:45 PM	4	1	4	2
3:00 PM	2	4	4	3
3:15 PM	0	1	3	2
3:30 PM	2	2	4	3
3:45 PM	1	1	0	1
<b>TOTAL</b>	<b>14</b>	<b>13</b>	<b>23</b>	<b>17</b>

BICYCLES				
	N-LEG	S-LEG	E-LEG	W-LEG
2:00 PM	0	0	0	0
2:15 PM	0	0	0	0
2:30 PM	0	0	0	1
2:45 PM	1	0	0	0
3:00 PM	1	0	0	0
3:15 PM	1	1	0	0
3:30 PM	0	0	0	0
3:45 PM	0	0	0	0
<b>TOTAL</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>



JOB# IC 073-15  
VALIDATED: \_\_\_\_\_

DATE: 03/18/2015  
DAY: WEDNESDAY



38) 54th St & Orange Ave

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

**DATE:**  
4/18/24  
THURSDAY

**LOCATION:**  
NORTH & SOUTH:  
EAST & WEST:

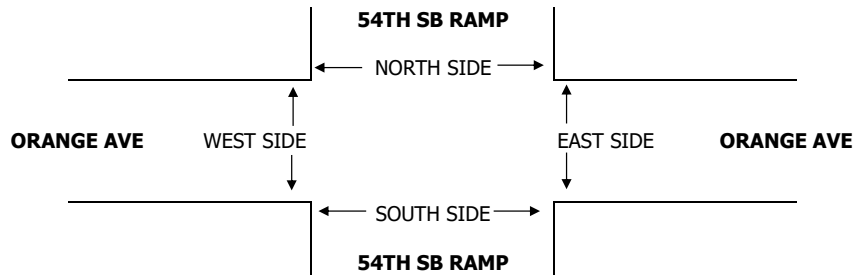
**EAST SAN DIEGO**  
54TH SB RAMP  
ORANGE AVE

**PROJECT #:** ETD24-0419-01  
**LOCATION #:** 7  
**CONTROL:** NONE

<p><b>NOTES:</b></p> <p style="text-align: center; color: blue;">INCLUDES BIKE &amp; PED</p>	AM PM MD OTHER OTHER	▲ N ◀ W      E ▶ S ▼
--	----------------------------------	----------------------------------

	NORTHBOUND 54TH SB RAMP			SOUTHBOUND 54TH SB RAMP			EASTBOUND ORANGE AVE			WESTBOUND ORANGE AVE			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
<b>AM</b>													
7:00 AM				0	0	0	0	2	17	6	9	0	34
7:15 AM				0	0	0	0	9	10	8	9	0	36
7:30 AM				0	0	0	0	13	14	14	14	0	55
7:45 AM				1	0	0	0	17	18	17	17	0	70
8:00 AM				0	0	0	0	31	26	31	35	0	123
8:15 AM				0	0	0	0	51	21	43	58	0	173
8:30 AM				0	0	0	0	50	17	56	59	0	182
8:45 AM				0	0	0	0	17	18	21	31	0	87
VOLUMES	0	0	0	1	0	0	0	190	141	196	232	0	760
APPROACH %	0%	0%	0%	100%	0%	0%	0%	57%	43%	46%	54%	0%	
APP/DEPART	0	/	0	1	/	337	331	/	191	428	/	232	0
BEGIN PEAK HR	8:00 AM												
VOLUMES	0	0	0	0	0	0	0	149	82	151	183	0	565
APPROACH %	0%	0%	0%	0%	0%	0%	0%	65%	35%	45%	55%	0%	
PEAK HR FACTOR	0.000			0.000			0.802			0.726			0.776
APP/DEPART	0	/	0	0	/	233	231	/	149	334	/	183	0
<b>PM</b>													
4:00 PM				0	0	0	0	16	37	27	26	0	106
4:15 PM				0	0	0	0	25	32	12	20	0	89
4:30 PM				0	0	0	0	17	29	9	22	0	77
4:45 PM				0	0	0	0	6	38	10	21	0	75
5:00 PM				0	0	0	0	24	45	17	21	0	107
5:15 PM				0	0	0	0	23	37	12	24	1	97
5:30 PM				0	0	0	0	21	34	9	20	0	84
5:45 PM				0	0	0	0	25	32	14	16	0	87
VOLUMES	0	0	0	0	0	0	0	157	284	110	170	1	722
APPROACH %	0%	0%	0%	0%	0%	0%	0%	36%	64%	39%	60%	0%	
APP/DEPART	0	/	1	0	/	394	441	/	157	281	/	170	0
BEGIN PEAK HR	5:00 PM												
VOLUMES	0	0	0	0	0	0	0	93	148	52	81	1	375
APPROACH %	0%	0%	0%	0%	0%	0%	0%	39%	61%	39%	60%	1%	
PEAK HR FACTOR	0.000			0.000			0.873			0.882			0.876
APP/DEPART	0	/	1	0	/	200	241	/	93	134	/	81	0

U-TURNS				
NB	SB	EB	WB	TTL
X	X	X	X	
		1		1
				0
				0
				0
				0
				0
				0
				0
				0
0	0	1	0	1



	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM	TOTAL
<b>AM</b>									
	1				3	7	3	5	20
				8	15	42	30	13	110
				1	2	2	1	3	7
								1	5
<b>PM</b>									
	4	3	3	3	1	5	2	4	25
	14	7	5	7	1	1	3	45	
		2		1			1	4	
							1	7	
							1	10	
<b>TOTAL</b>	25	45	4	7	81				

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
1				1
			1	1
1			3	6
	8	1		9
3	15			18
7	42	2		51
3	30	1		34
5	13	3	1	22
20	110	7	5	142
4	14			18
3	7	2		12
3	5			8
3	7	1		11
1	3			4
5	1		5	11
2	3	1	1	7
4	5		1	10
25	45	4	7	81

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
				0
				0
				0
				0
				0
	1			1
				0
				0
1		1	1	3
				0
				0
				0
1	1	1	1	4

39) I-805 SB Ramps & University Ave

City of San Diego  
 N/S: Boundary Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 14\_SDG\_Bound\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

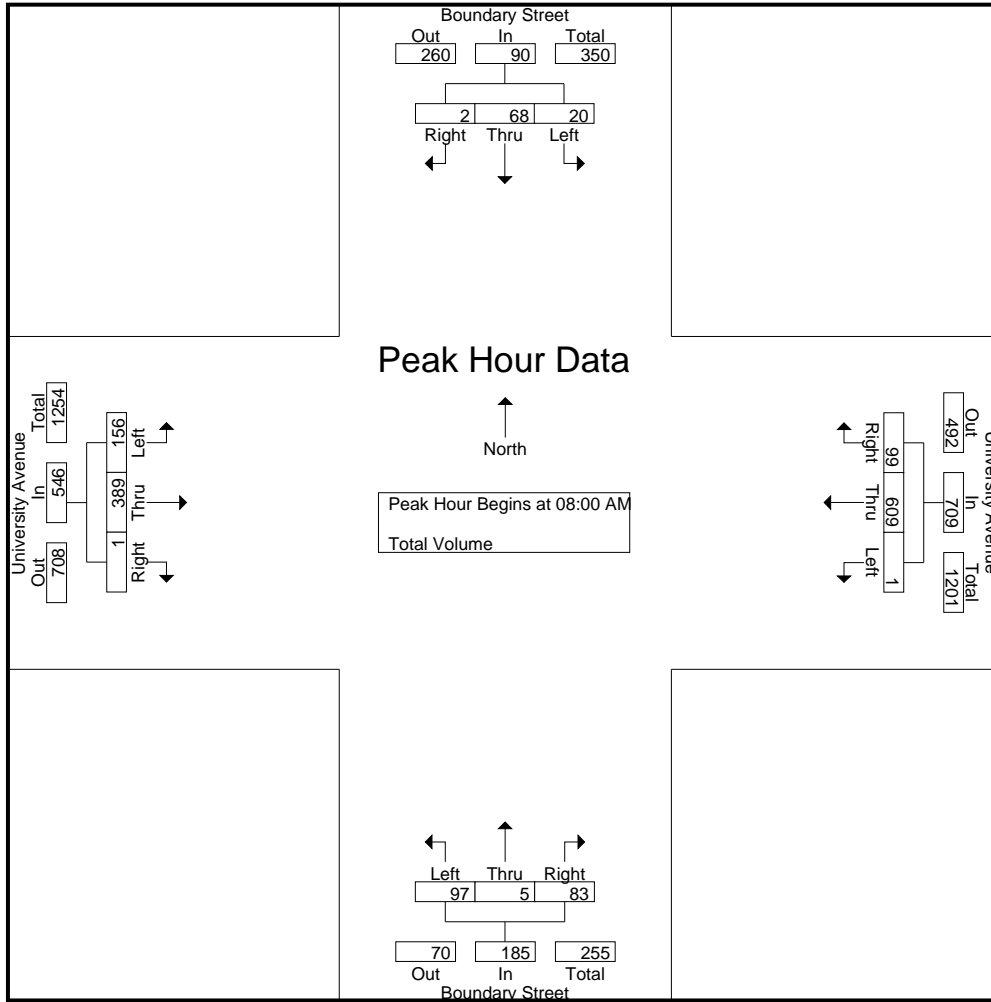
Start Time	Boundary Street Southbound				University Avenue Westbound				Boundary Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	6	8	1	15	0	113	17	130	13	8	16	37	27	58	1	86	268
07:15 AM	3	21	0	24	0	119	22	141	9	0	10	19	24	60	0	84	268
07:30 AM	6	18	0	24	0	156	19	175	6	0	15	21	38	42	0	80	300
07:45 AM	4	21	6	31	1	112	23	136	12	5	9	26	53	92	1	146	339
Total	19	68	7	94	1	500	81	582	40	13	50	103	142	252	2	396	1175
08:00 AM	7	18	1	26	0	151	30	181	19	0	26	45	42	106	0	148	400
08:15 AM	3	16	0	19	0	189	33	222	24	1	12	37	39	73	0	112	390
08:30 AM	3	18	1	22	0	159	21	180	28	2	17	47	39	99	1	139	388
08:45 AM	7	16	0	23	1	110	15	126	26	2	28	56	36	111	0	147	352
Total	20	68	2	90	1	609	99	709	97	5	83	185	156	389	1	546	1530
Grand Total	39	136	9	184	2	1109	180	1291	137	18	133	288	298	641	3	942	2705
Apprch %	21.2	73.9	4.9		0.2	85.9	13.9		47.6	6.2	46.2		31.6	68	0.3		
Total %	1.4	5	0.3	6.8	0.1	41	6.7	47.7	5.1	0.7	4.9	10.6	11	23.7	0.1	34.8	

Start Time	Boundary Street Southbound				University Avenue Westbound				Boundary Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:00 AM	<b>7</b>	<b>18</b>	<b>1</b>	<b>26</b>	0	151	30	181	19	0	26	45	<b>42</b>	106	0	<b>148</b>	<b>400</b>
08:15 AM	3	16	0	19	0	<b>189</b>	<b>33</b>	<b>222</b>	24	1	12	37	39	73	0	112	390
08:30 AM	3	18	1	22	0	159	21	180	<b>28</b>	<b>2</b>	17	47	39	99	<b>1</b>	139	388
08:45 AM	7	16	0	23	<b>1</b>	110	15	126	26	2	<b>28</b>	<b>56</b>	36	<b>111</b>	0	147	352
Total Volume	20	68	2	90	1	609	99	709	97	5	83	185	156	389	1	546	1530
% App. Total	22.2	75.6	2.2		0.1	85.9	14		52.4	2.7	44.9		28.6	71.2	0.2		
PHF	.714	.944	.500	.865	.250	.806	.750	.798	.866	.625	.741	.826	.929	.876	.250	.922	.956

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of San Diego  
 N/S: Boundary Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 14\_SDG\_Bound\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				08:00 AM				08:00 AM			
+0 mins.	3	21	0	24	1	112	23	136	19	0	26	45	42	106	0	148
+15 mins.	6	18	0	24	0	151	30	181	24	1	12	37	39	73	0	112
+30 mins.	4	21	6	31	0	189	33	222	28	2	17	47	39	99	1	139
+45 mins.	7	18	1	26	0	159	21	180	26	2	28	56	36	111	0	147
Total Volume	20	78	7	105	1	611	107	719	97	5	83	185	156	389	1	546
% App. Total	19	74.3	6.7		0.1	85	14.9		52.4	2.7	44.9		28.6	71.2	0.2	
PHF	.714	.929	.292	.847	.250	.808	.811	.810	.866	.625	.741	.826	.929	.876	.250	.922



City of San Diego  
 N/S: Boundary Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 14\_SDG\_Bound\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

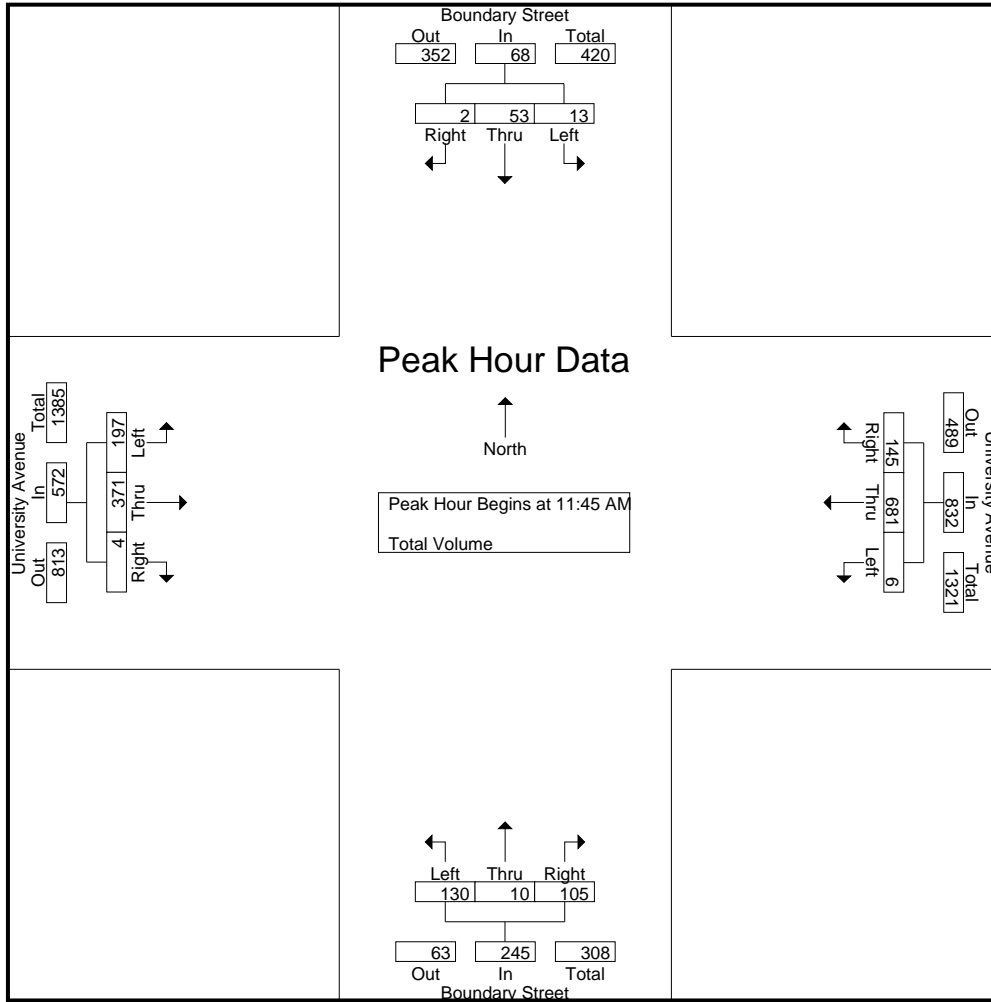
Groups Printed- Total Volume

Start Time	Boundary Street Southbound				University Avenue Westbound				Boundary Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	3	13	0	16	1	140	35	176	40	1	29	70	46	91	0	137	399
11:45 AM	3	17	2	22	1	187	37	225	37	4	32	73	43	98	1	142	462
Total	6	30	2	38	2	327	72	401	77	5	61	143	89	189	1	279	861
12:00 PM	3	14	0	17	2	162	39	203	32	2	28	62	65	90	1	156	438
12:15 PM	4	9	0	13	1	145	39	185	24	1	24	49	49	101	2	152	399
12:30 PM	3	13	0	16	2	187	30	219	37	3	21	61	40	82	0	122	418
12:45 PM	8	17	1	26	0	175	38	213	40	4	24	68	40	75	1	116	423
Total	18	53	1	72	5	669	146	820	133	10	97	240	194	348	4	546	1678
01:00 PM	7	20	1	28	2	144	31	177	31	6	26	63	50	100	3	153	421
01:15 PM	9	22	2	33	4	156	33	193	41	7	28	76	52	86	2	140	442
Grand Total	40	125	6	171	13	1296	282	1591	282	28	212	522	385	723	10	1118	3402
Apprch %	23.4	73.1	3.5		0.8	81.5	17.7		54	5.4	40.6		34.4	64.7	0.9		
Total %	1.2	3.7	0.2	5	0.4	38.1	8.3	46.8	8.3	0.8	6.2	15.3	11.3	21.3	0.3	32.9	

Start Time	Boundary Street Southbound				University Avenue Westbound				Boundary Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:45 AM	3	17	2	22	1	187	37	225	37	4	32	73	43	98	1	142	462
12:00 PM	3	14	0	17	2	162	39	203	32	2	28	62	65	90	1	156	438
12:15 PM	4	9	0	13	1	145	39	185	24	1	24	49	49	101	2	152	399
12:30 PM	3	13	0	16	2	187	30	219	37	3	21	61	40	82	0	122	418
Total Volume	13	53	2	68	6	681	145	832	130	10	105	245	197	371	4	572	1717
% App. Total	19.1	77.9	2.9		0.7	81.9	17.4		53.1	4.1	42.9		34.4	64.9	0.7		
PHF	.813	.779	.250	.773	.750	.910	.929	.924	.878	.625	.820	.839	.758	.918	.500	.917	.929

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 11:45 AM



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:30 PM				11:45 AM				12:30 PM				11:30 AM			
+0 mins.	3	13	0	16	<b>1</b>	<b>187</b>	<b>37</b>	<b>225</b>	37	3	21	61	46	91	0	137
+15 mins.	8	17	1	26	<b>2</b>	<b>162</b>	<b>39</b>	<b>203</b>	40	4	24	68	43	98	1	142
+30 mins.	7	20	1	28	1	145	39	185	31	6	26	63	<b>65</b>	90	1	<b>156</b>
+45 mins.	<b>9</b>	<b>22</b>	<b>2</b>	<b>33</b>	2	187	30	219	<b>41</b>	<b>7</b>	<b>28</b>	<b>76</b>	49	<b>101</b>	<b>2</b>	152
Total Volume	27	72	4	103	6	681	145	832	149	20	99	268	203	380	4	587
% App. Total	26.2	69.9	3.9		0.7	81.9	17.4		55.6	7.5	36.9		34.6	64.7	0.7	
PHF	.750	.818	.500	.780	.750	.910	.929	.924	.909	.714	.884	.882	.781	.941	.500	.941

City of San Diego  
 N/S: Boundary Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 14\_SDG\_Bound\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Boundary Street Southbound				University Avenue Westbound				Boundary Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	6	35	0	41	0	188	40	228	14	2	20	36	44	98	0	142	447
04:15 PM	2	31	0	33	0	169	28	197	14	2	17	33	57	72	1	130	393
04:30 PM	8	29	2	39	0	179	37	216	12	2	17	31	56	94	0	150	436
04:45 PM	2	21	2	25	5	185	37	227	9	1	19	29	65	68	1	134	415
Total	18	116	4	138	5	721	142	868	49	7	73	129	222	332	2	556	1691
05:00 PM	4	20	1	25	0	209	33	242	9	2	27	38	66	99	2	167	472
05:15 PM	8	28	1	37	1	195	54	250	7	2	25	34	49	94	0	143	464
05:30 PM	5	18	0	23	1	178	50	229	15	2	25	42	48	82	2	132	426
05:45 PM	2	21	0	23	2	185	38	225	8	5	28	41	48	91	1	140	429
Total	19	87	2	108	4	767	175	946	39	11	105	155	211	366	5	582	1791
Grand Total	37	203	6	246	9	1488	317	1814	88	18	178	284	433	698	7	1138	3482
Apprch %	15	82.5	2.4		0.5	82	17.5		31	6.3	62.7		38	61.3	0.6		
Total %	1.1	5.8	0.2	7.1	0.3	42.7	9.1	52.1	2.5	0.5	5.1	8.2	12.4	20	0.2	32.7	

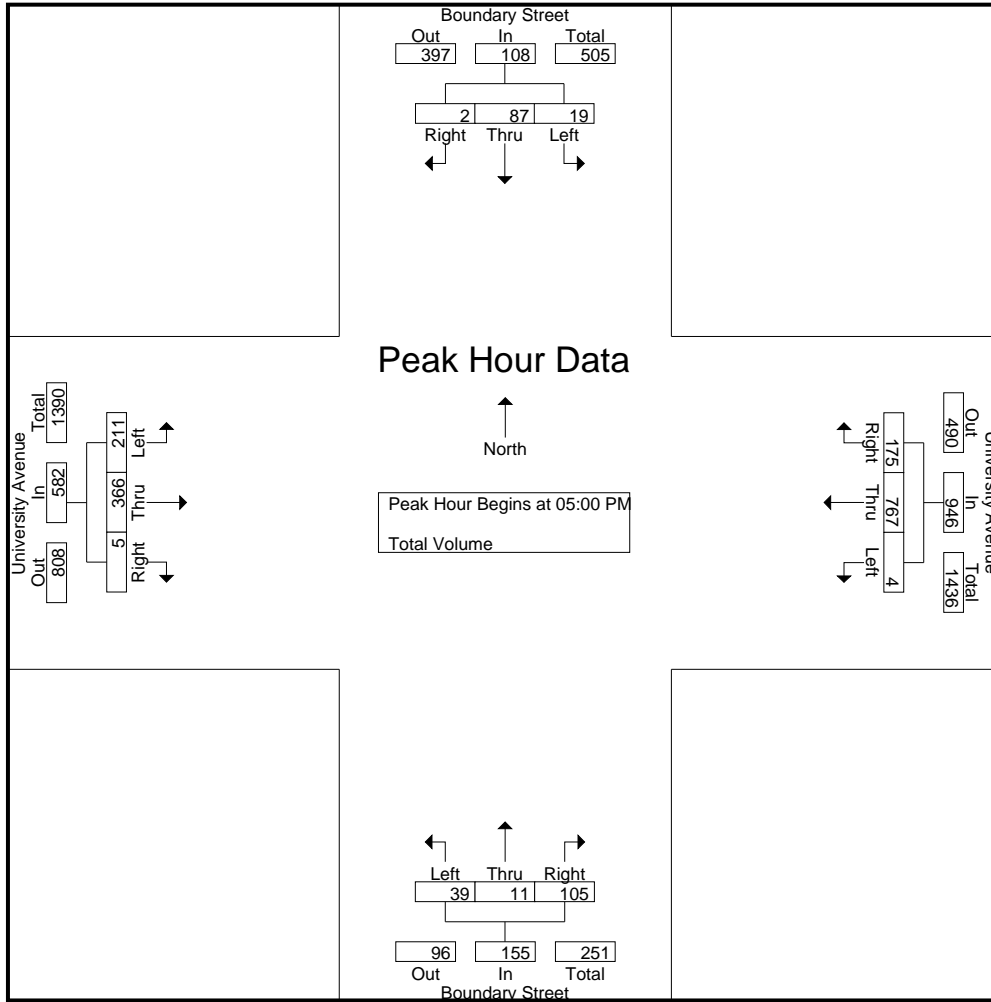
Start Time	Boundary Street Southbound				University Avenue Westbound				Boundary Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	4	20	1	25	0	<b>209</b>	33	242	9	2	27	38	<b>66</b>	<b>99</b>	2	<b>167</b>	<b>472</b>
05:15 PM	<b>8</b>	<b>28</b>	1	<b>37</b>	1	195	<b>54</b>	<b>250</b>	7	2	25	34	49	94	0	143	464
05:30 PM	5	18	0	23	1	178	50	229	<b>15</b>	2	25	<b>42</b>	48	82	2	132	426
05:45 PM	2	21	0	23	<b>2</b>	185	38	225	8	<b>5</b>	<b>28</b>	41	48	91	1	140	429
Total Volume	19	87	2	108	4	767	175	946	39	11	105	155	211	366	5	582	1791
% App. Total	17.6	80.6	1.9		0.4	81.1	18.5		25.2	7.1	67.7		36.3	62.9	0.9		
PHF	.594	.777	.500	.730	.500	.917	.810	.946	.650	.550	.938	.923	.799	.924	.625	.871	.949

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

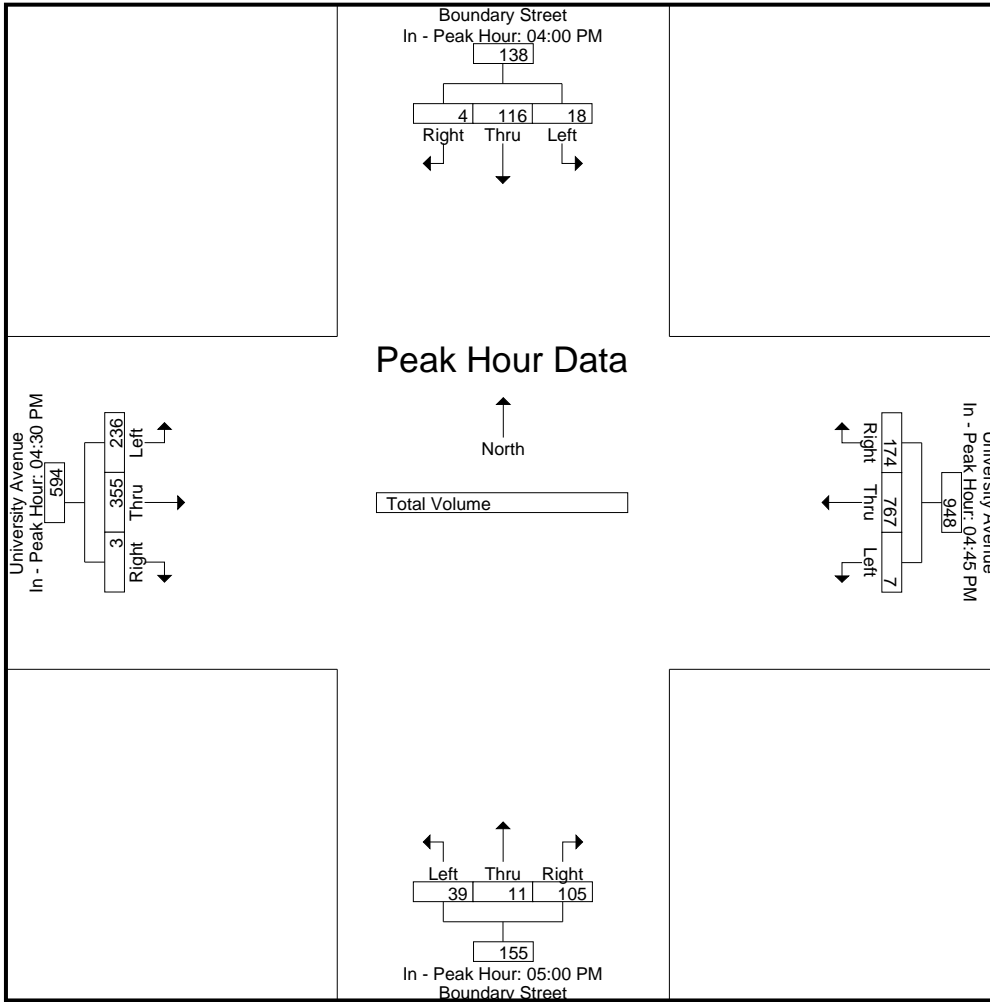
City of San Diego  
 N/S: Boundary Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 14\_SDG\_Bound\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:45 PM				05:00 PM				04:30 PM			
+0 mins.	6	<b>35</b>	0	<b>41</b>	<b>5</b>	185	37	227	9	2	27	38	56	94	0	150
+15 mins.	2	31	0	33	0	<b>209</b>	33	242	7	2	25	34	65	68	1	134
+30 mins.	<b>8</b>	29	<b>2</b>	39	1	195	<b>54</b>	<b>250</b>	<b>15</b>	2	25	<b>42</b>	<b>66</b>	<b>99</b>	<b>2</b>	<b>167</b>
+45 mins.	2	21	2	25	1	178	50	229	8	<b>5</b>	<b>28</b>	41	49	94	0	143
Total Volume	18	116	4	138	7	767	174	948	39	11	105	155	236	355	3	594
% App. Total	13	84.1	2.9		0.7	80.9	18.4		25.2	7.1	67.7		39.7	59.8	0.5	
PHF	.563	.829	.500	.841	.350	.917	.806	.948	.650	.550	.938	.923	.894	.896	.375	.889



Location: San Diego  
 N/S: Boundary Street  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Boundary Street	East Leg University Avenue	South Leg Boundary Street	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	3	0	0	0	3
7:15 AM	3	0	0	1	4
7:30 AM	0	0	7	0	7
7:45 AM	4	0	2	1	7
8:00 AM	4	0	3	1	8
8:15 AM	1	0	1	0	2
8:30 AM	2	0	3	0	5
8:45 AM	5	0	2	0	7
TOTAL VOLUMES:	22	0	18	3	43

	North Leg Boundary Street	East Leg University Avenue	South Leg Boundary Street	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	1	0	1	0	2
11:45 AM	2	0	7	0	9
12:00 PM	4	0	8	2	14
12:15 PM	3	0	5	0	8
12:30 PM	1	0	4	0	5
12:45 PM	2	0	0	0	2
1:00 PM	2	0	1	0	3
1:15 PM	0	0	3	1	4
TOTAL VOLUMES:	15	0	29	3	47

	North Leg Boundary Street	East Leg University Avenue	South Leg Boundary Street	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	2	2	4
4:15 PM	0	0	6	0	6
4:30 PM	2	0	4	0	6
4:45 PM	0	0	4	0	4
5:00 PM	3	0	9	1	13
5:15 PM	4	0	2	1	7
5:30 PM	5	1	3	1	10
5:45 PM	7	0	8	0	15
TOTAL VOLUMES:	21	1	38	5	65

Location: San Diego  
 N/S: Boundary Street  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Boundary Street			Westbound University Avenue			Northbound Boundary Street			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

	Southbound Boundary Street			Westbound University Avenue			Northbound Boundary Street			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Boundary Street			Westbound University Avenue			Northbound Boundary Street			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	2	0	0	0	0	1	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	6	0	0	0	0	2	0	0	8

40) I-805 NB Ramps & University Ave



City of San Diego  
 N/S: Wabash Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 15\_SDG\_Wab\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Wabash Avenue Southbound				University Avenue Westbound				Wabash Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	2	19	2	23	90	27	0	117	57	25	31	113	2	18	110	130	383
07:15 AM	2	18	4	24	96	29	0	125	62	24	32	118	1	30	107	138	405
07:30 AM	1	18	5	24	103	30	0	133	48	30	41	119	1	29	133	163	439
07:45 AM	2	12	2	16	82	71	1	154	75	51	41	167	0	22	113	135	472
Total	7	67	13	87	371	157	1	529	242	130	145	517	4	99	463	566	1699
08:00 AM	1	15	3	19	86	59	0	145	84	60	43	187	2	44	139	185	536
08:15 AM	3	13	0	16	88	48	2	138	74	53	41	168	0	52	157	209	531
08:30 AM	4	9	0	13	86	62	2	150	81	56	36	173	2	42	137	181	517
08:45 AM	0	11	1	12	73	49	1	123	98	51	44	193	2	39	107	148	476
Total	8	48	4	60	333	218	5	556	337	220	164	721	6	177	540	723	2060
Grand Total	15	115	17	147	704	375	6	1085	579	350	309	1238	10	276	1003	1289	3759
Apprch %	10.2	78.2	11.6		64.9	34.6	0.6		46.8	28.3	25		0.8	21.4	77.8		
Total %	0.4	3.1	0.5	3.9	18.7	10	0.2	28.9	15.4	9.3	8.2	32.9	0.3	7.3	26.7	34.3	

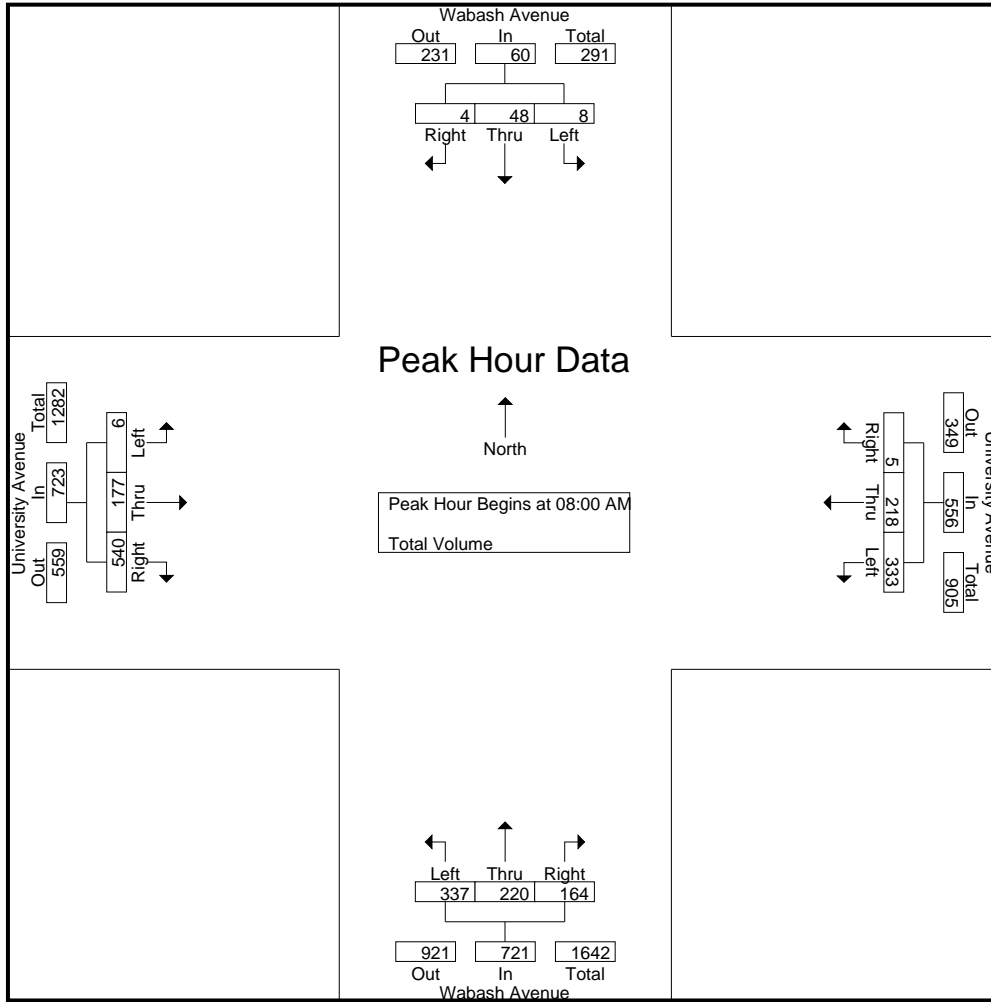
Start Time	Wabash Avenue Southbound				University Avenue Westbound				Wabash Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:00 AM	1	<b>15</b>	<b>3</b>	<b>19</b>	86	59	0	145	84	<b>60</b>	43	187	<b>2</b>	44	139	185	<b>536</b>
08:15 AM	3	13	0	16	<b>88</b>	48	<b>2</b>	138	74	53	41	168	0	<b>52</b>	<b>157</b>	<b>209</b>	531
08:30 AM	<b>4</b>	9	0	13	86	<b>62</b>	<b>2</b>	<b>150</b>	81	56	36	173	2	42	137	181	517
08:45 AM	0	11	1	12	73	49	1	123	<b>98</b>	51	<b>44</b>	<b>193</b>	2	39	107	148	476
Total Volume	8	48	4	60	333	218	5	556	337	220	164	721	6	177	540	723	2060
% App. Total	13.3	80	6.7		59.9	39.2	0.9		46.7	30.5	22.7		0.8	24.5	74.7		
PHF	.500	.800	.333	.789	.946	.879	.625	.927	.860	.917	.932	.934	.750	.851	.860	.865	.961

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 08:00 AM

City of San Diego  
 N/S: Wabash Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 15\_SDG\_Wab\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				08:00 AM				08:00 AM			
+0 mins.	2	19	2	23	82	71	1	154	84	60	43	187	2	44	139	185
+15 mins.	2	18	4	24	86	59	0	145	74	53	41	168	0	52	157	209
+30 mins.	1	18	5	24	88	48	2	138	81	56	36	173	2	42	137	181
+45 mins.	2	12	2	16	86	62	2	150	98	51	44	193	2	39	107	148
Total Volume	7	67	13	87	342	240	5	587	337	220	164	721	6	177	540	723
% App. Total	8	77	14.9		58.3	40.9	0.9		46.7	30.5	22.7		0.8	24.5	74.7	
PHF	.875	.882	.650	.906	.972	.845	.625	.953	.860	.917	.932	.934	.750	.851	.860	.865

City of San Diego  
 N/S: Wabash Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 15\_SDG\_Wab\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

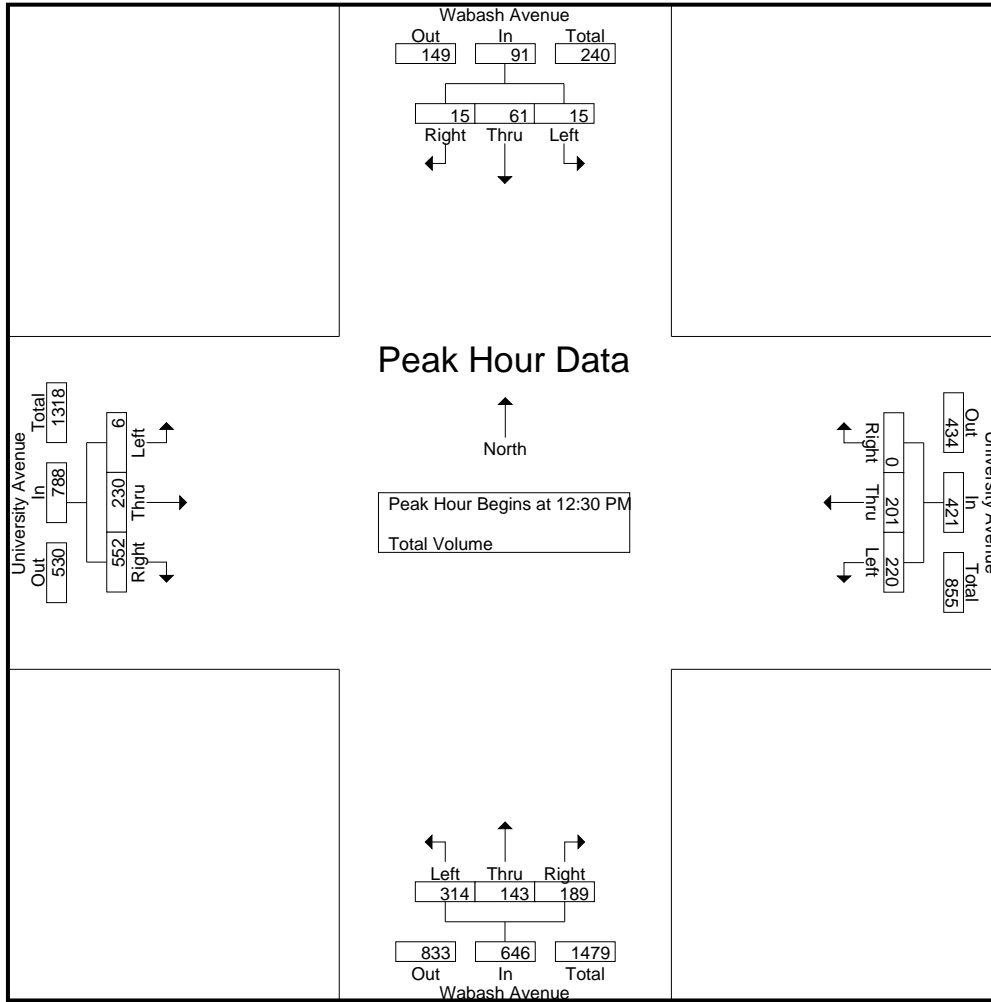
Groups Printed- Total Volume

Start Time	Wabash Avenue Southbound				University Avenue Westbound				Wabash Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	5	6	8	19	42	47	1	90	84	44	50	178	3	53	124	180	467
11:45 AM	4	11	6	21	63	56	0	119	80	48	52	180	2	67	140	209	529
Total	9	17	14	40	105	103	1	209	164	92	102	358	5	120	264	389	996
12:00 PM	3	8	4	15	55	51	0	106	96	27	37	160	3	68	115	186	467
12:15 PM	3	13	4	20	38	64	1	103	76	39	46	161	2	61	114	177	461
12:30 PM	1	18	3	22	53	52	0	105	66	36	53	155	0	51	144	195	477
12:45 PM	4	12	3	19	70	38	0	108	73	33	49	155	2	56	154	212	494
Total	11	51	14	76	216	205	1	422	311	135	185	631	7	236	527	770	1899
01:00 PM	3	19	5	27	54	61	0	115	81	36	36	153	1	68	122	191	486
01:15 PM	7	12	4	23	43	50	0	93	94	38	51	183	3	55	132	190	489
Grand Total	30	99	37	166	418	419	2	839	650	301	374	1325	16	479	1045	1540	3870
Apprch %	18.1	59.6	22.3		49.8	49.9	0.2		49.1	22.7	28.2		1	31.1	67.9		
Total %	0.8	2.6	1	4.3	10.8	10.8	0.1	21.7	16.8	7.8	9.7	34.2	0.4	12.4	27	39.8	

Start Time	Wabash Avenue Southbound				University Avenue Westbound				Wabash Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:30 PM																	
12:30 PM	1	18	3	22	53	52	0	105	66	36	<b>53</b>	155	0	51	144	195	477
12:45 PM	4	12	3	19	<b>70</b>	38	0	108	73	33	49	155	2	56	<b>154</b>	<b>212</b>	<b>494</b>
01:00 PM	3	<b>19</b>	<b>5</b>	<b>27</b>	54	<b>61</b>	0	<b>115</b>	81	36	36	153	1	<b>68</b>	122	191	486
01:15 PM	<b>7</b>	12	4	23	43	50	0	93	<b>94</b>	<b>38</b>	51	<b>183</b>	<b>3</b>	55	132	190	489
Total Volume	15	61	15	91	220	201	0	421	314	143	189	646	6	230	552	788	1946
% App. Total	16.5	67	16.5		52.3	47.7	0		48.6	22.1	29.3		0.8	29.2	70.1		
PHF	.536	.803	.750	.843	.786	.824	.000	.915	.835	.941	.892	.883	.500	.846	.896	.929	.985

City of San Diego  
 N/S: Wabash Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 15\_SDG\_Wab\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:30 PM				11:45 AM				11:30 AM				12:30 PM			
+0 mins.	1	18	3	22	<b>63</b>	56	0	<b>119</b>	84	44	50	178	0	51	144	195
+15 mins.	4	12	3	19	55	51	0	106	80	<b>48</b>	<b>52</b>	<b>180</b>	2	56	<b>154</b>	<b>212</b>
+30 mins.	3	<b>19</b>	<b>5</b>	<b>27</b>	38	<b>64</b>	<b>1</b>	103	<b>96</b>	27	37	160	1	<b>68</b>	122	191
+45 mins.	<b>7</b>	12	4	23	53	52	0	105	76	39	46	161	<b>3</b>	55	132	190
Total Volume	15	61	15	91	209	223	1	433	336	158	185	679	6	230	552	788
% App. Total	16.5	67	16.5		48.3	51.5	0.2		49.5	23.3	27.2		0.8	29.2	70.1	
PHF	.536	.803	.750	.843	.829	.871	.250	.910	.875	.823	.889	.943	.500	.846	.896	.929

City of San Diego  
 N/S: Wabash Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 15\_SDG\_Wab\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Wabash Avenue Southbound				University Avenue Westbound				Wabash Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	5	13	6	24	46	55	0	101	90	36	52	178	3	78	126	207	510
04:15 PM	9	17	3	29	36	58	0	94	72	50	60	182	4	76	101	181	486
04:30 PM	5	10	5	20	57	54	0	111	100	39	64	203	1	72	126	199	533
04:45 PM	11	21	11	43	61	61	2	124	68	50	62	180	1	76	136	213	560
Total	30	61	25	116	200	228	2	430	330	175	238	743	9	302	489	800	2089
05:00 PM	7	23	6	36	56	68	1	125	83	51	68	202	6	82	151	239	602
05:15 PM	3	16	2	21	56	59	1	116	90	58	60	208	1	84	138	223	568
05:30 PM	10	15	1	26	49	69	0	118	65	49	61	175	2	74	132	208	527
05:45 PM	2	21	3	26	54	67	1	122	74	59	49	182	3	68	138	209	539
Total	22	75	12	109	215	263	3	481	312	217	238	767	12	308	559	879	2236
Grand Total	52	136	37	225	415	491	5	911	642	392	476	1510	21	610	1048	1679	4325
Apprch %	23.1	60.4	16.4		45.6	53.9	0.5		42.5	26	31.5		1.3	36.3	62.4		
Total %	1.2	3.1	0.9	5.2	9.6	11.4	0.1	21.1	14.8	9.1	11	34.9	0.5	14.1	24.2	38.8	

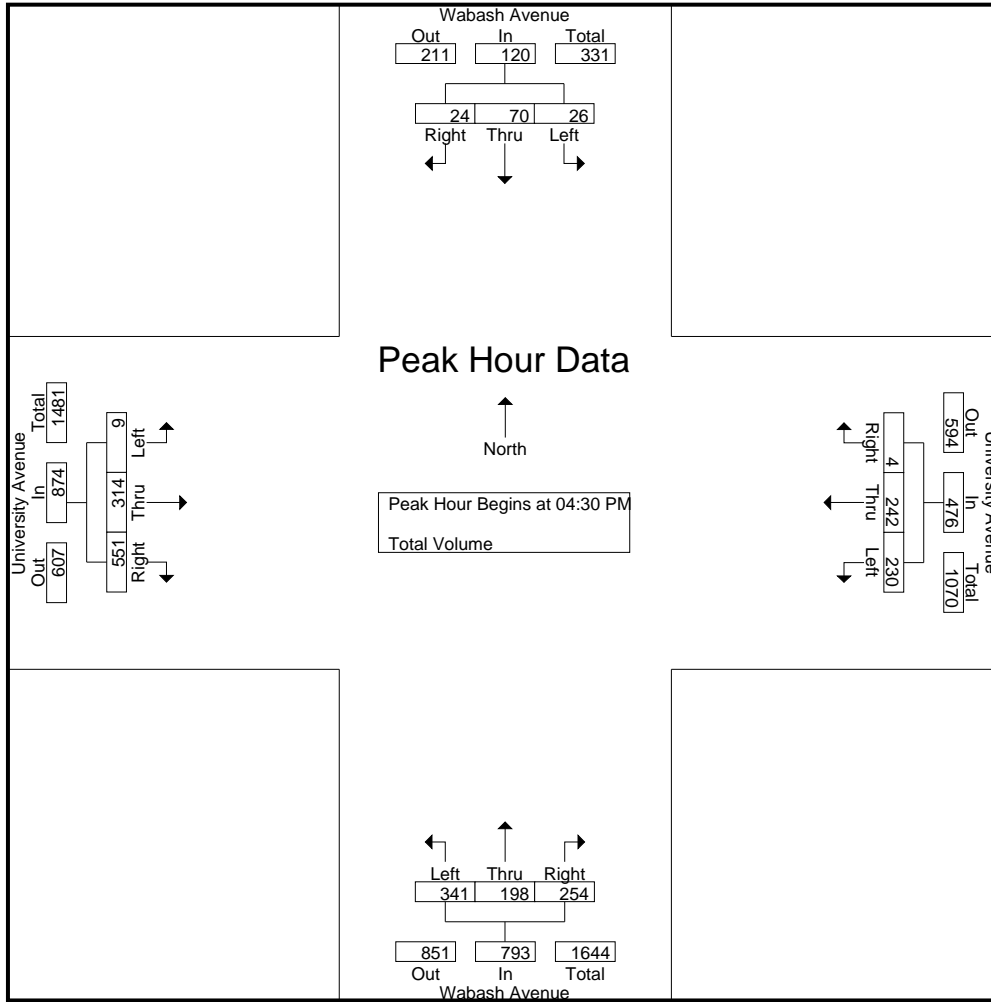
Start Time	Wabash Avenue Southbound				University Avenue Westbound				Wabash Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	5	10	5	20	57	54	0	111	<b>100</b>	39	64	203	1	72	126	199	533
04:45 PM	<b>11</b>	21	<b>11</b>	<b>43</b>	<b>61</b>	61	<b>2</b>	124	68	50	62	180	1	76	136	213	560
05:00 PM	7	<b>23</b>	6	36	56	<b>68</b>	1	<b>125</b>	83	51	<b>68</b>	202	<b>6</b>	82	<b>151</b>	<b>239</b>	<b>602</b>
05:15 PM	3	16	2	21	56	59	1	116	90	<b>58</b>	60	<b>208</b>	1	<b>84</b>	138	223	568
Total Volume	26	70	24	120	230	242	4	476	341	198	254	793	9	314	551	874	2263
% App. Total	21.7	58.3	20		48.3	50.8	0.8		43	25	32		1	35.9	63		
PHF	.591	.761	.545	.698	.943	.890	.500	.952	.853	.853	.934	.953	.375	.935	.912	.914	.940

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of San Diego  
 N/S: Wabash Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 15\_SDG\_Wab\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:45 PM				04:30 PM				04:45 PM			
+0 mins.	9	17	3	29	<b>61</b>	61	<b>2</b>	124	<b>100</b>	39	64	203	1	76	136	213
+15 mins.	5	10	5	20	56	68	1	<b>125</b>	68	50	62	180	<b>6</b>	82	<b>151</b>	<b>239</b>
+30 mins.	<b>11</b>	21	<b>11</b>	<b>43</b>	56	59	1	116	83	51	<b>68</b>	202	1	<b>84</b>	138	223
+45 mins.	7	<b>23</b>	6	36	49	<b>69</b>	0	118	90	<b>58</b>	60	<b>208</b>	2	74	132	208
Total Volume	32	71	25	128	222	257	4	483	341	198	254	793	10	316	557	883
% App. Total	25	55.5	19.5		46	53.2	0.8		43	25	32		1.1	35.8	63.1	
PHF	.727	.772	.568	.744	.910	.931	.500	.966	.853	.853	.934	.953	.417	.940	.922	.924

Location: San Diego  
 N/S: Wabash Avenue  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Wabash Avenue	East Leg University Avenue	South Leg Wabash Avenue	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	1	0	0	1
7:30 AM	0	2	6	0	8
7:45 AM	2	1	4	1	8
8:00 AM	2	0	5	0	7
8:15 AM	0	0	1	0	1
8:30 AM	1	0	1	0	2
8:45 AM	3	0	2	0	5
TOTAL VOLUMES:	8	4	19	1	32

	North Leg Wabash Avenue	East Leg University Avenue	South Leg Wabash Avenue	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	1	0	6	4	11
11:45 AM	5	0	2	0	7
12:00 PM	0	0	8	0	8
12:15 PM	0	0	4	0	4
12:30 PM	1	0	6	0	7
12:45 PM	0	0	2	1	3
1:00 PM	3	0	1	0	4
1:15 PM	0	0	1	0	1
TOTAL VOLUMES:	10	0	30	5	45

	North Leg Wabash Avenue	East Leg University Avenue	South Leg Wabash Avenue	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	0	3	0	4
4:15 PM	0	0	6	0	6
4:30 PM	2	0	4	0	6
4:45 PM	1	0	3	1	5
5:00 PM	1	0	4	1	6
5:15 PM	0	0	4	0	4
5:30 PM	4	0	2	1	7
5:45 PM	7	1	6	2	16
TOTAL VOLUMES:	16	1	32	5	54

Location: San Diego  
 N/S: Wabash Avenue  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Wabash Avenue			Westbound University Avenue			Northbound Wabash Avenue			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1	0	0	0	0	0	0	0	2

	Southbound Wabash Avenue			Westbound University Avenue			Northbound Wabash Avenue			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	0	0	2

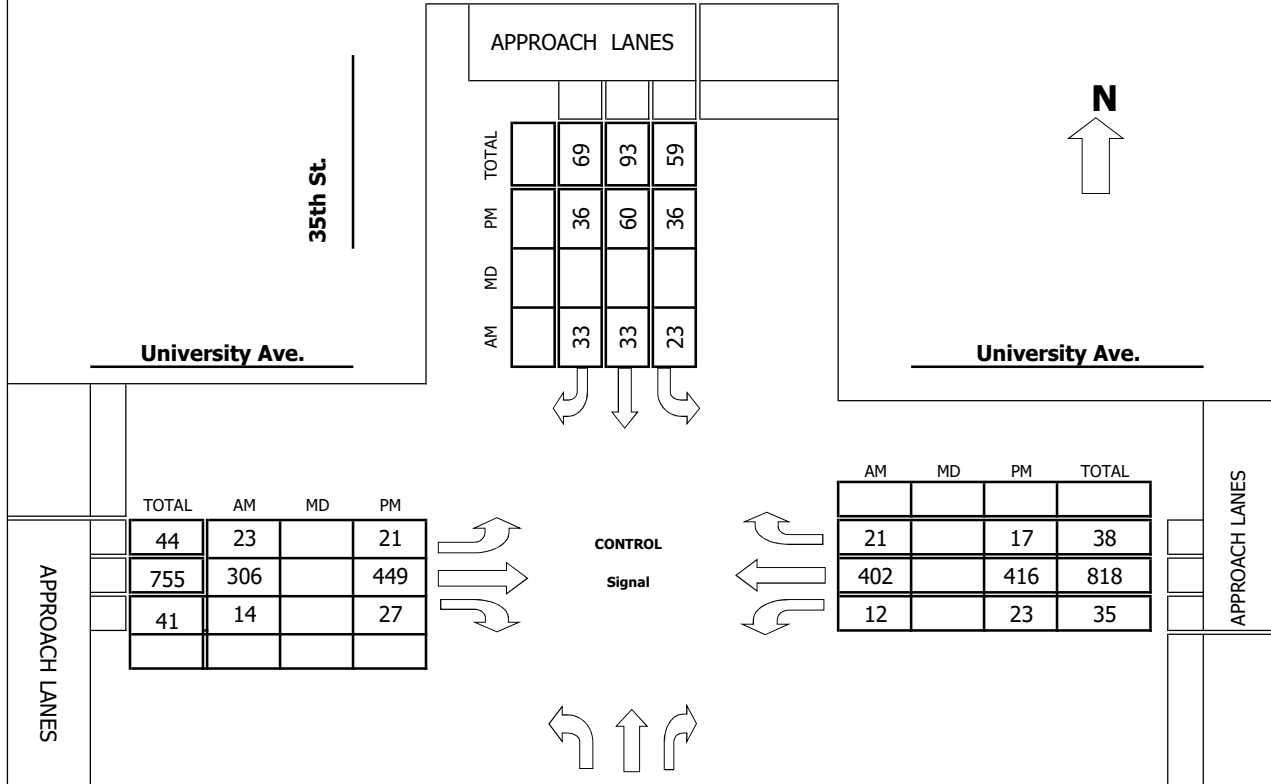
	Southbound Wabash Avenue			Westbound University Avenue			Northbound Wabash Avenue			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	3	0	0	0	0	0	4	0	7



41) 35th St & University Ave

**Project #:** IC 089-17

**TMC SUMMARY OF 35th St. & University Ave.**



TOTAL	AM	MD	PM
44	23		21
755	306		449
41	14		27

AM	MD	PM	TOTAL
21		17	38
402		416	818
12		23	35

TOTAL	AM	MD	PM
95	53		42
72	36		36
13	6		7

**LOCATION #:** IC 089-17

**TURNING MOVEMENT COUNT**

**35th St. & University Ave.**  
 (Intersection Name)

TUESDAY                      04/11/17  
 Day                                      Date

**COUNT PERIODS**

<b>AM</b>	700AM	-	900AM
<b>NOON</b>		-	
<b>PM</b>	400PM	-	600PM

AM PEAK HOUR                      745 AM

NOON PEAK HOUR                      \_\_\_\_\_

PM PEAK HOUR                      500 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **35th St.**      DATE: **04/11/17**      LOCATION: **San Diego**  
 E-W STREET: **University Ave.**      DAY: **TUESDAY**      PROJECT# **IC 089-17**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	1	0	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	15	11	1	4	3	3	3	46	0	2	87	1	176
7:15 AM	14	15	2	4	3	7	2	56	1	2	85	10	201
7:30 AM	10	10	0	2	6	6	5	64	1	1	114	12	231
7:45 AM	10	9	3	10	6	3	5	74	3	1	99	6	229
8:00 AM	17	7	1	2	11	8	4	66	2	6	110	8	242
8:15 AM	10	13	1	4	7	14	5	75	6	4	112	5	256
8:30 AM	16	7	1	7	9	8	9	91	3	1	81	2	235
8:45 AM	8	8	2	4	2	3	3	72	3	1	69	2	177
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	100	80	11	37	47	52	36	544	19	18	757	46	1747
Approach %	52.36	41.88	5.76	27.21	34.56	38.24	6.01	90.82	3.17	2.19	92.20	5.60	
App/Depart	191	/	162	136	/	84	599	/	592	821	/	909	

AM Peak Hr Begins at: 745 AM

**PEAK**

Volumes	53	36	6	23	33	33	23	306	14	12	402	21	962
Approach %	55.79	37.89	6.32	25.84	37.08	37.08	6.71	89.21	4.08	2.76	92.41	4.83	

**PEAK HR.**

FACTOR:	0.950	0.890	0.833	0.877	0.939
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CONTROL: **Signal**  
 COMMENT 1:  
 GPS: **32.749771, -117.118068**

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **35th St.**      DATE: **04/11/17**      LOCATION: **San Diego**  
 E-W STREET: **University Ave.**      DAY: **TUESDAY**      PROJECT# **IC 089-17**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	1	0	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	4	8	1	15	15	13	9	119	5	7	82	3	281
4:15 PM	15	7	1	15	11	13	12	117	12	7	98	1	309
4:30 PM	13	19	1	9	7	4	8	121	5	5	92	5	289
4:45 PM	6	8	1	11	15	11	6	107	5	7	82	10	269
5:00 PM	18	13	2	11	24	6	5	102	7	7	102	6	303
5:15 PM	7	9	2	9	12	8	4	110	7	6	104	7	285
5:30 PM	8	8	2	3	13	11	6	125	5	8	107	1	297
5:45 PM	9	6	1	13	11	11	6	112	8	2	103	3	285
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	80	78	11	86	108	77	56	913	54	49	770	36	2318
Approach %	47.34	46.15	6.51	31.73	39.85	28.41	5.47	89.25	5.28	5.73	90.06	4.21	
App/Depart	169	/	170	271	/	211	1023	/	1010	855	/	927	

PM Peak Hr Begins at: 500 PM

**PEAK**

Volumes	42	36	7	36	60	36	21	449	27	23	416	17	1170
Approach %	49.41	42.35	8.24	27.27	45.45	27.27	4.23	90.34	5.43	5.04	91.23	3.73	

**PEAK HR.**

FACTOR:	0.644	0.805	0.914	0.974	0.965
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CONTROL: **Signal**  
 COMMENT 1: **0**  
 GPS: **32.749771, -117.118068**



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

### Pedestrian & Bicycle Study

**N-S STREET:** 35th St.  
**E-W STREET:** University Ave.

**Date:** 04/11/17  
**Day:** TUESDAY

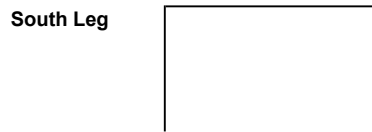
**City:** San Diego  
**Project #:** IC 089-17

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	1	0	2	2
7:15 AM	4	0	4	4
7:30 AM	5	3	5	5
7:45 AM	4	4	5	5
8:00 AM	5	2	1	3
8:15 AM	1	2	2	1
8:30 AM	0	1	6	2
8:45 AM	2	0	1	1
<b>TOTAL</b>	<b>22</b>	<b>12</b>	<b>26</b>	<b>23</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	2	2	0	0
7:15 AM	1	2	1	2
7:30 AM	2	1	1	1
7:45 AM	2	1	0	0
8:00 AM	1	2	0	0
8:15 AM	2	2	1	1
8:30 AM	0	0	0	0
8:45 AM	3	1	1	0
<b>TOTAL</b>	<b>13</b>	<b>11</b>	<b>4</b>	<b>4</b>

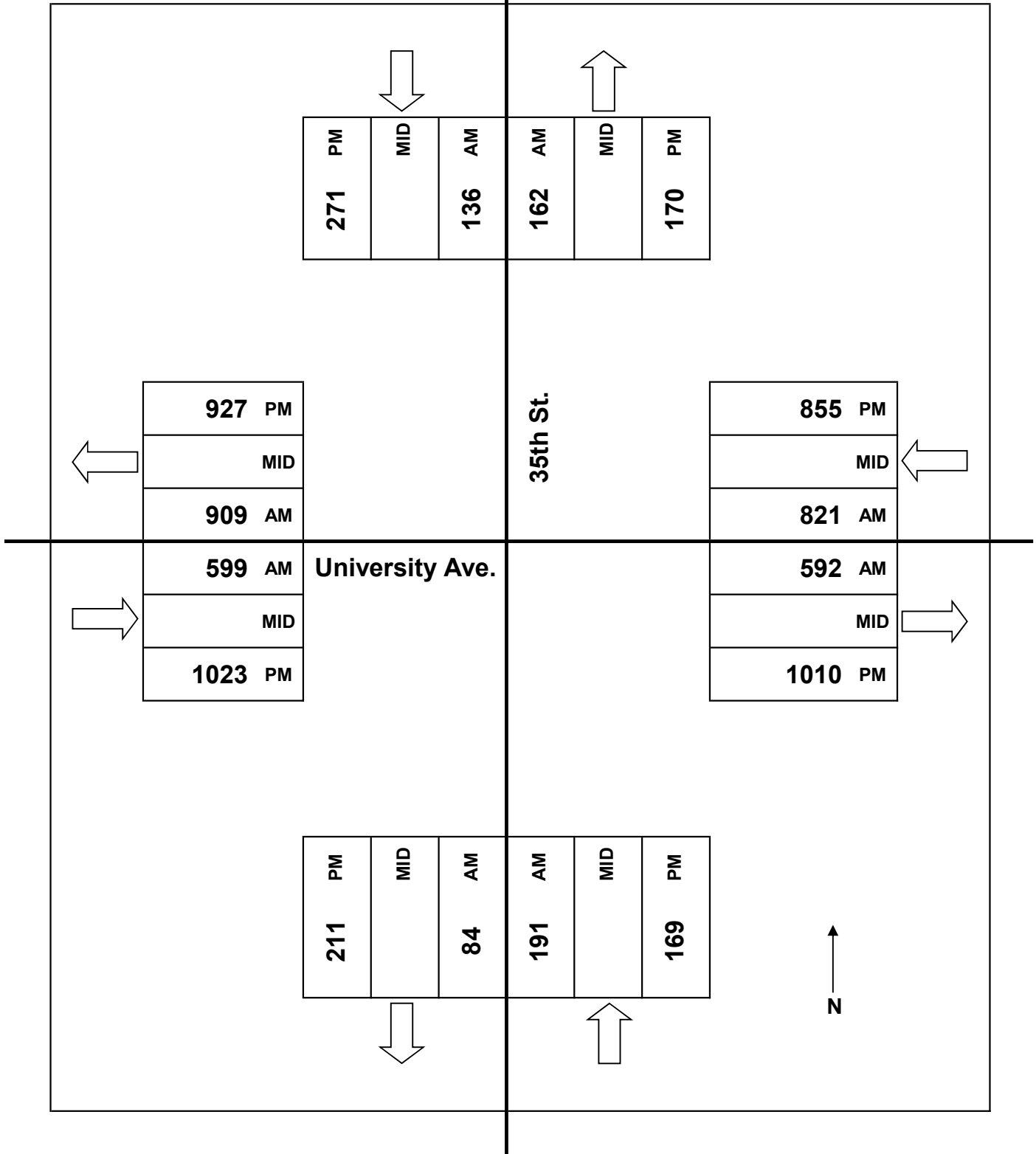
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	1	3	4	2
4:15 PM	5	4	2	5
4:30 PM	4	2	3	8
4:45 PM	2	1	1	4
5:00 PM	4	6	6	5
5:15 PM	4	2	5	6
5:30 PM	12	3	1	1
5:45 PM	4	1	5	14
<b>TOTAL</b>	<b>36</b>	<b>22</b>	<b>27</b>	<b>45</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	1	4	0	1
4:15 PM	0	0	1	0
4:30 PM	3	2	0	0
4:45 PM	0	3	0	2
5:00 PM	4	1	0	0
5:15 PM	3	3	0	1
5:30 PM	2	0	0	0
5:45 PM	0	6	0	1
<b>TOTAL</b>	<b>13</b>	<b>19</b>	<b>1</b>	<b>5</b>



JOB# IC 089-17  
VALIDATED: \_\_\_\_\_

DATE: 04/11/17  
DAY: TUESDAY



42) University Ave & I-15 SB Ramps

City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 16\_SDG\_15S\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	I-15 Southbound Off Ramp Southbound				University Avenue Westbound				I-15 Southbound On Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	34	13	31	78	47	62	0	109	0	0	0	0	0	68	50	118	305
07:15 AM	40	24	49	113	55	71	0	126	0	0	0	0	0	66	80	146	385
07:30 AM	44	27	45	116	57	93	0	150	0	0	0	0	0	87	82	169	435
07:45 AM	50	24	46	120	69	73	0	142	0	0	0	0	0	85	91	176	438
Total	168	88	171	427	228	299	0	527	0	0	0	0	0	306	303	609	1563
08:00 AM	48	28	44	120	67	87	0	154	0	0	0	0	0	74	80	154	428
08:15 AM	47	29	33	109	55	119	0	174	0	0	0	0	0	92	80	172	455
08:30 AM	48	20	38	106	51	96	0	147	0	0	0	0	0	102	86	188	441
08:45 AM	65	38	25	128	52	78	0	130	0	0	0	0	0	80	57	137	395
Total	208	115	140	463	225	380	0	605	0	0	0	0	0	348	303	651	1719
Grand Total	376	203	311	890	453	679	0	1132	0	0	0	0	0	654	606	1260	3282
Apprch %	42.2	22.8	34.9		40	60	0		0	0	0	0	0	51.9	48.1		
Total %	11.5	6.2	9.5	27.1	13.8	20.7	0	34.5	0	0	0	0	0	19.9	18.5	38.4	

Start Time	I-15 Southbound Off Ramp Southbound				University Avenue Westbound				I-15 Southbound On Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	<b>50</b>	24	<b>46</b>	<b>120</b>	<b>69</b>	73	0	142	0	0	0	0	0	85	<b>91</b>	176	438
08:00 AM	48	28	44	120	67	87	0	154	0	0	0	0	0	74	80	154	428
08:15 AM	47	<b>29</b>	33	109	55	<b>119</b>	0	<b>174</b>	0	0	0	0	0	92	80	172	<b>455</b>
08:30 AM	48	20	38	106	51	96	0	147	0	0	0	0	0	<b>102</b>	86	<b>188</b>	441
Total Volume	193	101	161	455	242	375	0	617	0	0	0	0	0	353	337	690	1762
% App. Total	42.4	22.2	35.4		39.2	60.8	0		0	0	0	0	0	51.2	48.8		
PHF	.965	.871	.875	.948	.877	.788	.000	.886	.000	.000	.000	.000	.000	.865	.926	.918	.968

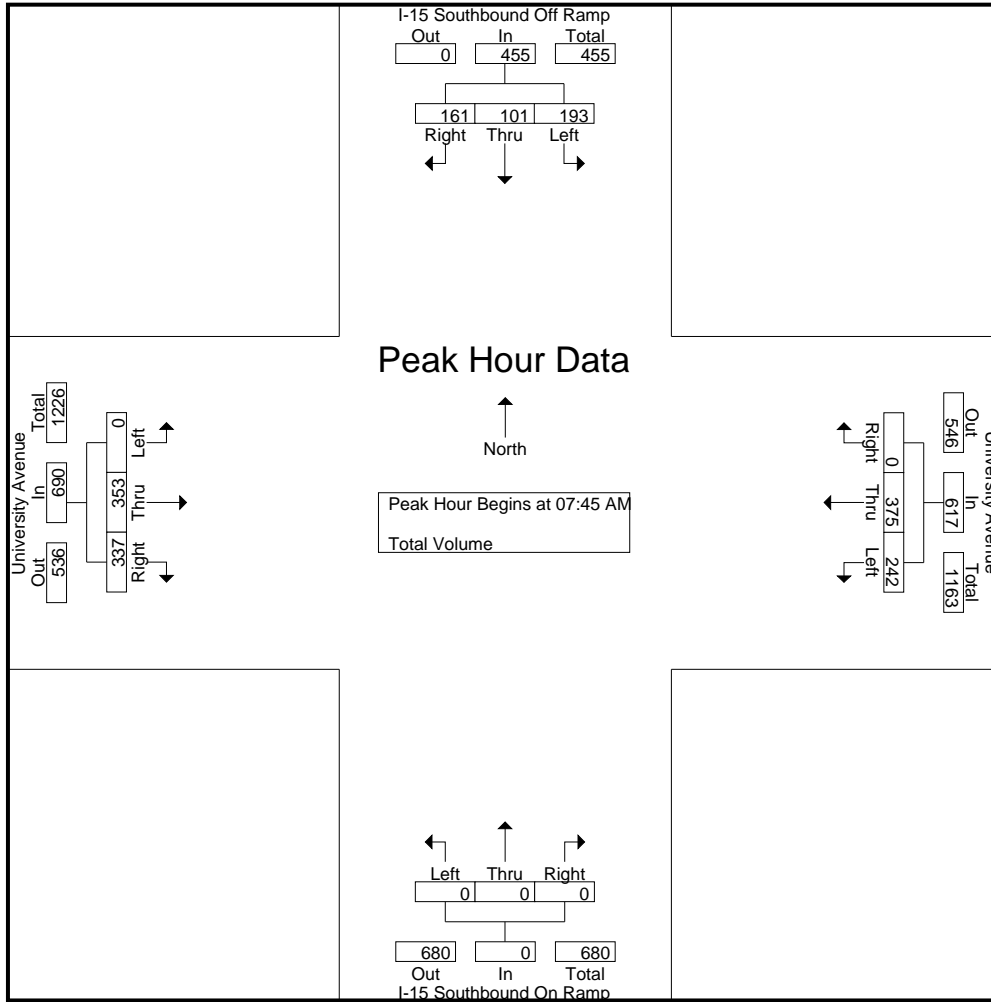
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM



City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 16\_SDG\_15S\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:00 AM				07:45 AM			
+0 mins.	40	24	<b>49</b>	113	57	93	0	150	0	0	0	0	0	85	<b>91</b>	176
+15 mins.	44	27	45	116	<b>69</b>	73	0	142	0	0	0	0	0	74	80	154
+30 mins.	<b>50</b>	24	46	<b>120</b>	67	87	0	154	0	0	0	0	0	92	80	172
+45 mins.	48	<b>28</b>	44	120	55	<b>119</b>	0	<b>174</b>	0	0	0	0	0	<b>102</b>	86	<b>188</b>
Total Volume	182	103	184	469	248	372	0	620	0	0	0	0	0	353	337	690
% App. Total	38.8	22	39.2		40	60	0		0	0	0	0	0	51.2	48.8	
PHF	.910	.920	.939	.977	.899	.782	.000	.891	.000	.000	.000	.000	.000	.865	.926	.918

City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 16\_SDG\_15S\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

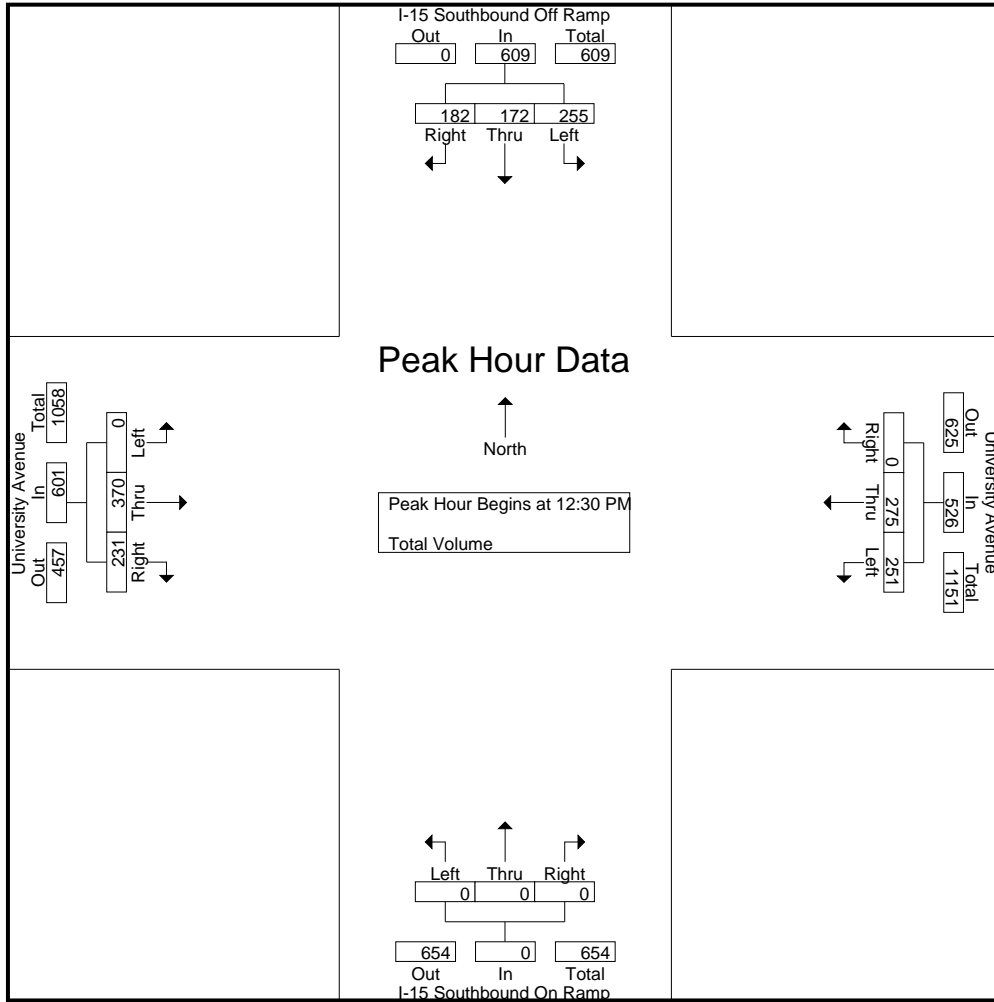
Start Time	I-15 Southbound Off Ramp Southbound				University Avenue Westbound				I-15 Southbound On Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	65	26	40	131	54	79	0	133	0	0	0	0	0	83	51	134	398
11:45 AM	53	29	44	126	72	92	0	164	0	0	0	0	0	76	55	131	421
Total	118	55	84	257	126	171	0	297	0	0	0	0	0	159	106	265	819
12:00 PM	54	28	43	125	67	80	0	147	0	0	0	0	0	83	53	136	408
12:15 PM	59	31	57	147	66	78	0	144	0	0	0	0	0	88	44	132	423
12:30 PM	58	52	50	160	58	65	0	123	0	0	0	0	0	105	58	163	446
12:45 PM	58	38	47	143	61	65	0	126	0	0	0	0	0	93	65	158	427
Total	229	149	197	575	252	288	0	540	0	0	0	0	0	369	220	589	1704
01:00 PM	57	39	50	146	66	60	0	126	0	0	0	0	0	83	53	136	408
01:15 PM	82	43	35	160	66	85	0	151	0	0	0	0	0	89	55	144	455
Grand Total	486	286	366	1138	510	604	0	1114	0	0	0	0	0	700	434	1134	3386
Apprch %	42.7	25.1	32.2		45.8	54.2	0		0	0	0	0	0	61.7	38.3		
Total %	14.4	8.4	10.8	33.6	15.1	17.8	0	32.9	0	0	0	0	0	20.7	12.8	33.5	

Start Time	I-15 Southbound Off Ramp Southbound				University Avenue Westbound				I-15 Southbound On Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:30 PM	58	<b>52</b>	<b>50</b>	<b>160</b>	58	65	0	123	0	0	0	0	0	<b>105</b>	58	<b>163</b>	446
12:45 PM	58	38	47	143	61	65	0	126	0	0	0	0	0	93	<b>65</b>	158	427
01:00 PM	57	39	50	146	<b>66</b>	60	0	126	0	0	0	0	0	83	53	136	408
01:15 PM	<b>82</b>	43	35	160	66	<b>85</b>	0	<b>151</b>	0	0	0	0	0	89	55	144	<b>455</b>
Total Volume	255	172	182	609	251	275	0	526	0	0	0	0	0	370	231	601	1736
% App. Total	41.9	28.2	29.9		47.7	52.3	0		0	0	0	0	0	61.6	38.4		
PHF	.777	.827	.910	.952	.951	.809	.000	.871	.000	.000	.000	.000	.000	.881	.888	.922	.954

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:30 PM

City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 16\_SDG\_15S\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:30 PM				11:30 AM				11:30 AM				12:30 PM			
+0 mins.	58	<b>52</b>	<b>50</b>	<b>160</b>	54	79	0	133	0	0	0	0	0	<b>105</b>	58	<b>163</b>
+15 mins.	58	38	47	143	<b>72</b>	<b>92</b>	0	<b>164</b>	0	0	0	0	0	93	<b>65</b>	158
+30 mins.	57	39	50	146	67	80	0	147	0	0	0	0	0	83	53	136
+45 mins.	<b>82</b>	43	35	160	66	78	0	144	0	0	0	0	0	89	55	144
Total Volume	255	172	182	609	259	329	0	588	0	0	0	0	0	370	231	601
% App. Total	41.9	28.2	29.9		44	56	0		0	0	0	0	0	61.6	38.4	
PHF	.777	.827	.910	.952	.899	.894	.000	.896	.000	.000	.000	.000	.000	.881	.888	.922

City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 16\_SDG\_15S\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

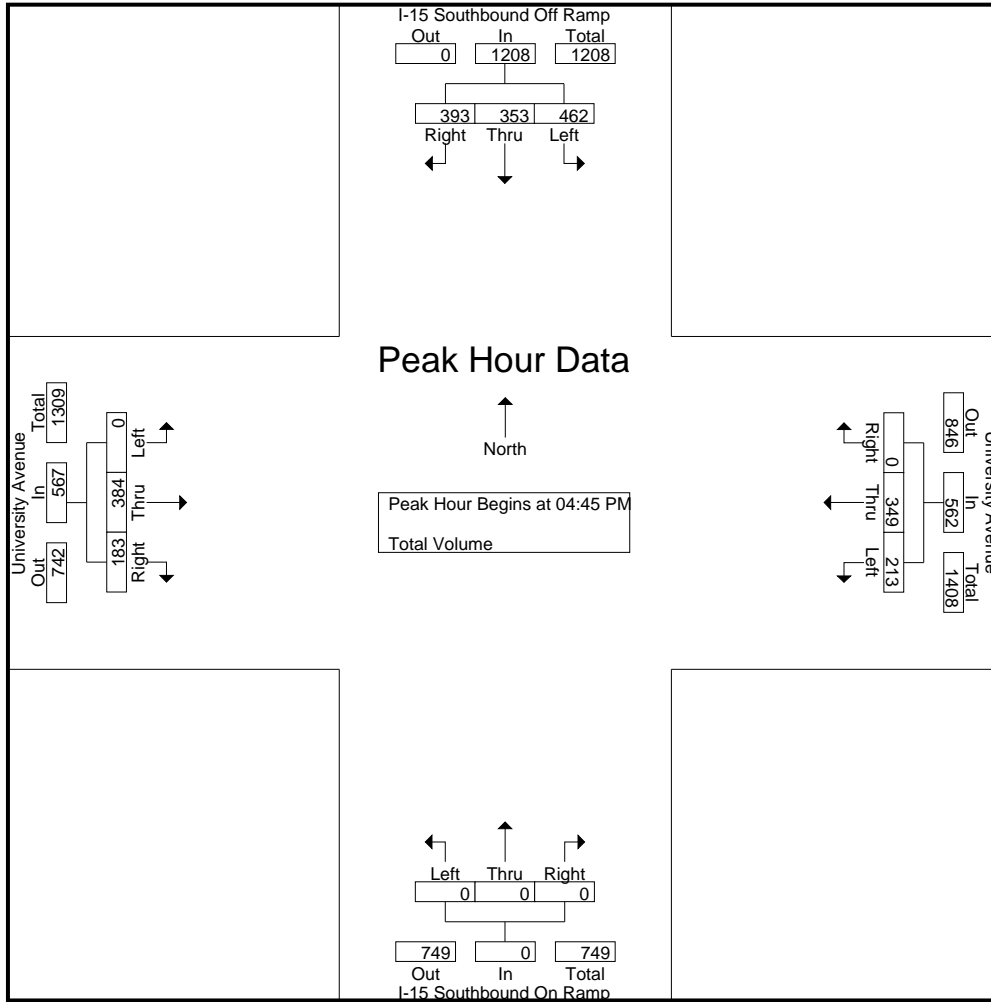
Start Time	I-15 Southbound Off Ramp Southbound				University Avenue Westbound				I-15 Southbound On Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	115	97	90	302	43	77	0	120	0	0	0	0	0	107	37	144	566
04:15 PM	110	89	66	265	34	99	0	133	0	0	0	0	0	75	38	113	511
04:30 PM	123	95	73	291	41	88	0	129	0	0	0	0	0	95	54	149	569
04:45 PM	110	92	92	294	55	76	0	131	0	0	0	0	0	108	41	149	574
Total	458	373	321	1152	173	340	0	513	0	0	0	0	0	385	170	555	2220
05:00 PM	124	82	108	314	59	99	0	158	0	0	0	0	0	98	57	155	627
05:15 PM	112	89	85	286	50	65	0	115	0	0	0	0	0	91	46	137	538
05:30 PM	116	90	108	314	49	109	0	158	0	0	0	0	0	87	39	126	598
05:45 PM	104	80	90	274	59	88	0	147	0	0	0	0	0	92	48	140	561
Total	456	341	391	1188	217	361	0	578	0	0	0	0	0	368	190	558	2324
Grand Total	914	714	712	2340	390	701	0	1091	0	0	0	0	0	753	360	1113	4544
Apprch %	39.1	30.5	30.4		35.7	64.3	0		0	0	0	0	0	67.7	32.3		
Total %	20.1	15.7	15.7	51.5	8.6	15.4	0	24	0	0	0	0	0	16.6	7.9	24.5	

Start Time	I-15 Southbound Off Ramp Southbound				University Avenue Westbound				I-15 Southbound On Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	110	<b>92</b>	92	294	55	76	0	131	0	0	0	0	0	<b>108</b>	41	149	574
05:00 PM	<b>124</b>	82	<b>108</b>	<b>314</b>	<b>59</b>	99	0	<b>158</b>	0	0	0	0	0	98	<b>57</b>	<b>155</b>	<b>627</b>
05:15 PM	112	89	85	286	50	65	0	115	0	0	0	0	0	91	46	137	538
05:30 PM	116	90	108	314	49	<b>109</b>	0	158	0	0	0	0	0	87	39	126	598
Total Volume	462	353	393	1208	213	349	0	562	0	0	0	0	0	384	183	567	2337
% App. Total	38.2	29.2	32.5		37.9	62.1	0		0	0	0	0	0	67.7	32.3		
PHF	.931	.959	.910	.962	.903	.800	.000	.889	.000	.000	.000	.000	.000	.889	.803	.915	.932

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:45 PM

City of San Diego  
 N/S: I-15 Southbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 16\_SDG\_15S\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				04:00 PM				04:30 PM			
+0 mins.	110	<b>92</b>	92	294	<b>59</b>	99	0	<b>158</b>	0	0	0	0	0	95	54	149
+15 mins.	<b>124</b>	82	<b>108</b>	<b>314</b>	50	65	0	115	0	0	0	0	0	<b>108</b>	41	149
+30 mins.	112	89	85	286	49	<b>109</b>	0	158	0	0	0	0	0	98	<b>57</b>	<b>155</b>
+45 mins.	116	90	108	314	59	88	0	147	0	0	0	0	0	91	46	137
Total Volume	462	353	393	1208	217	361	0	578	0	0	0	0	0	392	198	590
% App. Total	38.2	29.2	32.5		37.5	62.5	0		0	0	0		0	66.4	33.6	
PHF	.931	.959	.910	.962	.919	.828	.000	.915	.000	.000	.000	.000	.000	.907	.868	.952

Location: San Diego  
 N/S: I-15 SB Ramps  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg I-15 SB Ramps	East Leg University Avenue	South Leg I-15 SB Ramps	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	7	2	4	0	13
7:15 AM	7	2	5	0	14
7:30 AM	9	1	7	2	19
7:45 AM	12	2	5	0	19
8:00 AM	17	6	4	0	27
8:15 AM	24	4	14	3	45
8:30 AM	6	3	4	1	14
8:45 AM	5	1	6	1	13
TOTAL VOLUMES:	87	21	49	7	164

	North Leg I-15 SB Ramps	East Leg University Avenue	South Leg I-15 SB Ramps	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	43	3	11	2	59
11:45 AM	28	0	7	5	40
12:00 PM	22	4	14	8	48
12:15 PM	8	4	13	6	31
12:30 PM	3	4	10	0	17
12:45 PM	7	1	5	1	14
1:00 PM	10	4	5	2	21
1:15 PM	5	0	6	1	12
TOTAL VOLUMES:	126	20	71	25	242

	North Leg I-15 SB Ramps	East Leg University Avenue	South Leg I-15 SB Ramps	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	12	4	0	0	16
4:15 PM	4	2	4	0	10
4:30 PM	3	4	10	0	17
4:45 PM	13	1	4	0	18
5:00 PM	12	8	5	1	26
5:15 PM	12	6	12	2	32
5:30 PM	14	8	3	2	27
5:45 PM	9	3	7	0	19
TOTAL VOLUMES:	79	36	45	5	165

Location: San Diego  
 N/S: I-15 SB Ramps  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound I-15 SB Ramps			Westbound University Avenue			Northbound I-15 SB Ramps			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	1	0	1

	Southbound I-15 SB Ramps			Westbound University Avenue			Northbound I-15 SB Ramps			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	0	0	2

	Southbound I-15 SB Ramps			Westbound University Avenue			Northbound I-15 SB Ramps			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	1	0	3

43) I-15 NB Ramps & University Ave



City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 17\_SDG\_15N\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

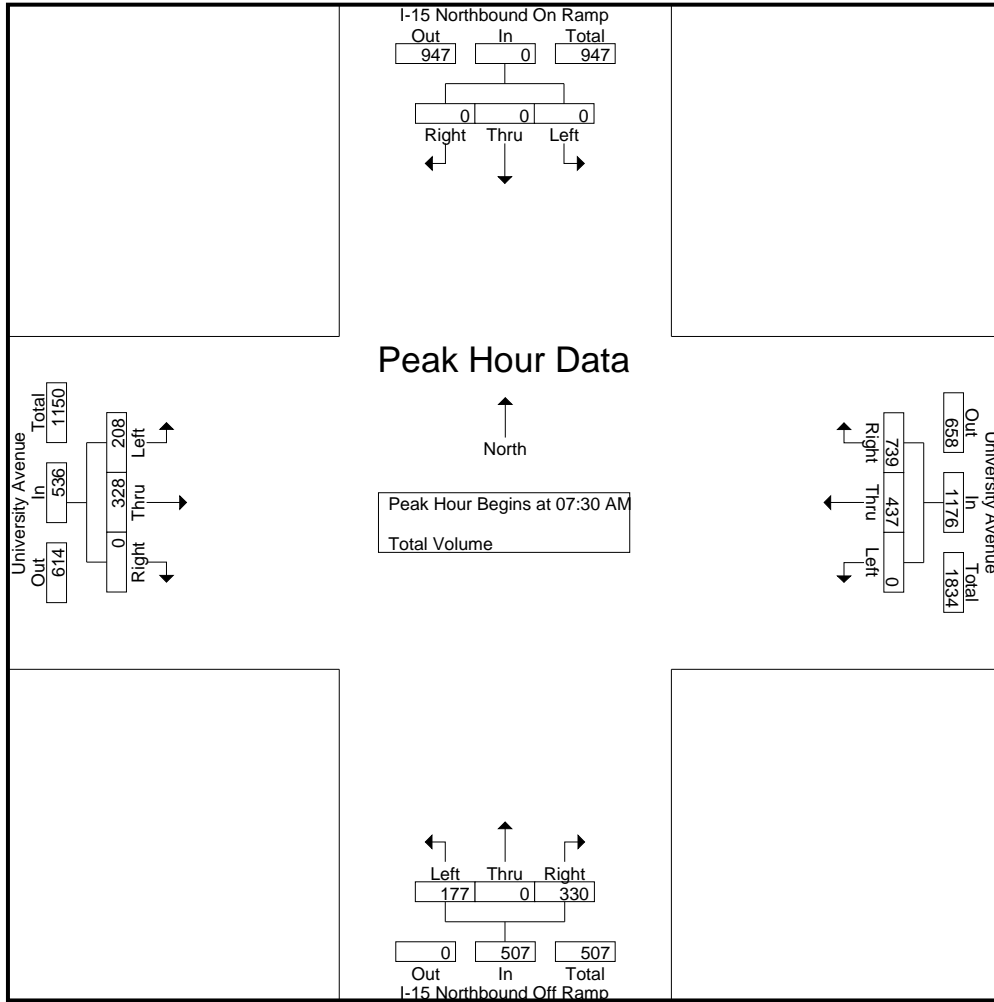
Start Time	I-15 Northbound On Ramp Southbound				University Avenue Westbound				I-15 Northbound Off Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	84	164	248	27	0	47	74	39	61	0	100	422
07:15 AM	0	0	0	0	0	78	210	288	41	1	66	108	44	55	0	99	495
07:30 AM	0	0	0	0	0	107	207	314	45	0	71	116	53	73	0	126	556
07:45 AM	0	0	0	0	0	107	193	300	31	0	87	118	60	76	0	136	554
Total	0	0	0	0	0	376	774	1150	144	1	271	416	196	265	0	461	2027
08:00 AM	0	0	0	0	0	104	188	292	48	0	78	126	41	87	0	128	546
08:15 AM	0	0	0	0	0	119	151	270	53	0	94	147	54	92	0	146	563
08:30 AM	0	0	0	0	0	99	150	249	51	0	79	130	50	99	0	149	528
08:45 AM	0	0	0	0	0	100	143	243	34	0	100	134	42	100	0	142	519
Total	0	0	0	0	0	422	632	1054	186	0	351	537	187	378	0	565	2156
Grand Total	0	0	0	0	0	798	1406	2204	330	1	622	953	383	643	0	1026	4183
Apprch %	0	0	0	0	0	36.2	63.8		34.6	0.1	65.3		37.3	62.7	0		
Total %	0	0	0	0	0	19.1	33.6	52.7	7.9	0	14.9	22.8	9.2	15.4	0	24.5	

Start Time	I-15 Northbound On Ramp Southbound				University Avenue Westbound				I-15 Northbound Off Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	107	<b>207</b>	<b>314</b>	45	0	71	116	53	73	0	126	556
07:45 AM	0	0	0	0	0	107	193	300	31	0	87	118	<b>60</b>	76	0	136	554
08:00 AM	0	0	0	0	0	104	188	292	48	0	78	126	41	87	0	128	546
08:15 AM	0	0	0	0	0	<b>119</b>	151	270	<b>53</b>	0	<b>94</b>	<b>147</b>	54	<b>92</b>	0	<b>146</b>	<b>563</b>
Total Volume	0	0	0	0	0	437	739	1176	177	0	330	507	208	328	0	536	2219
% App. Total	0	0	0	0	0	37.2	62.8		34.9	0	65.1		38.8	61.2	0		
PHF	.000	.000	.000	.000	.000	.918	.893	.936	.835	.000	.878	.862	.867	.891	.000	.918	.985

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 17\_SDG\_15N\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	78	210	288	48	0	78	126	41	87	0	128
+15 mins.	0	0	0	0	0	107	207	314	53	0	94	147	54	92	0	146
+30 mins.	0	0	0	0	0	107	193	300	51	0	79	130	50	99	0	149
+45 mins.	0	0	0	0	0	104	188	292	34	0	100	134	42	100	0	142
Total Volume	0	0	0	0	0	396	798	1194	186	0	351	537	187	378	0	565
% App. Total	0	0	0	0	0	33.2	66.8		34.6	0	65.4		33.1	66.9	0	
PHF	.000	.000	.000	.000	.000	.925	.950	.951	.877	.000	.878	.913	.866	.945	.000	.948

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 17\_SDG\_15N\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

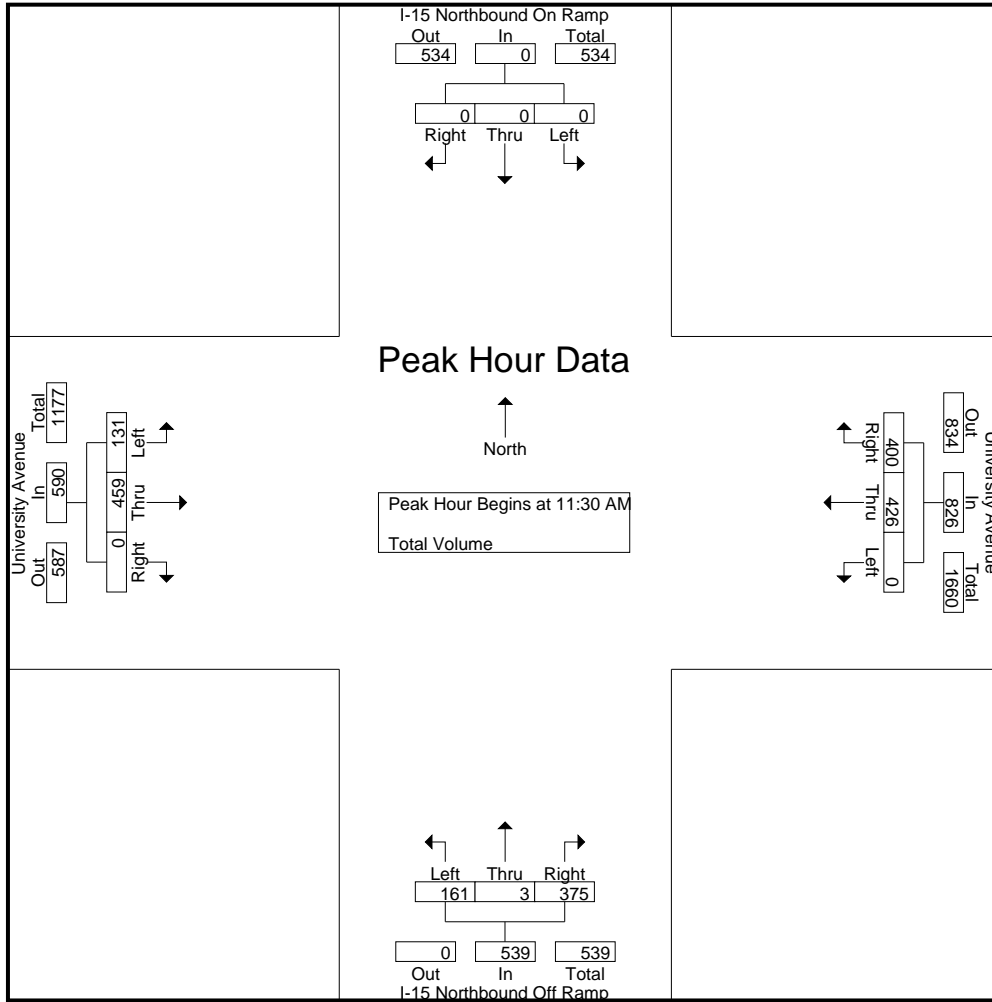
Start Time	I-15 Northbound On Ramp Southbound				University Avenue Westbound				I-15 Northbound Off Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	0	0	0	0	0	98	116	214	36	1	93	130	36	119	0	155	499
11:45 AM	0	0	0	0	0	114	95	209	48	1	97	146	26	108	0	134	489
Total	0	0	0	0	0	212	211	423	84	2	190	276	62	227	0	289	988
12:00 PM	0	0	0	0	0	106	86	192	45	1	85	131	32	116	0	148	471
12:15 PM	0	0	0	0	0	108	103	211	32	0	100	132	37	116	0	153	496
12:30 PM	0	0	0	0	0	94	93	187	35	0	78	113	40	118	0	158	458
12:45 PM	0	0	0	0	0	105	106	211	30	0	99	129	28	121	0	149	489
Total	0	0	0	0	0	413	388	801	142	1	362	505	137	471	0	608	1914
01:00 PM	0	0	0	0	0	98	108	206	32	2	100	134	30	109	0	139	479
01:15 PM	0	0	0	0	0	106	104	210	42	0	87	129	43	133	0	176	515
Grand Total	0	0	0	0	0	829	811	1640	300	5	739	1044	272	940	0	1212	3896
Apprch %	0	0	0	0	0	50.5	49.5		28.7	0.5	70.8		22.4	77.6	0		
Total %	0	0	0	0	0	21.3	20.8	42.1	7.7	0.1	19	26.8	7	24.1	0	31.1	

Start Time	I-15 Northbound On Ramp Southbound				University Avenue Westbound				I-15 Northbound Off Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	0	0	0	0	0	98	<b>116</b>	<b>214</b>	36	<b>1</b>	93	130	36	<b>119</b>	0	<b>155</b>	<b>499</b>
11:45 AM	0	0	0	0	0	<b>114</b>	95	209	<b>48</b>	1	97	<b>146</b>	26	108	0	134	489
12:00 PM	0	0	0	0	0	106	86	192	45	1	85	131	32	116	0	148	471
12:15 PM	0	0	0	0	0	108	103	211	32	0	<b>100</b>	132	<b>37</b>	116	0	153	496
Total Volume	0	0	0	0	0	426	400	826	161	3	375	539	131	459	0	590	1955
% App. Total	0	0	0	0	0	51.6	48.4		29.9	0.6	69.6		22.2	77.8	0		
PHF	.000	.000	.000	.000	.000	.934	.862	.965	.839	.750	.938	.923	.885	.964	.000	.952	.979

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 11:30 AM

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 17\_SDG\_15N\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	11:30 AM				11:30 AM				11:30 AM				12:30 PM			
+0 mins.	0	0	0	0	0	98	116	214	36	1	93	130	40	118	0	158
+15 mins.	0	0	0	0	0	114	95	209	48	1	97	146	28	121	0	149
+30 mins.	0	0	0	0	0	106	86	192	45	1	85	131	30	109	0	139
+45 mins.	0	0	0	0	0	108	103	211	32	0	100	132	43	133	0	176
Total Volume	0	0	0	0	0	426	400	826	161	3	375	539	141	481	0	622
% App. Total	0	0	0	0	0	51.6	48.4		29.9	0.6	69.6		22.7	77.3	0	
PHF	.000	.000	.000	.000	.000	.934	.862	.965	.839	.750	.938	.923	.820	.904	.000	.884

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 17\_SDG\_15N\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

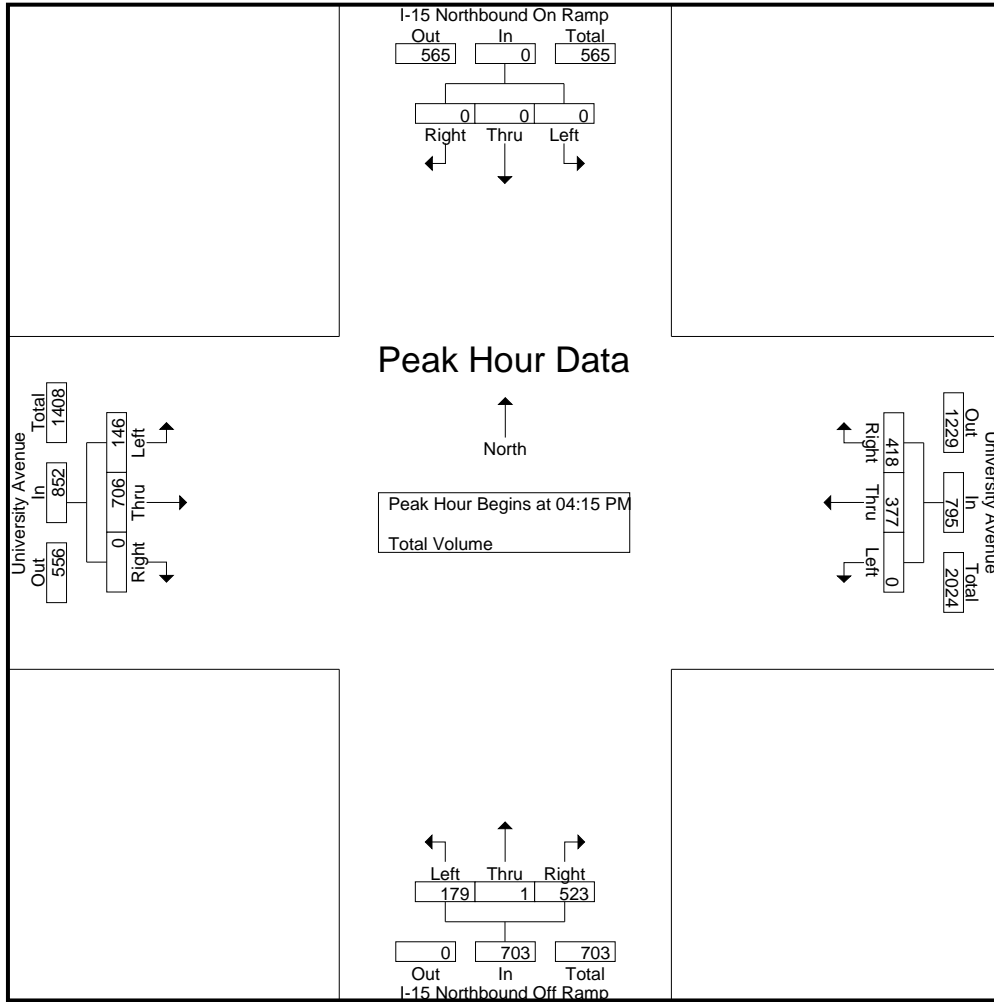
Start Time	I-15 Northbound On Ramp Southbound				University Avenue Westbound				I-15 Northbound Off Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	86	93	179	35	0	132	167	36	179	0	215	561
04:15 PM	0	0	0	0	0	86	89	175	54	1	131	186	35	159	0	194	555
04:30 PM	0	0	0	0	0	88	117	205	38	0	133	171	35	176	0	211	587
04:45 PM	0	0	0	0	0	95	98	193	35	0	121	156	42	177	0	219	568
Total	0	0	0	0	0	355	397	752	162	1	517	680	148	691	0	839	2271
05:00 PM	0	0	0	0	0	108	114	222	52	0	138	190	34	194	0	228	640
05:15 PM	0	0	0	0	0	76	88	164	37	0	143	180	46	162	0	208	552
05:30 PM	0	0	0	0	0	116	100	216	36	0	130	166	29	172	0	201	583
05:45 PM	0	0	0	0	0	106	89	195	37	0	118	155	39	166	0	205	555
Total	0	0	0	0	0	406	391	797	162	0	529	691	148	694	0	842	2330
Grand Total	0	0	0	0	0	761	788	1549	324	1	1046	1371	296	1385	0	1681	4601
Apprch %	0	0	0	0	0	49.1	50.9		23.6	0.1	76.3		17.6	82.4	0		
Total %	0	0	0	0	0	16.5	17.1	33.7	7	0	22.7	29.8	6.4	30.1	0	36.5	

Start Time	I-15 Northbound On Ramp Southbound				University Avenue Westbound				I-15 Northbound Off Ramp Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	86	89	175	<b>54</b>	<b>1</b>	131	186	35	159	0	194	555
04:30 PM	0	0	0	0	0	88	<b>117</b>	205	38	0	133	171	35	176	0	211	587
04:45 PM	0	0	0	0	0	95	98	193	35	0	121	156	<b>42</b>	177	0	219	568
05:00 PM	0	0	0	0	0	<b>108</b>	114	<b>222</b>	52	0	<b>138</b>	<b>190</b>	34	<b>194</b>	0	<b>228</b>	<b>640</b>
Total Volume	0	0	0	0	0	377	418	795	179	1	523	703	146	706	0	852	2350
% App. Total	0	0	0	0	0	47.4	52.6		25.5	0.1	74.4		17.1	82.9	0		
PHF	.000	.000	.000	.000	.000	.873	.893	.895	.829	.250	.947	.925	.869	.910	.000	.934	.918

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:15 PM

City of San Diego  
 N/S: I-15 Northbound Ramps  
 E/W: University Avenue  
 Weather: Clear

File Name : 17\_SDG\_15N\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				04:15 PM				04:30 PM			
+0 mins.	0	0	0	0	0	108	<b>114</b>	<b>222</b>	<b>54</b>	<b>1</b>	131	186	35	176	0	211
+15 mins.	0	0	0	0	0	76	88	164	38	0	133	171	42	177	0	219
+30 mins.	0	0	0	0	0	<b>116</b>	100	216	35	0	121	156	34	<b>194</b>	0	<b>228</b>
+45 mins.	0	0	0	0	0	106	89	195	52	0	<b>138</b>	<b>190</b>	<b>46</b>	162	0	208
Total Volume	0	0	0	0	0	406	391	797	179	1	523	703	157	709	0	866
% App. Total	0	0	0	0	0	50.9	49.1		25.5	0.1	74.4		18.1	81.9	0	
PHF	.000	.000	.000	.000	.000	.875	.857	.898	.829	.250	.947	.925	.853	.914	.000	.950

Location: San Diego  
 N/S: I-15 NB Ramps  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg I-15 NB Ramps	East Leg University Avenue	South Leg I-15 NB Ramps	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	6	3	10	9	28
7:15 AM	6	5	13	6	30
7:30 AM	15	8	23	6	52
7:45 AM	8	5	11	4	28
8:00 AM	11	2	19	5	37
8:15 AM	17	9	9	2	37
8:30 AM	5	6	5	5	21
8:45 AM	6	2	16	6	30
TOTAL VOLUMES:	74	40	106	43	263

	North Leg I-15 NB Ramps	East Leg University Avenue	South Leg I-15 NB Ramps	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	42	8	19	10	79
11:45 AM	29	2	21	1	53
12:00 PM	14	7	11	2	34
12:15 PM	8	3	15	3	29
12:30 PM	0	7	16	3	26
12:45 PM	10	5	9	6	30
1:00 PM	10	2	9	1	22
1:15 PM	2	3	8	1	14
TOTAL VOLUMES:	115	37	108	27	287

	North Leg I-15 NB Ramps	East Leg University Avenue	South Leg I-15 NB Ramps	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	11	9	8	2	30
4:15 PM	10	3	8	3	24
4:30 PM	6	3	16	5	30
4:45 PM	3	4	11	6	24
5:00 PM	13	5	18	5	41
5:15 PM	4	3	9	4	20
5:30 PM	18	3	13	7	41
5:45 PM	10	6	21	8	45
TOTAL VOLUMES:	75	36	104	40	255

Location: San Diego  
 N/S: I-15 NB Ramps  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound I-15 NB Ramps			Westbound University Avenue			Northbound I-15 NB Ramps			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	1	0	1

	Southbound I-15 NB Ramps			Westbound University Avenue			Northbound I-15 NB Ramps			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	0	0	2

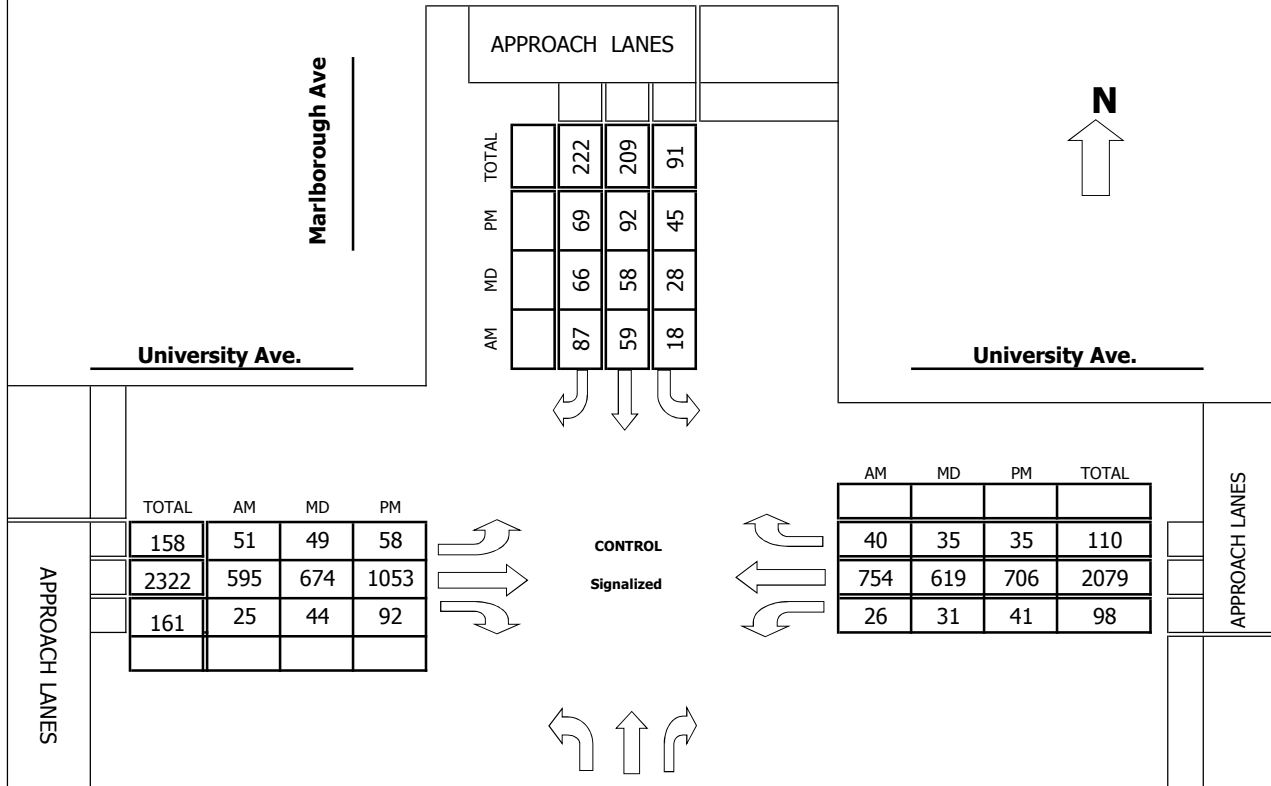
	Southbound I-15 NB Ramps			Westbound University Avenue			Northbound I-15 NB Ramps			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	4	0	0	0	0	0	4	0	8



44) Marlborough Ave & University Ave

**Project #:** IC 075-15

**TMC SUMMARY OF Marlborough Ave. & University Ave.**



TOTAL	AM	MD	PM
158	51	49	58
2322	595	674	1053
161	25	44	92

AM	MD	PM	TOTAL
40	35	35	110
754	619	706	2079
26	31	41	98

TOTAL	AM	MD	PM
222	90	64	68
205	108	45	52
88	24	34	30

**LOCATION #:** IC 075-15

**TURNING MOVEMENT COUNT**

**Marlborough Ave. & University Ave.**  
(Intersection Name)

WEDNESDAY  
Day

04/08/2015  
Date

**COUNT PERIODS**

<b>AM</b>	700AM - 900AM
<b>NOON</b>	1100AM - 100PM
<b>PM</b>	300PM - 500PM

AM PEAK HOUR 715 AM

NOON PEAK HOUR 1145 AM

PM PEAK HOUR 330 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Marlborough Ave.**      DATE: **04/08/2015**      LOCATION: **San Diego**  
 E-W STREET: **University Ave.**      DAY: **WEDNESDAY**      PROJECT# **IC 075-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	2	0	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	15	13	4	4	10	26	11	88	5	0	142	7	325
7:15 AM	19	39	5	2	12	17	9	123	3	9	198	11	447
7:30 AM	29	30	7	2	13	21	20	127	4	4	192	11	460
7:45 AM	21	23	6	9	15	22	14	166	7	5	191	8	487
8:00 AM	21	16	6	5	19	27	8	179	11	8	173	10	483
8:15 AM	13	19	6	2	12	16	16	159	9	9	166	8	435
8:30 AM	19	18	9	4	12	15	11	151	4	11	200	5	459
8:45 AM	28	13	9	1	10	22	11	124	12	7	198	9	444
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	165	171	52	29	103	166	100	1117	55	53	1460	69	3540
Approach %	42.53	44.07	13.40	9.73	34.56	55.70	7.86	87.81	4.32	3.35	92.29	4.36	
App/Depart	388	/	340	298	/	211	1272	/	1198	1582	/	1791	

AM Peak Hr Begins at: 715 AM

**PEAK**

Volumes	90	108	24	18	59	87	51	595	25	26	754	40	1877
Approach %	40.54	48.65	10.81	10.98	35.98	53.05	7.60	88.67	3.73	3.17	91.95	4.88	

**PEAK HR.**

FACTOR:	0.841	0.804	0.847	0.940	0.964
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CONTROL: **Signalized**

COMMENT 1:

GPS: **32.749658, -117.105717**

# Intersection Turning Movement

Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Marlborough Ave.**

DATE: **04/08/2015**

LOCATION: **San Diego**

E-W STREET: **University Ave.**

DAY: **WEDNESDAY**

PROJECT# **IC 075-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	2	0	1	1	0	
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM	16	12	8	5	6	15	3	149	13	7	168	4	406
11:15 AM	11	11	11	7	13	17	7	161	12	11	159	7	427
11:30 AM	20	14	7	3	12	13	6	155	9	10	164	10	423
11:45 AM	14	11	4	4	22	14	18	148	10	10	180	5	440
12:00 PM	24	15	10	9	14	17	10	152	12	8	159	14	444
12:15 PM	14	8	9	4	11	18	14	204	7	4	124	7	424
12:30 PM	12	11	11	11	11	17	7	170	15	9	156	9	439
12:45 PM	12	9	7	7	16	12	7	156	12	14	161	7	420
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	123	91	67	50	105	123	72	1295	90	73	1271	63	3423
Approach %	43.77	32.38	23.84	17.99	37.77	44.24	4.94	88.88	6.18	5.19	90.33	4.48	
App/Depart	281	/	226	278	/	268	1457	/	1412	1407	/	1517	

NOON Peak Hr Begins at: 1145 AM

**PEAK**

Volumes	64	45	34	28	58	66	49	674	44	31	619	35	1747
Approach %	44.76	31.47	23.78	18.42	38.16	43.42	6.39	87.87	5.74	4.53	90.36	5.11	

**PEAK HR.**

FACTOR:	0.730	0.950	0.852	0.878	0.984
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CONTROL: **Signalized**

COMMENT 1: **0**

GPS: **32.749658, -117.105717**

HOURS:

	FROM:		TO:	
AM	700	AM	900	AM
NOON	1100	AM	100	PM
PM	300	PM	500	PM

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Marlborough Ave.**      DATE: **04/08/2015**      LOCATION: **San Diego**  
 E-W STREET: **University Ave.**      DAY: **WEDNESDAY**      PROJECT# **IC 075-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	2	0	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM	9	15	4	9	23	22	10	224	10	12	142	11	491
3:15 PM	18	15	18	10	15	14	7	235	16	10	164	6	528
3:30 PM	20	13	8	11	21	14	13	259	13	10	172	7	561
3:45 PM	17	14	9	11	20	19	13	261	31	8	175	6	584
4:00 PM	18	13	5	10	28	21	17	294	26	5	184	13	634
4:15 PM	13	12	8	13	23	15	15	239	22	18	175	9	562
4:30 PM	19	28	18	8	26	5	8	223	18	5	168	5	531
4:45 PM	18	23	10	12	25	12	9	209	20	21	142	10	511
5:00 PM													
5:15 PM													
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	132	133	80	84	181	122	92	1944	156	89	1322	67	4402
Approach %	38.26	38.55	23.19	21.71	46.77	31.52	4.20	88.69	7.12	6.02	89.45	4.53	
App/Depart	345	/	292	387	/	426	2192	/	2108	1478	/	1576	

PM Peak Hr Begins at: 330 PM

**PEAK**

Volumes	68	52	30	45	92	69	58	1053	92	41	706	35	2341
Approach %	45.33	34.67	20.00	21.84	44.66	33.50	4.82	87.53	7.65	5.24	90.28	4.48	

**PEAK HR.**

FACTOR:	0.915	0.873	0.892	0.968	0.923
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CONTROL: **Signalized**  
 COMMENT 1: **0**  
 GPS: **32.749658, -117.105717**



### Pedestrian & Bicycle Study

**N-S STREET:** Marlborough Ave.  
**E-W STREET:** University Ave.

**Date:** 04/08/2015  
**Day:** WEDNESDAY

**City:** San Diego  
**Project #:** IC 075-15

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	7	13	5	5
7:15 AM	13	2	5	20
7:30 AM	16	49	27	43
7:45 AM	18	21	23	41
8:00 AM	19	24	18	15
8:15 AM	3	18	4	19
8:30 AM	5	8	9	13
8:45 AM	5	8	4	9
<b>TOTAL</b>	<b>86</b>	<b>143</b>	<b>95</b>	<b>165</b>

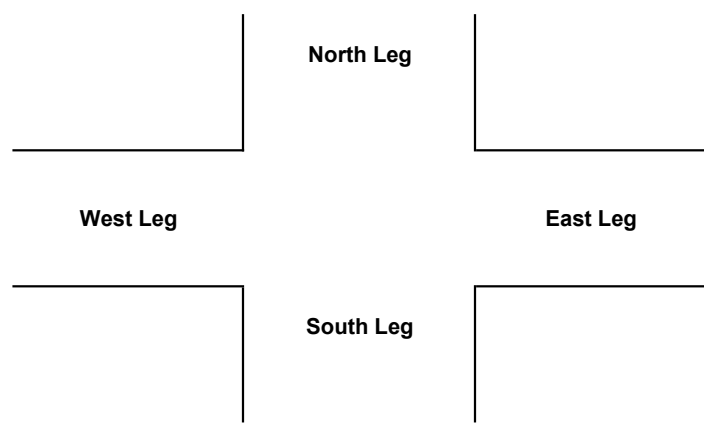
	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	1	0	0	0
7:15 AM	1	0	0	0
7:30 AM	2	0	0	0
7:45 AM	1	1	0	0
8:00 AM	1	0	0	0
8:15 AM	0	1	0	0
8:30 AM	2	0	0	0
8:45 AM	1	0	0	1
<b>TOTAL</b>	<b>9</b>	<b>2</b>	<b>0</b>	<b>1</b>

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
11:00 AM	4	17	13	13
11:15 AM	6	13	11	4
11:30 AM	11	12	11	14
11:45 AM	1	29	18	13
12:00 PM	14	27	6	8
12:15 PM	11	12	6	7
12:30 PM	10	23	6	5
12:45 PM	10	20	9	9
<b>TOTAL</b>	<b>67</b>	<b>153</b>	<b>80</b>	<b>73</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
11:00 AM	1	1	0	0
11:15 AM	1	1	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	0
12:00 PM	0	0	0	0
12:15 PM	0	2	0	0
12:30 PM	0	0	0	0
12:45 PM	2	2	2	0
<b>TOTAL</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>0</b>

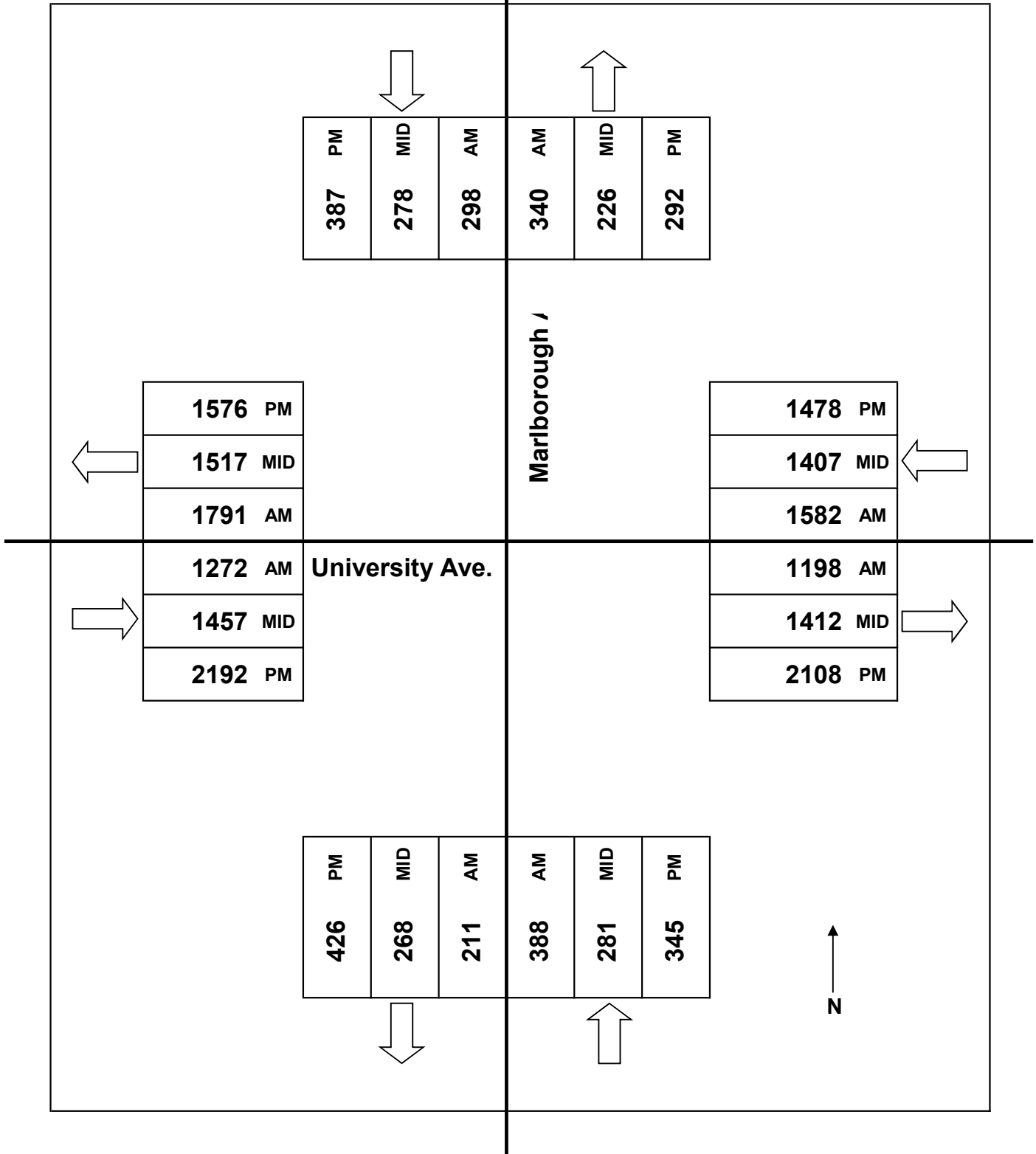
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:00 PM	13	28	17	17
3:15 PM	5	26	11	12
3:30 PM	14	25	5	9
3:45 PM	17	16	15	32
4:00 PM	17	8	20	9
4:15 PM	12	14	8	27
4:30 PM	14	21	4	9
4:45 PM	11	15	10	17
<b>TOTAL</b>	<b>103</b>	<b>153</b>	<b>90</b>	<b>132</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:00 PM	1	1	1	4
3:15 PM	2	1	0	1
3:30 PM	1	0	0	0
3:45 PM	1	0	0	5
4:00 PM	0	3	0	0
4:15 PM	1	1	0	0
4:30 PM	0	1	0	0
4:45 PM	3	2	0	0
<b>TOTAL</b>	<b>9</b>	<b>9</b>	<b>1</b>	<b>10</b>



JOB# IC 075-15  
VALIDATED: \_\_\_\_\_

DATE: 04/08/2015  
DAY: WEDNESDAY



45) University Ave & 42nd St



City of San Diego  
 N/S: 42nd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 19\_SDG\_42nd\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	42nd Street Southbound				University Avenue Westbound				42nd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	3	4	10	4	115	2	121	10	3	5	18	4	62	4	70	219
07:15 AM	0	3	3	6	4	108	3	115	25	5	3	33	1	91	7	99	253
07:30 AM	0	1	7	8	3	135	4	142	19	13	4	36	4	83	2	89	275
07:45 AM	1	5	9	15	9	118	3	130	9	26	7	42	4	121	3	128	315
Total	4	12	23	39	20	476	12	508	63	47	19	129	13	357	16	386	1062
08:00 AM	1	9	4	14	3	110	8	121	12	10	3	25	6	107	8	121	281
08:15 AM	1	9	4	14	2	135	2	139	11	16	4	31	7	130	6	143	327
08:30 AM	3	9	10	22	0	130	6	136	5	11	1	17	6	118	7	131	306
08:45 AM	2	2	3	7	2	120	4	126	8	6	2	16	6	141	4	151	300
Total	7	29	21	57	7	495	20	522	36	43	10	89	25	496	25	546	1214
Grand Total	11	41	44	96	27	971	32	1030	99	90	29	218	38	853	41	932	2276
Apprch %	11.5	42.7	45.8		2.6	94.3	3.1		45.4	41.3	13.3		4.1	91.5	4.4		
Total %	0.5	1.8	1.9	4.2	1.2	42.7	1.4	45.3	4.3	4	1.3	9.6	1.7	37.5	1.8	40.9	

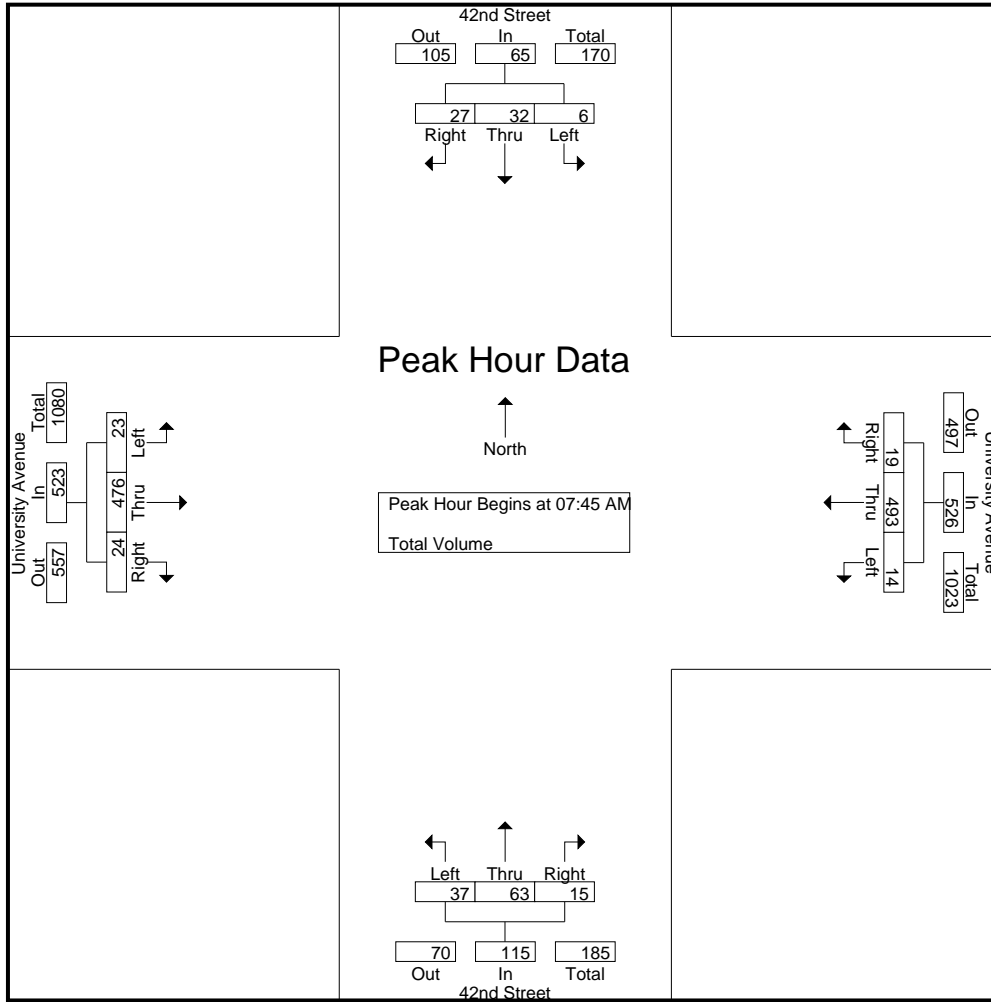
Start Time	42nd Street Southbound				University Avenue Westbound				42nd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	1	5	9	15	<b>9</b>	118	3	130	9	<b>26</b>	<b>7</b>	<b>42</b>	4	121	3	128	315
08:00 AM	1	<b>9</b>	4	14	3	110	<b>8</b>	121	<b>12</b>	10	3	25	6	107	<b>8</b>	121	281
08:15 AM	1	9	4	14	2	<b>135</b>	2	<b>139</b>	11	16	4	31	<b>7</b>	<b>130</b>	6	<b>143</b>	<b>327</b>
08:30 AM	<b>3</b>	9	<b>10</b>	<b>22</b>	0	130	6	136	5	11	1	17	6	118	7	131	306
Total Volume	6	32	27	65	14	493	19	526	37	63	15	115	23	476	24	523	1229
% App. Total	9.2	49.2	41.5		2.7	93.7	3.6		32.2	54.8	13		4.4	91	4.6		
PHF	.500	.889	.675	.739	.389	.913	.594	.946	.771	.606	.536	.685	.821	.915	.750	.914	.940

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of San Diego  
 N/S: 42nd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 19\_SDG\_42nd\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:30 AM				07:15 AM				08:00 AM			
+0 mins.	1	5	9	15	3	<b>135</b>	4	<b>142</b>	<b>25</b>	5	3	33	6	107	<b>8</b>	121
+15 mins.	1	<b>9</b>	4	14	<b>9</b>	118	3	130	19	13	4	36	<b>7</b>	130	6	143
+30 mins.	1	9	4	14	3	110	<b>8</b>	121	9	<b>26</b>	<b>7</b>	<b>42</b>	6	118	7	131
+45 mins.	<b>3</b>	9	<b>10</b>	<b>22</b>	2	135	2	139	12	10	3	25	6	<b>141</b>	4	<b>151</b>
Total Volume	6	32	27	65	17	498	17	532	65	54	17	136	25	496	25	546
% App. Total	9.2	49.2	41.5		3.2	93.6	3.2		47.8	39.7	12.5		4.6	90.8	4.6	
PHF	.500	.889	.675	.739	.472	.922	.531	.937	.650	.519	.607	.810	.893	.879	.781	.904

City of San Diego  
 N/S: 42nd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 19\_SDG\_42nd\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

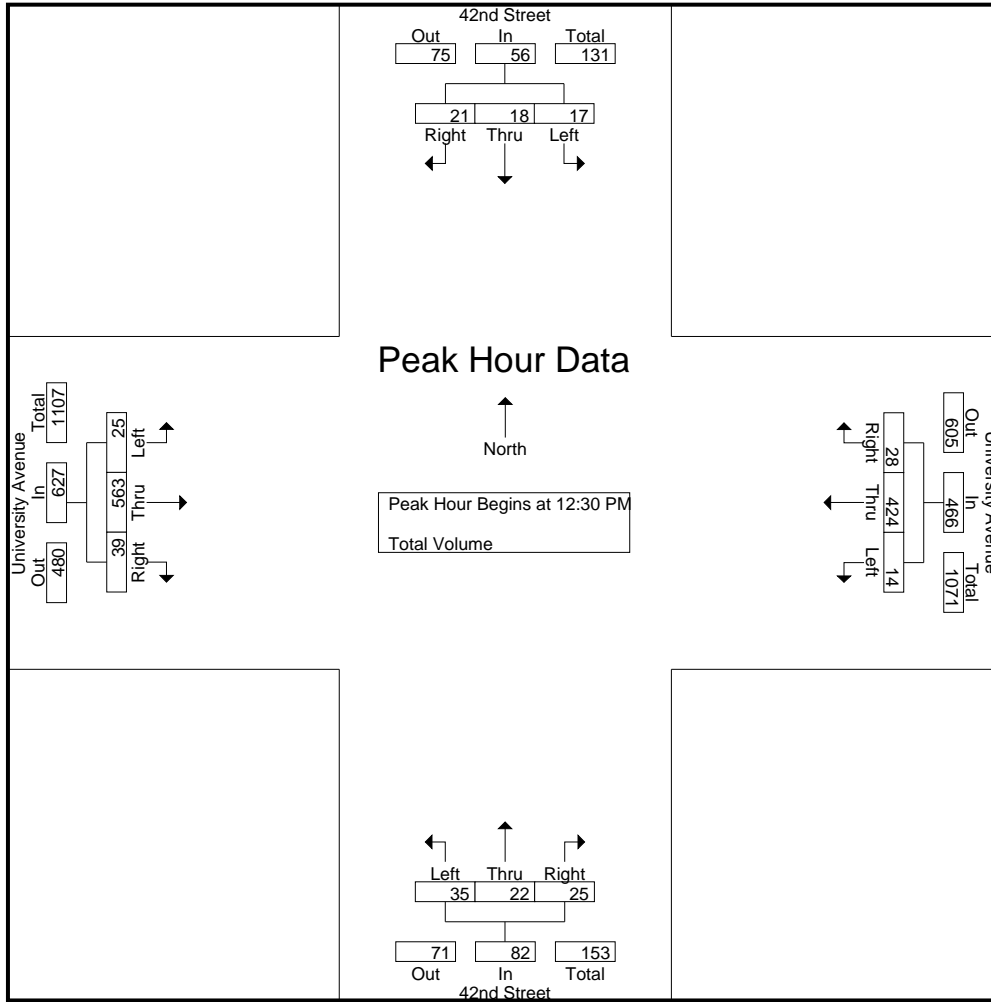
Start Time	42nd Street Southbound				University Avenue Westbound				42nd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	6	3	7	16	4	125	3	132	11	7	5	23	8	129	13	150	321
11:45 AM	1	2	8	11	3	109	5	117	13	5	5	23	6	116	13	135	286
Total	7	5	15	27	7	234	8	249	24	12	10	46	14	245	26	285	607
12:00 PM	1	4	9	14	3	113	10	126	8	12	4	24	9	123	7	139	303
12:15 PM	5	9	2	16	2	111	4	117	20	4	4	28	8	135	6	149	310
12:30 PM	5	5	4	14	6	105	8	119	10	4	4	18	7	134	12	153	304
12:45 PM	3	6	7	16	0	107	6	113	10	4	7	21	8	137	7	152	302
Total	14	24	22	60	11	436	28	475	48	24	19	91	32	529	32	593	1219
01:00 PM	4	4	4	12	4	109	8	121	10	6	4	20	5	140	6	151	304
01:15 PM	5	3	6	14	4	103	6	113	5	8	10	23	5	152	14	171	321
Grand Total	30	36	47	113	26	882	50	958	87	50	43	180	56	1066	78	1200	2451
Apprch %	26.5	31.9	41.6		2.7	92.1	5.2		48.3	27.8	23.9		4.7	88.8	6.5		
Total %	1.2	1.5	1.9	4.6	1.1	36	2	39.1	3.5	2	1.8	7.3	2.3	43.5	3.2	49	

Start Time	42nd Street Southbound				University Avenue Westbound				42nd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:30 PM	5	5	4	14	6	105	8	119	10	4	4	18	7	134	12	153	304
12:45 PM	3	6	7	16	0	107	6	113	10	4	7	21	8	137	7	152	302
01:00 PM	4	4	4	12	4	109	8	121	10	6	4	20	5	140	6	151	304
01:15 PM	5	3	6	14	4	103	6	113	5	8	10	23	5	152	14	171	321
Total Volume	17	18	21	56	14	424	28	466	35	22	25	82	25	563	39	627	1231
% App. Total	30.4	32.1	37.5		3	91	6		42.7	26.8	30.5		4	89.8	6.2		
PHF	.850	.750	.750	.875	.583	.972	.875	.963	.875	.688	.625	.891	.781	.926	.696	.917	.959

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:30 PM

City of San Diego  
 N/S: 42nd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 19\_SDG\_42nd\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:00 PM				11:30 AM				11:30 AM				12:30 PM			
+0 mins.	1	4	9	14	4	125	3	132	11	7	5	23	7	134	12	153
+15 mins.	5	9	2	16	3	109	5	117	13	5	5	23	8	137	7	152
+30 mins.	5	5	4	14	3	113	10	126	8	12	4	24	5	140	6	151
+45 mins.	3	6	7	16	2	111	4	117	20	4	4	28	5	152	14	171
Total Volume	14	24	22	60	12	458	22	492	52	28	18	98	25	563	39	627
% App. Total	23.3	40	36.7		2.4	93.1	4.5		53.1	28.6	18.4		4	89.8	6.2	
PHF	.700	.667	.611	.938	.750	.916	.550	.932	.650	.583	.900	.875	.781	.926	.696	.917

City of San Diego  
 N/S: 42nd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 19\_SDG\_42nd\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	42nd Street Southbound				University Avenue Westbound				42nd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	9	5	17	6	113	6	125	8	14	4	26	7	168	18	193	361
04:15 PM	3	15	6	24	6	94	5	105	8	9	4	21	12	175	21	208	358
04:30 PM	4	18	2	24	4	116	6	126	13	9	7	29	6	187	18	211	390
04:45 PM	3	31	9	43	6	102	5	113	3	13	7	23	9	187	19	215	394
Total	13	73	22	108	22	425	22	469	32	45	22	99	34	717	76	827	1503
05:00 PM	3	19	8	30	5	121	9	135	6	9	11	26	9	191	21	221	412
05:15 PM	1	23	6	30	1	95	2	98	8	8	4	20	10	176	11	197	345
05:30 PM	1	15	8	24	5	118	2	125	7	2	5	14	9	199	13	221	384
05:45 PM	2	8	5	15	3	105	5	113	6	6	5	17	7	153	11	171	316
Total	7	65	27	99	14	439	18	471	27	25	25	77	35	719	56	810	1457
Grand Total	20	138	49	207	36	864	40	940	59	70	47	176	69	1436	132	1637	2960
Apprch %	9.7	66.7	23.7		3.8	91.9	4.3		33.5	39.8	26.7		4.2	87.7	8.1		
Total %	0.7	4.7	1.7	7	1.2	29.2	1.4	31.8	2	2.4	1.6	5.9	2.3	48.5	4.5	55.3	

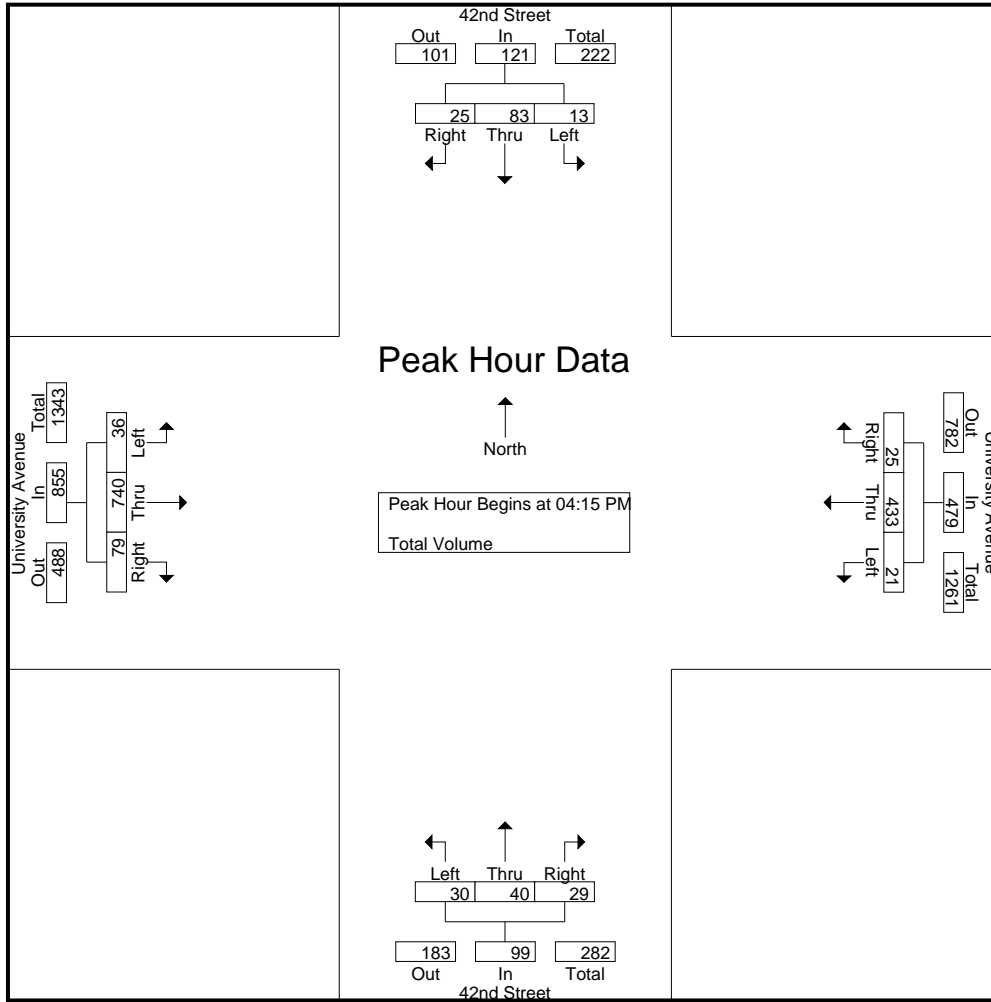
Start Time	42nd Street Southbound				University Avenue Westbound				42nd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	3	15	6	24	6	94	5	105	8	9	4	21	12	175	21	208	358
04:30 PM	4	18	2	24	4	116	6	126	13	9	7	29	6	187	18	211	390
04:45 PM	3	31	9	43	6	102	5	113	3	13	7	23	9	187	19	215	394
05:00 PM	3	19	8	30	5	121	9	135	6	9	11	26	9	191	21	221	412
Total Volume	13	83	25	121	21	433	25	479	30	40	29	99	36	740	79	855	1554
% App. Total	10.7	68.6	20.7		4.4	90.4	5.2		30.3	40.4	29.3		4.2	86.5	9.2		
PHF	.813	.669	.694	.703	.875	.895	.694	.887	.577	.769	.659	.853	.750	.969	.940	.967	.943

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

City of San Diego  
 N/S: 42nd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 19\_SDG\_42nd\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				04:00 PM				04:15 PM			
+0 mins.	4	18	2	24	6	94	5	105	8	14	4	26	12	175	21	208
+15 mins.	3	31	9	43	4	116	6	126	8	9	4	21	6	187	18	211
+30 mins.	3	19	8	30	6	102	5	113	13	9	7	29	9	187	19	215
+45 mins.	1	23	6	30	5	121	9	135	3	13	7	23	9	191	21	221
Total Volume	11	91	25	127	21	433	25	479	32	45	22	99	36	740	79	855
% App. Total	8.7	71.7	19.7		4.4	90.4	5.2		32.3	45.5	22.2		4.2	86.5	9.2	
PHF	.688	.734	.694	.738	.875	.895	.694	.887	.615	.804	.786	.853	.750	.969	.940	.967

Location: San Diego  
 N/S: 42nd Street  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg 42nd Street	East Leg University Avenue	South Leg 42nd Street	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	5	1	3	1	10
7:15 AM	6	0	6	1	13
7:30 AM	6	4	5	5	20
7:45 AM	8	4	4	6	22
8:00 AM	7	1	12	6	26
8:15 AM	8	0	6	1	15
8:30 AM	3	2	7	0	12
8:45 AM	6	3	11	0	20
TOTAL VOLUMES:	49	15	54	20	138

	North Leg 42nd Street	East Leg University Avenue	South Leg 42nd Street	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	15	1	18	2	36
11:45 AM	7	1	16	4	28
12:00 PM	17	5	12	3	37
12:15 PM	15	6	18	6	45
12:30 PM	13	11	16	9	49
12:45 PM	5	1	13	3	22
1:00 PM	17	3	16	4	40
1:15 PM	6	3	16	0	25
TOTAL VOLUMES:	95	31	125	31	282

	North Leg 42nd Street	East Leg University Avenue	South Leg 42nd Street	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	12	3	5	9	29
4:15 PM	9	3	6	0	18
4:30 PM	13	10	19	6	48
4:45 PM	14	4	20	7	45
5:00 PM	9	2	14	3	28
5:15 PM	5	4	12	6	27
5:30 PM	13	3	15	3	34
5:45 PM	11	2	14	2	29
TOTAL VOLUMES:	86	31	105	36	258

Location: San Diego  
 N/S: 42nd Street  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound 42nd Street			Westbound University Avenue			Northbound 42nd Street			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	1	0	0	2	0	4

	Southbound 42nd Street			Westbound University Avenue			Northbound 42nd Street			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
1:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	3	0	0	0	0	0	4	0	7

	Southbound 42nd Street			Westbound University Avenue			Northbound 42nd Street			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	1	0	0	0	0	2	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	6	1	0	0	0	0	3	1	11



46) University Ave & 43rd St

City of San Diego  
 N/S: 43rd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 18\_SDG\_43rd\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

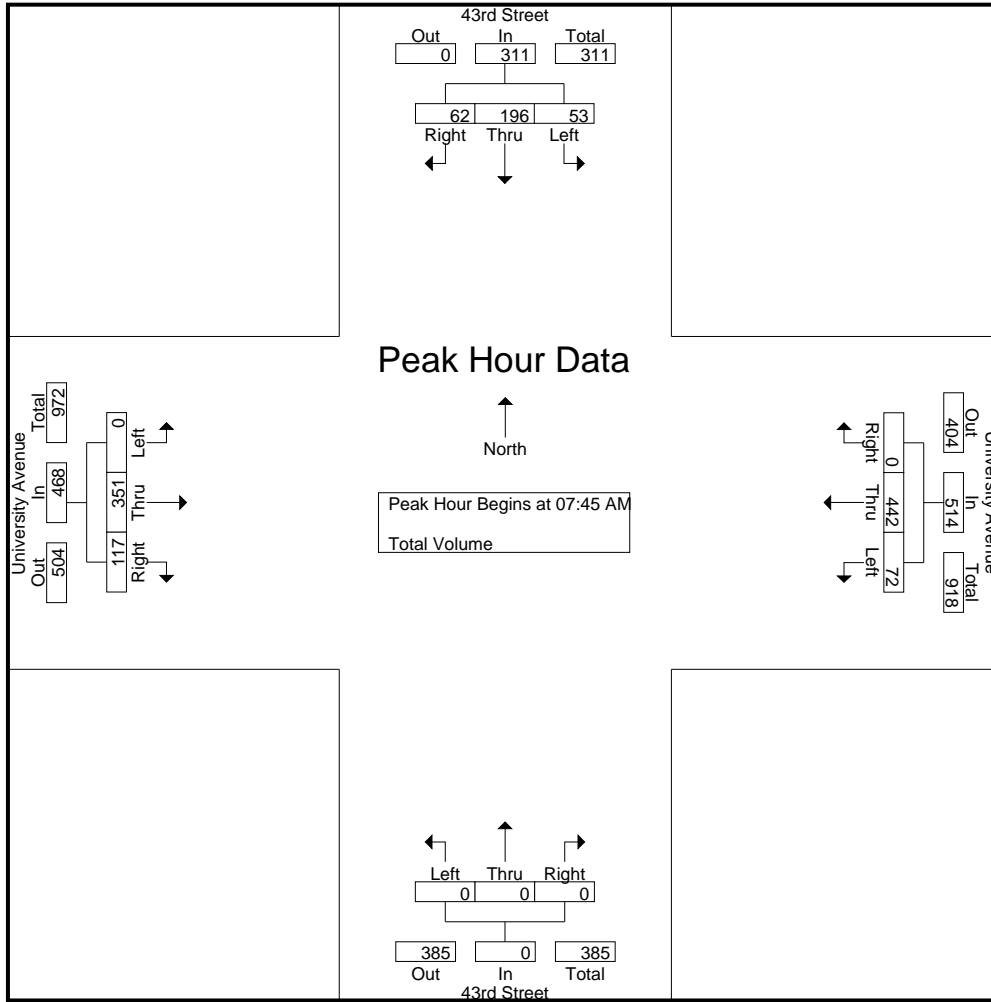
Start Time	43rd Street Southbound				University Avenue Westbound				43rd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	15	10	29	10	102	0	112	0	0	0	0	0	45	12	57	198
07:15 AM	16	27	9	52	8	87	0	95	0	0	0	0	0	60	24	84	231
07:30 AM	12	39	14	65	12	115	0	127	0	0	0	0	0	69	18	87	279
07:45 AM	11	53	16	80	27	115	0	142	0	0	0	0	0	81	38	119	341
Total	43	134	49	226	57	419	0	476	0	0	0	0	0	255	92	347	1049
08:00 AM	14	36	14	64	14	90	0	104	0	0	0	0	0	87	30	117	285
08:15 AM	15	57	10	82	8	116	0	124	0	0	0	0	0	99	24	123	329
08:30 AM	13	50	22	85	23	121	0	144	0	0	0	0	0	84	25	109	338
08:45 AM	9	43	17	69	11	104	0	115	0	0	0	0	0	104	30	134	318
Total	51	186	63	300	56	431	0	487	0	0	0	0	0	374	109	483	1270
Grand Total	94	320	112	526	113	850	0	963	0	0	0	0	0	629	201	830	2319
Apprch %	17.9	60.8	21.3		11.7	88.3	0		0	0	0	0	0	75.8	24.2		
Total %	4.1	13.8	4.8	22.7	4.9	36.7	0	41.5	0	0	0	0	0	27.1	8.7	35.8	

Start Time	43rd Street Southbound				University Avenue Westbound				43rd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	11	53	16	80	<b>27</b>	115	0	142	0	0	0	0	0	81	<b>38</b>	119	<b>341</b>
08:00 AM	14	36	14	64	14	90	0	104	0	0	0	0	0	87	30	117	285
08:15 AM	<b>15</b>	<b>57</b>	10	82	8	116	0	124	0	0	0	0	0	<b>99</b>	24	<b>123</b>	329
08:30 AM	13	50	<b>22</b>	<b>85</b>	23	<b>121</b>	0	<b>144</b>	0	0	0	0	0	84	25	109	338
Total Volume	53	196	62	311	72	442	0	514	0	0	0	0	0	351	117	468	1293
% App. Total	17	63	19.9		14	86	0		0	0	0	0	0	75	25		
PHF	.883	.860	.705	.915	.667	.913	.000	.892	.000	.000	.000	.000	.000	.886	.770	.951	.948

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of San Diego  
 N/S: 43rd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 18\_SDG\_43rd\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:00 AM				08:00 AM			
+0 mins.	11	53	16	80	<b>27</b>	115	0	142	0	0	0	0	0	87	<b>30</b>	117
+15 mins.	14	36	14	64	14	90	0	104	0	0	0	0	0	99	<b>24</b>	123
+30 mins.	<b>15</b>	<b>57</b>	10	82	8	116	0	124	0	0	0	0	0	84	25	109
+45 mins.	13	50	<b>22</b>	<b>85</b>	23	<b>121</b>	0	<b>144</b>	0	0	0	0	0	<b>104</b>	30	<b>134</b>
Total Volume	53	196	62	311	72	442	0	514	0	0	0	0	0	374	109	483
% App. Total	17	63	19.9		14	86	0		0	0	0		0	77.4	22.6	
PHF	.883	.860	.705	.915	.667	.913	.000	.892	.000	.000	.000	.000	.000	.899	.908	.901

City of San Diego  
 N/S: 43rd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 18\_SDG\_43rd\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

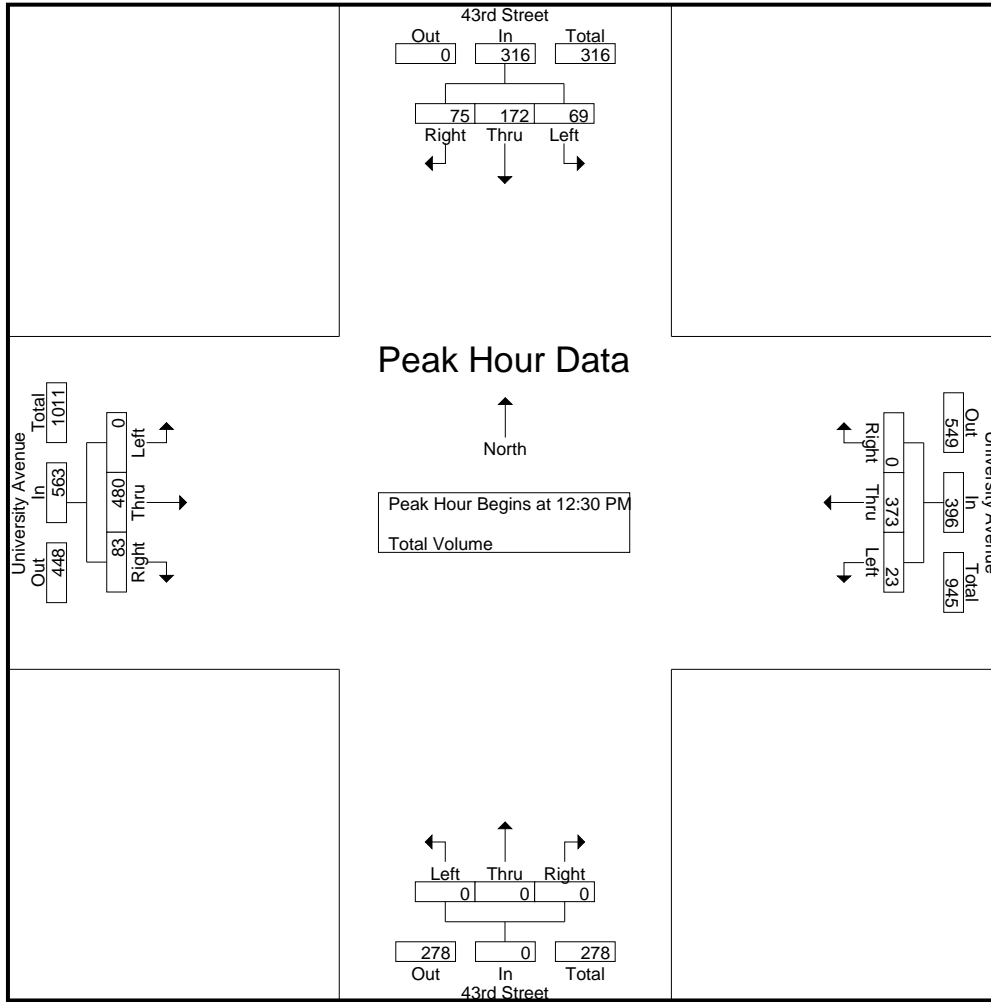
Start Time	43rd Street Southbound				University Avenue Westbound				43rd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	7	45	12	64	9	130	0	139	0	0	0	0	0	104	16	120	323
11:45 AM	25	38	16	79	2	100	0	102	0	0	0	0	0	93	23	116	297
Total	32	83	28	143	11	230	0	241	0	0	0	0	0	197	39	236	620
12:00 PM	17	45	22	84	4	97	0	101	0	0	0	0	0	99	21	120	305
12:15 PM	16	34	19	69	8	96	0	104	0	0	0	0	0	103	18	121	294
12:30 PM	9	41	17	67	5	105	0	110	0	0	0	0	0	125	14	139	316
12:45 PM	20	38	21	79	6	90	0	96	0	0	0	0	0	106	26	132	307
Total	62	158	79	299	23	388	0	411	0	0	0	0	0	433	79	512	1222
01:00 PM	19	48	18	85	5	79	0	84	0	0	0	0	0	111	19	130	299
01:15 PM	21	45	19	85	7	99	0	106	0	0	0	0	0	138	24	162	353
Grand Total	134	334	144	612	46	796	0	842	0	0	0	0	0	879	161	1040	2494
Apprch %	21.9	54.6	23.5		5.5	94.5	0		0	0	0	0	0	84.5	15.5		
Total %	5.4	13.4	5.8	24.5	1.8	31.9	0	33.8	0	0	0	0	0	35.2	6.5	41.7	

Start Time	43rd Street Southbound				University Avenue Westbound				43rd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:30 PM	9	41	17	67	5	<b>105</b>	0	<b>110</b>	0	0	0	0	0	125	14	139	316
12:45 PM	20	38	<b>21</b>	79	6	90	0	96	0	0	0	0	0	106	<b>26</b>	132	307
01:00 PM	19	<b>48</b>	18	<b>85</b>	5	79	0	84	0	0	0	0	0	111	19	130	299
01:15 PM	<b>21</b>	45	19	85	<b>7</b>	99	0	106	0	0	0	0	0	<b>138</b>	24	<b>162</b>	<b>353</b>
Total Volume	69	172	75	316	23	373	0	396	0	0	0	0	0	480	83	563	1275
% App. Total	21.8	54.4	23.7		5.8	94.2	0		0	0	0	0	0	85.3	14.7		
PHF	.821	.896	.893	.929	.821	.888	.000	.900	.000	.000	.000	.000	.000	.870	.798	.869	.903

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:30 PM

City of San Diego  
 N/S: 43rd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 18\_SDG\_43rd\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:30 PM				11:30 AM				11:30 AM				12:30 PM			
+0 mins.	9	41	17	67	<b>9</b>	<b>130</b>	0	<b>139</b>	0	0	0	0	0	125	14	139
+15 mins.	20	38	<b>21</b>	79	2	100	0	102	0	0	0	0	0	106	<b>26</b>	132
+30 mins.	19	<b>48</b>	18	<b>85</b>	4	97	0	101	0	0	0	0	0	111	19	130
+45 mins.	<b>21</b>	45	19	85	8	96	0	104	0	0	0	0	0	<b>138</b>	24	<b>162</b>
Total Volume	69	172	75	316	23	423	0	446	0	0	0	0	0	480	83	563
% App. Total	21.8	54.4	23.7		5.2	94.8	0		0	0	0	0	0	85.3	14.7	
PHF	.821	.896	.893	.929	.639	.813	.000	.802	.000	.000	.000	.000	.000	.870	.798	.869

City of San Diego  
 N/S: 43rd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 18\_SDG\_43rd\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	43rd Street Southbound				University Avenue Westbound				43rd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	17	113	10	140	7	96	0	103	0	0	0	0	0	143	31	174	417
04:15 PM	14	99	18	131	8	97	0	105	0	0	0	0	0	129	40	169	405
04:30 PM	21	99	18	138	5	105	0	110	0	0	0	0	0	141	33	174	422
04:45 PM	28	99	26	153	9	93	0	102	0	0	0	0	0	147	32	179	434
Total	80	410	72	562	29	391	0	420	0	0	0	0	0	560	136	696	1678
05:00 PM	20	114	20	154	12	98	0	110	0	0	0	0	0	147	35	182	446
05:15 PM	24	103	23	150	6	81	0	87	0	0	0	0	0	143	28	171	408
05:30 PM	16	84	10	110	8	103	0	111	0	0	0	0	0	151	30	181	402
05:45 PM	16	117	11	144	4	99	0	103	0	0	0	0	0	133	23	156	403
Total	76	418	64	558	30	381	0	411	0	0	0	0	0	574	116	690	1659
Grand Total	156	828	136	1120	59	772	0	831	0	0	0	0	0	1134	252	1386	3337
Apprch %	13.9	73.9	12.1		7.1	92.9	0		0	0	0	0	0	81.8	18.2		
Total %	4.7	24.8	4.1	33.6	1.8	23.1	0	24.9	0	0	0	0	0	34	7.6	41.5	

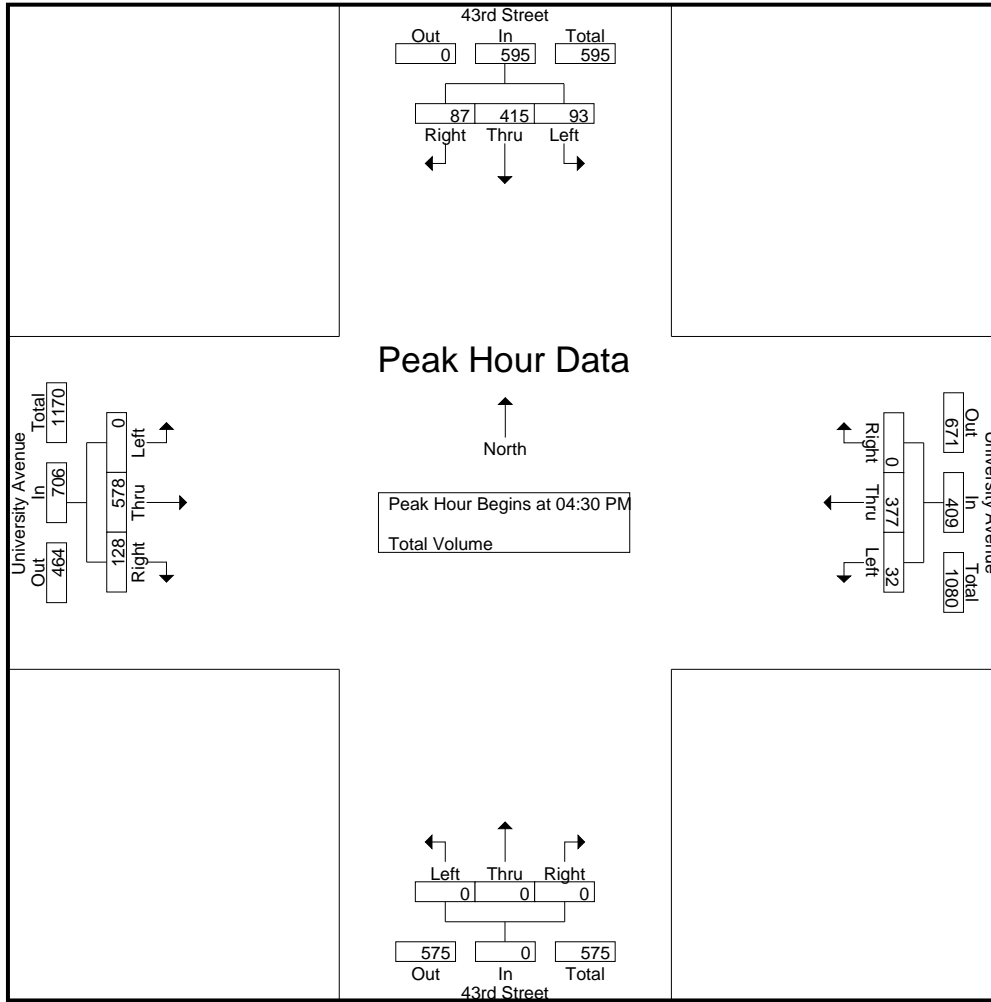
Start Time	43rd Street Southbound				University Avenue Westbound				43rd Street Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	21	99	18	138	5	<b>105</b>	0	<b>110</b>	0	0	0	0	0	141	33	174	422
04:45 PM	<b>28</b>	99	<b>26</b>	153	9	93	0	102	0	0	0	0	0	<b>147</b>	32	179	434
05:00 PM	20	<b>114</b>	20	<b>154</b>	<b>12</b>	98	0	110	0	0	0	0	0	147	<b>35</b>	<b>182</b>	<b>446</b>
05:15 PM	24	103	23	150	6	81	0	87	0	0	0	0	0	143	28	171	408
Total Volume	93	415	87	595	32	377	0	409	0	0	0	0	0	578	128	706	1710
% App. Total	15.6	69.7	14.6		7.8	92.2	0		0	0	0	0	0	81.9	18.1		
PHF	.830	.910	.837	.966	.667	.898	.000	.930	.000	.000	.000	.000	.000	.983	.914	.970	.959

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of San Diego  
 N/S: 43rd Street  
 E/W: University Avenue  
 Weather: Clear

File Name : 18\_SDG\_43rd\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				04:00 PM				04:45 PM			
+0 mins.	21	99	18	138	8	97	0	105	0	0	0	0	0	147	32	179
+15 mins.	<b>28</b>	99	<b>26</b>	153	5	<b>105</b>	0	<b>110</b>	0	0	0	0	0	147	<b>35</b>	<b>182</b>
+30 mins.	20	<b>114</b>	20	<b>154</b>	9	93	0	102	0	0	0	0	0	143	28	171
+45 mins.	24	103	23	150	<b>12</b>	98	0	110	0	0	0	0	0	<b>151</b>	30	181
Total Volume	93	415	87	595	34	393	0	427	0	0	0	0	0	588	125	713
% App. Total	15.6	69.7	14.6		8	92	0		0	0	0		0	82.5	17.5	
PHF	.830	.910	.837	.966	.708	.936	.000	.970	.000	.000	.000	.000	.000	.974	.893	.979

Location: San Diego  
 N/S: 43rd Street  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg 43rd Street	East Leg University Avenue	South Leg 43rd Street	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	2	4	5	1	12
7:15 AM	5	6	9	1	21
7:30 AM	2	9	7	3	21
7:45 AM	13	10	10	0	33
8:00 AM	8	10	8	2	28
8:15 AM	9	18	4	5	36
8:30 AM	12	10	8	5	35
8:45 AM	6	8	14	5	33
TOTAL VOLUMES:	57	75	65	22	219

	North Leg 43rd Street	East Leg University Avenue	South Leg 43rd Street	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	9	12	15	3	39
11:45 AM	20	21	12	8	61
12:00 PM	14	16	20	3	53
12:15 PM	31	9	10	9	59
12:30 PM	19	21	11	6	57
12:45 PM	20	17	11	1	49
1:00 PM	26	21	13	6	66
1:15 PM	12	13	13	7	45
TOTAL VOLUMES:	151	130	105	43	429

	North Leg 43rd Street	East Leg University Avenue	South Leg 43rd Street	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	36	21	15	9	81
4:15 PM	14	6	16	4	40
4:30 PM	22	7	18	7	54
4:45 PM	26	11	16	6	59
5:00 PM	20	6	14	6	46
5:15 PM	19	10	17	7	53
5:30 PM	14	4	12	6	36
5:45 PM	14	11	18	5	48
TOTAL VOLUMES:	165	76	126	50	417



Location: San Diego  
 N/S: 43rd Street  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound 43rd Street			Westbound University Avenue			Northbound 43rd Street			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	1	0	0	4	0	0	0	0	0	2	0	7

	Southbound 43rd Street			Westbound University Avenue			Northbound 43rd Street			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
1:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
1:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES:	0	2	1	1	4	0	0	0	0	0	1	0	9

	Southbound 43rd Street			Westbound University Avenue			Northbound 43rd Street			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	1	0	0	1	0	0	0	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	1	2	0	0	0	0	0	3	1	9

47) Fairmount Ave & University Ave

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 20\_SDG\_Fairmount\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

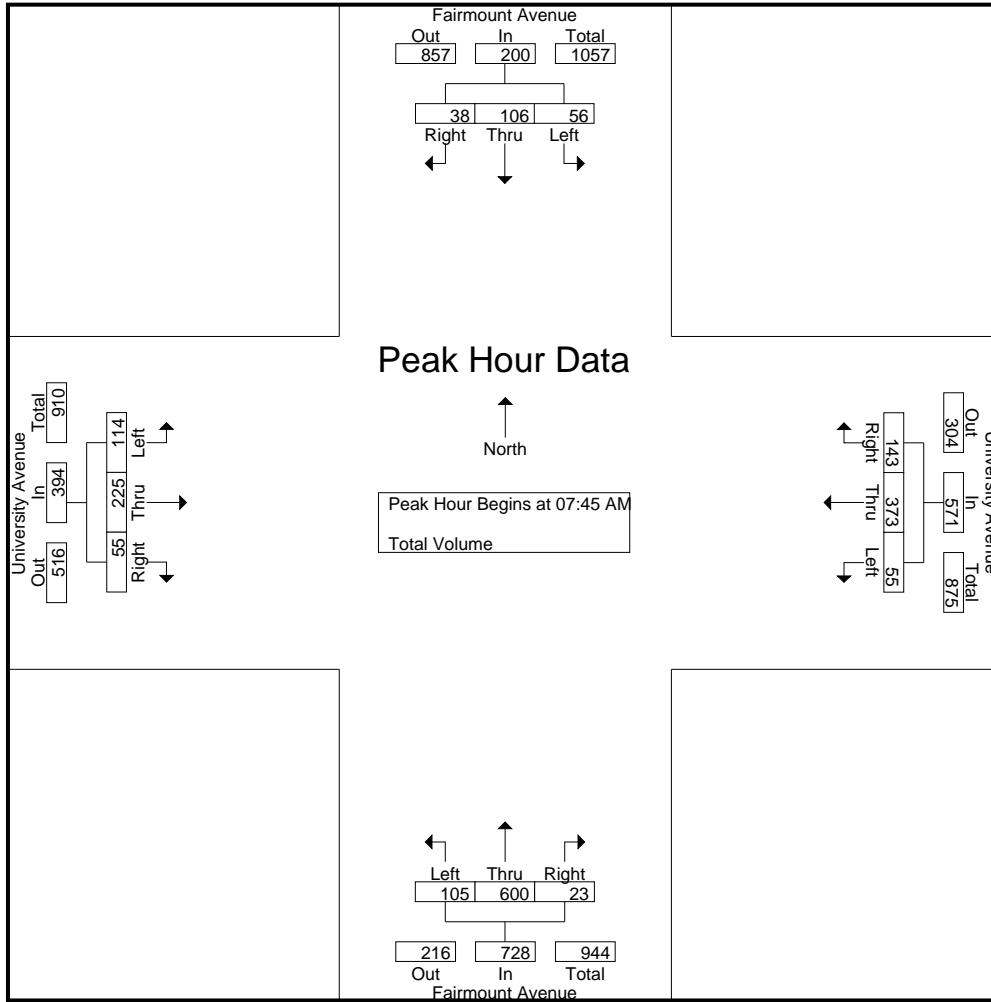
Groups Printed- Total Volume

Start Time	Fairmount Avenue Southbound				University Avenue Westbound				Fairmount Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	9	5	4	18	8	79	18	105	24	86	4	114	15	30	5	50	287
07:15 AM	10	16	8	34	6	66	29	101	20	109	2	131	21	44	6	71	337
07:30 AM	7	25	8	40	19	104	52	175	22	156	7	185	22	50	13	85	485
07:45 AM	16	25	9	50	20	108	45	173	27	145	3	175	28	42	15	85	483
Total	42	71	29	142	53	357	144	554	93	496	16	605	86	166	39	291	1592
08:00 AM	9	24	7	40	9	69	34	112	27	171	5	203	31	58	10	99	454
08:15 AM	12	19	11	42	12	102	35	149	13	144	6	163	26	71	14	111	465
08:30 AM	19	38	11	68	14	94	29	137	38	140	9	187	29	54	16	99	491
08:45 AM	23	32	10	65	12	76	23	111	26	111	11	148	26	78	10	114	438
Total	63	113	39	215	47	341	121	509	104	566	31	701	112	261	50	423	1848
Grand Total	105	184	68	357	100	698	265	1063	197	1062	47	1306	198	427	89	714	3440
Apprch %	29.4	51.5	19		9.4	65.7	24.9		15.1	81.3	3.6		27.7	59.8	12.5		
Total %	3.1	5.3	2	10.4	2.9	20.3	7.7	30.9	5.7	30.9	1.4	38	5.8	12.4	2.6	20.8	

Start Time	Fairmount Avenue Southbound				University Avenue Westbound				Fairmount Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	16	25	9	50	<b>20</b>	<b>108</b>	<b>45</b>	<b>173</b>	27	145	3	175	28	42	15	85	483
08:00 AM	9	24	7	40	9	69	34	112	27	<b>171</b>	5	<b>203</b>	<b>31</b>	58	10	99	454
08:15 AM	12	19	<b>11</b>	42	12	102	35	149	13	144	6	163	26	<b>71</b>	14	<b>111</b>	465
08:30 AM	<b>19</b>	<b>38</b>	11	<b>68</b>	14	94	29	137	<b>38</b>	140	<b>9</b>	187	29	54	<b>16</b>	99	<b>491</b>
Total Volume	56	106	38	200	55	373	143	571	105	600	23	728	114	225	55	394	1893
% App. Total	28	53	19		9.6	65.3	25		14.4	82.4	3.2		28.9	57.1	14		
PHF	.737	.697	.864	.735	.688	.863	.794	.825	.691	.877	.639	.897	.919	.792	.859	.887	.964

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 20\_SDG\_Fairmount\_Uni AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	08:00 AM				07:30 AM				07:45 AM				08:00 AM			
+0 mins.	9	24	7	40	19	104	<b>52</b>	<b>175</b>	27	145	3	175	<b>31</b>	58	10	99
+15 mins.	12	19	<b>11</b>	42	<b>20</b>	<b>108</b>	45	173	27	<b>171</b>	5	<b>203</b>	26	71	14	111
+30 mins.	19	<b>38</b>	11	<b>68</b>	9	69	34	112	13	144	6	163	29	54	<b>16</b>	99
+45 mins.	<b>23</b>	32	10	65	12	102	35	149	<b>38</b>	140	<b>9</b>	187	26	<b>78</b>	10	<b>114</b>
Total Volume	63	113	39	215	60	383	166	609	105	600	23	728	112	261	50	423
% App. Total	29.3	52.6	18.1		9.9	62.9	27.3		14.4	82.4	3.2		26.5	61.7	11.8	
PHF	.685	.743	.886	.790	.750	.887	.798	.870	.691	.877	.639	.897	.903	.837	.781	.928

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 20\_SDG\_Fairmount\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

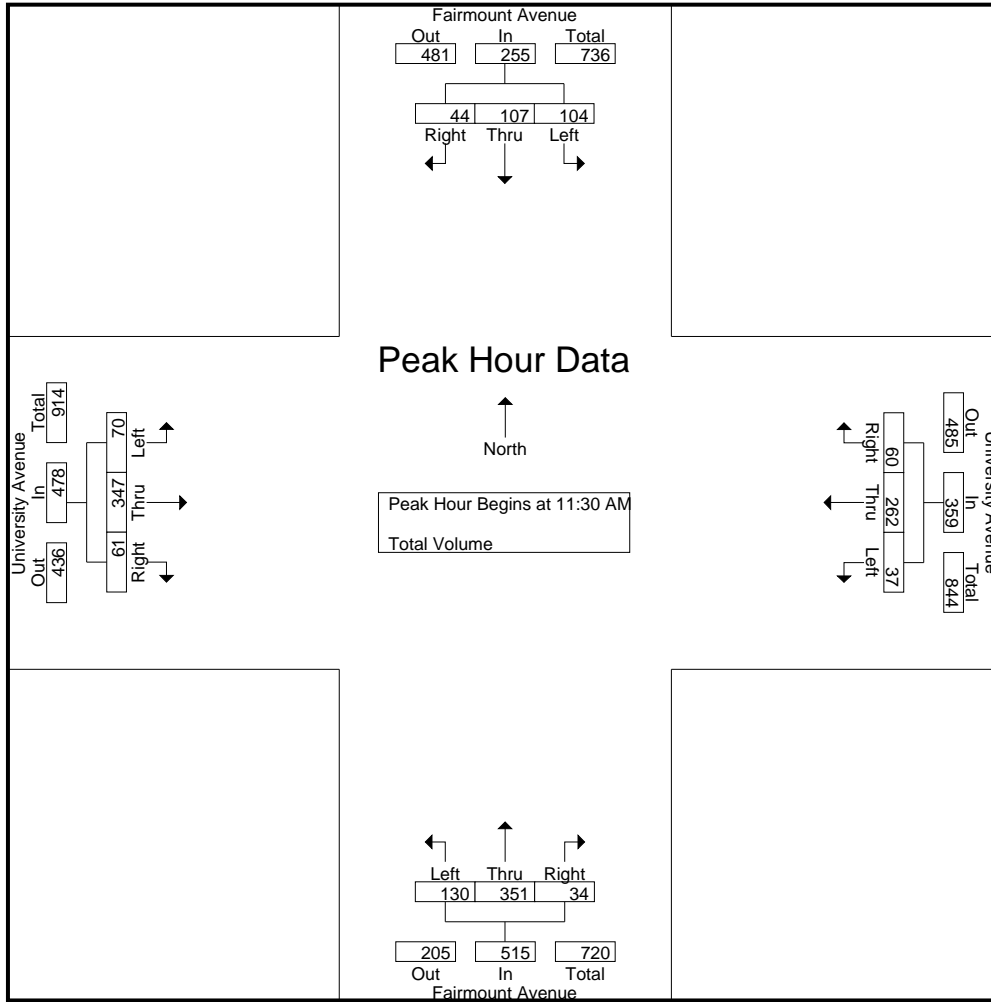
Start Time	Fairmount Avenue Southbound				University Avenue Westbound				Fairmount Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	29	17	18	64	10	70	13	93	45	101	7	153	17	92	17	126	436
11:45 AM	29	26	8	63	5	65	16	86	28	61	8	97	11	82	21	114	360
Total	58	43	26	127	15	135	29	179	73	162	15	250	28	174	38	240	796
12:00 PM	29	33	10	72	5	67	12	84	26	90	9	125	18	91	10	119	400
12:15 PM	17	31	8	56	17	60	19	96	31	99	10	140	24	82	13	119	411
12:30 PM	15	26	15	56	10	61	12	83	26	89	8	123	31	94	8	133	395
12:45 PM	28	28	9	65	5	59	17	81	26	98	12	136	23	87	7	117	399
Total	89	118	42	249	37	247	60	344	109	376	39	524	96	354	38	488	1605
01:00 PM	31	36	6	73	10	62	15	87	19	79	6	104	27	88	23	138	402
01:15 PM	16	19	11	46	9	49	12	70	38	83	14	135	22	107	16	145	396
Grand Total	194	216	85	495	71	493	116	680	239	700	74	1013	173	723	115	1011	3199
Apprch %	39.2	43.6	17.2		10.4	72.5	17.1		23.6	69.1	7.3		17.1	71.5	11.4		
Total %	6.1	6.8	2.7	15.5	2.2	15.4	3.6	21.3	7.5	21.9	2.3	31.7	5.4	22.6	3.6	31.6	

Start Time	Fairmount Avenue Southbound				University Avenue Westbound				Fairmount Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	<b>29</b>	17	<b>18</b>	64	10	<b>70</b>	13	93	<b>45</b>	<b>101</b>	7	<b>153</b>	17	<b>92</b>	17	<b>126</b>	<b>436</b>
11:45 AM	29	26	8	63	5	65	16	86	28	61	8	97	11	82	21	114	360
12:00 PM	29	<b>33</b>	10	<b>72</b>	5	67	12	84	26	90	9	125	18	91	10	119	400
12:15 PM	17	31	8	56	<b>17</b>	60	<b>19</b>	<b>96</b>	31	99	<b>10</b>	140	<b>24</b>	82	13	119	411
Total Volume	104	107	44	255	37	262	60	359	130	351	34	515	70	347	61	478	1607
% App. Total	40.8	42	17.3		10.3	73	16.7		25.2	68.2	6.6		14.6	72.6	12.8		
PHF	.897	.811	.611	.885	.544	.936	.789	.935	.722	.869	.850	.842	.729	.943	.726	.948	.921

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 11:30 AM

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 20\_SDG\_Fairmount\_Uni MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	11:30 AM				11:30 AM				12:00 PM				12:30 PM			
+0 mins.	<b>29</b>	17	<b>18</b>	64	10	<b>70</b>	13	93	26	90	9	125	<b>31</b>	94	8	133
+15 mins.	29	26	8	63	5	65	16	86	<b>31</b>	<b>99</b>	10	<b>140</b>	23	87	7	117
+30 mins.	29	<b>33</b>	10	<b>72</b>	5	67	12	84	26	89	8	123	27	88	<b>23</b>	138
+45 mins.	17	31	8	56	<b>17</b>	60	<b>19</b>	<b>96</b>	26	98	<b>12</b>	136	22	<b>107</b>	16	<b>145</b>
Total Volume	104	107	44	255	37	262	60	359	109	376	39	524	103	376	54	533
% App. Total	40.8	42	17.3		10.3	73	16.7		20.8	71.8	7.4		19.3	70.5	10.1	
PHF	.897	.811	.611	.885	.544	.936	.789	.935	.879	.949	.813	.936	.831	.879	.587	.919

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 20\_SDG\_Fairmount\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Fairmount Avenue Southbound				University Avenue Westbound				Fairmount Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	23	41	13	77	21	58	16	95	29	84	10	123	26	122	25	173	468
04:15 PM	25	32	12	69	15	62	10	87	33	89	9	131	24	101	16	141	428
04:30 PM	27	37	13	77	15	68	20	103	27	108	13	148	29	99	30	158	486
04:45 PM	19	38	9	66	19	64	19	102	28	105	4	137	36	109	21	166	471
Total	94	148	47	289	70	252	65	387	117	386	36	539	115	431	92	638	1853
05:00 PM	28	36	13	77	16	71	20	107	29	96	8	133	26	125	22	173	490
05:15 PM	24	40	7	71	17	49	18	84	31	94	6	131	21	118	27	166	452
05:30 PM	27	38	8	73	18	81	21	120	25	66	12	103	25	124	23	172	468
05:45 PM	19	52	11	82	17	75	15	107	16	112	13	141	22	103	21	146	476
Total	98	166	39	303	68	276	74	418	101	368	39	508	94	470	93	657	1886
Grand Total	192	314	86	592	138	528	139	805	218	754	75	1047	209	901	185	1295	3739
Apprch %	32.4	53	14.5		17.1	65.6	17.3		20.8	72	7.2		16.1	69.6	14.3		
Total %	5.1	8.4	2.3	15.8	3.7	14.1	3.7	21.5	5.8	20.2	2	28	5.6	24.1	4.9	34.6	

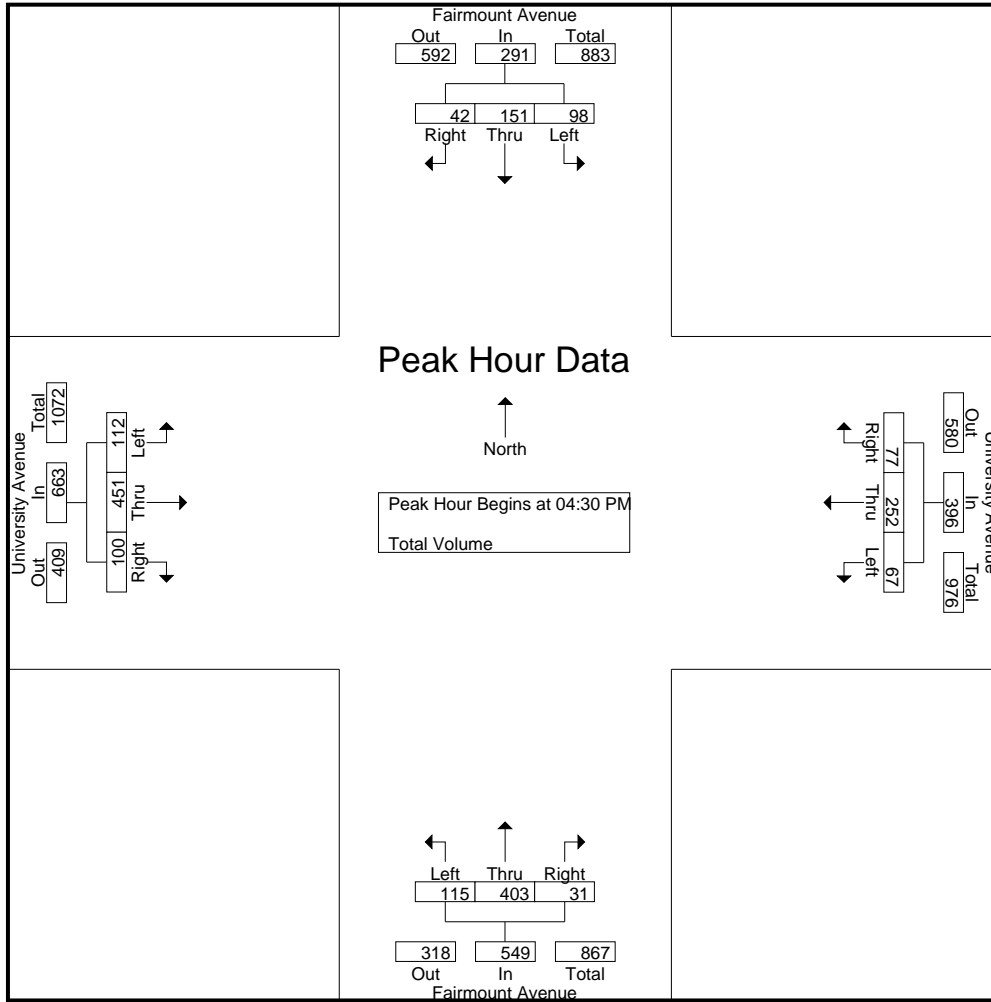
Start Time	Fairmount Avenue Southbound				University Avenue Westbound				Fairmount Avenue Northbound				University Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	27	37	<b>13</b>	<b>77</b>	15	68	<b>20</b>	103	27	<b>108</b>	<b>13</b>	<b>148</b>	29	99	<b>30</b>	158	486
04:45 PM	19	38	9	66	<b>19</b>	64	19	102	28	105	4	137	<b>36</b>	109	21	166	471
05:00 PM	<b>28</b>	36	13	77	16	<b>71</b>	20	<b>107</b>	29	96	8	133	26	<b>125</b>	22	<b>173</b>	<b>490</b>
05:15 PM	24	<b>40</b>	7	71	17	49	18	84	<b>31</b>	94	6	131	21	118	27	166	452
Total Volume	98	151	42	291	67	252	77	396	115	403	31	549	112	451	100	663	1899
% App. Total	33.7	51.9	14.4		16.9	63.6	19.4		20.9	73.4	5.6		16.9	68	15.1		
PHF	.875	.944	.808	.945	.882	.887	.963	.925	.927	.933	.596	.927	.778	.902	.833	.958	.969

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of San Diego  
 N/S: Fairmount Avenue  
 E/W: University Avenue  
 Weather: Clear

File Name : 20\_SDG\_Fairmount\_Uni PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:15 PM				04:45 PM			
+0 mins.	28	36	13	77	16	71	20	107	33	89	9	131	36	109	21	166
+15 mins.	24	40	7	71	17	49	18	84	27	108	13	148	26	125	22	173
+30 mins.	27	38	8	73	18	81	21	120	28	105	4	137	21	118	27	166
+45 mins.	19	52	11	82	17	75	15	107	29	96	8	133	25	124	23	172
Total Volume	98	166	39	303	68	276	74	418	117	398	34	549	108	476	93	677
% App. Total	32.3	54.8	12.9		16.3	66	17.7		21.3	72.5	6.2		16	70.3	13.7	
PHF	.875	.798	.750	.924	.944	.852	.881	.871	.886	.921	.654	.927	.750	.952	.861	.978



Location: San Diego  
 N/S: Fairmount Avenue  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Fairmount Avenue	East Leg University Avenue	South Leg Fairmount Avenue	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	17	9	4	5	35
7:15 AM	10	13	14	3	40
7:30 AM	21	18	22	10	71
7:45 AM	42	22	16	14	94
8:00 AM	26	28	31	26	111
8:15 AM	28	32	23	13	96
8:30 AM	37	21	22	17	97
8:45 AM	44	37	24	35	140
TOTAL VOLUMES:	225	180	156	123	684

	North Leg Fairmount Avenue	East Leg University Avenue	South Leg Fairmount Avenue	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	34	39	20	23	116
11:45 AM	30	38	36	37	141
12:00 PM	38	50	56	56	200
12:15 PM	45	40	23	20	128
12:30 PM	36	25	39	34	134
12:45 PM	26	35	40	28	129
1:00 PM	47	30	28	26	131
1:15 PM	36	35	32	29	132
TOTAL VOLUMES:	292	292	274	253	1111

	North Leg Fairmount Avenue	East Leg University Avenue	South Leg Fairmount Avenue	West Leg University Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	46	33	33	34	146
4:15 PM	31	45	24	14	114
4:30 PM	36	39	40	29	144
4:45 PM	33	43	22	23	121
5:00 PM	30	21	35	37	123
5:15 PM	29	18	17	24	88
5:30 PM	32	28	23	26	109
5:45 PM	28	34	25	14	101
TOTAL VOLUMES:	265	261	219	201	946

Location: San Diego  
 N/S: Fairmount Avenue  
 E/W: University Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Fairmount Avenue			Westbound University Avenue			Northbound Fairmount Avenue			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	2
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
TOTAL VOLUMES:	0	1	0	0	3	1	1	3	0	0	0	1	10

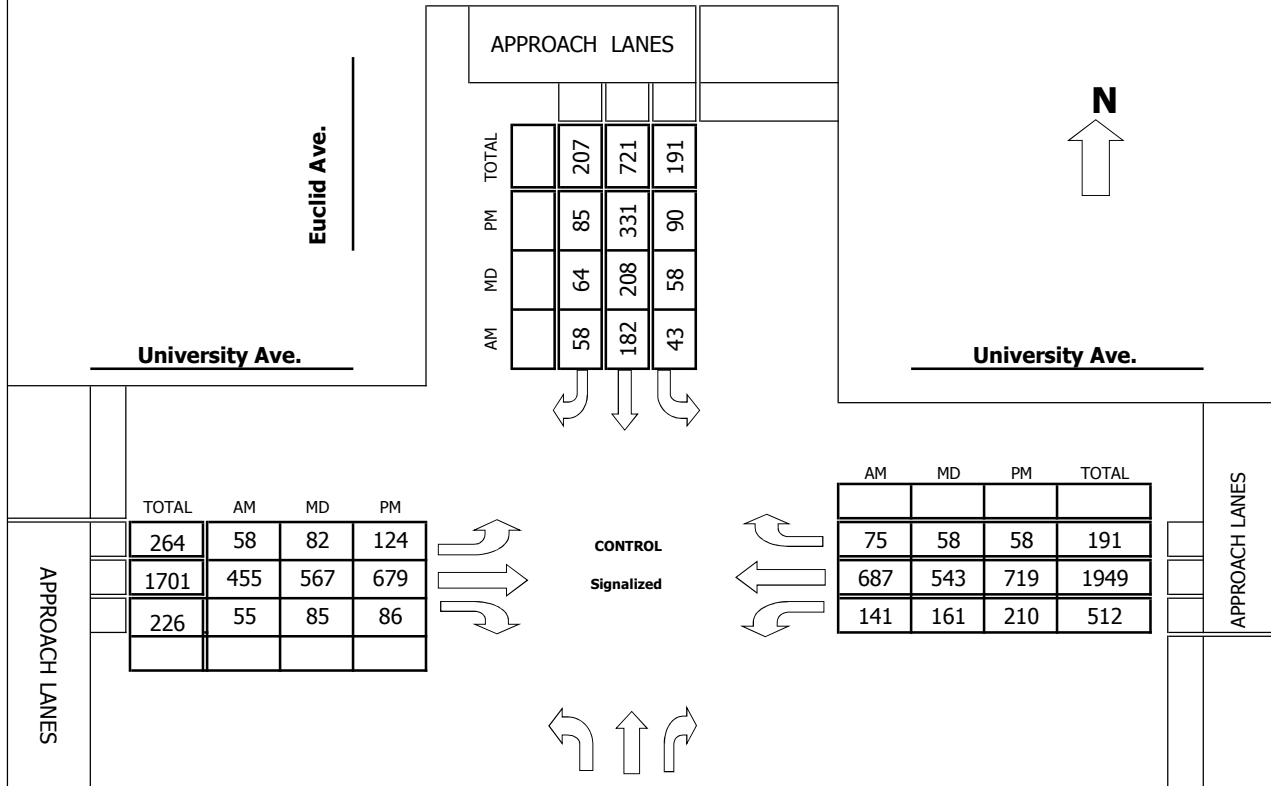
	Southbound Fairmount Avenue			Westbound University Avenue			Northbound Fairmount Avenue			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
12:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
1:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	2	0	0	2	0	6

	Southbound Fairmount Avenue			Westbound University Avenue			Northbound Fairmount Avenue			Eastbound University Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	1	0	1	0	0	1	0	0	3	0	6

48) Euclid Ave & University Ave

**Project #:** IC 085-15

**TMC SUMMARY OF Euclid Ave. & University Ave.**



TOTAL	AM	MD	PM
264	58	82	124
1701	455	567	679
226	55	85	86

AM	MD	PM	TOTAL
75	58	58	191
687	543	719	1949
141	161	210	512

TOTAL	AM	MD	PM
213	95	52	66
693	271	165	257
420	122	148	150

**LOCATION #:** IC 085-15

**TURNING MOVEMENT COUNT**

**Euclid Ave. & University Ave.**  
 (Intersection Name)

WEDNESDAY                      04/29/2015  
 Day    Date

COUNT PERIODS	
<b>AM</b>	700AM - 900AM
<b>NOON</b>	1100AM - 100PM
<b>PM</b>	300PM - 500PM

AM PEAK HOUR                      745 AM  
 NOON PEAK HOUR                      1200 PM  
 PM PEAK HOUR                      330 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **Euclid Ave.**      DATE: **04/29/2015**      LOCATION: **San Diego**  
 E-W STREET: **University Ave.**      DAY: **WEDNESDAY**      PROJECT# **IC 085-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	1	0	1	1	0	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	21	89	11	5	35	12	12	60	13	27	158	15	458
7:15 AM	19	78	22	8	68	15	9	68	1	21	178	20	507
7:30 AM	21	77	24	6	62	10	17	84	11	32	180	14	538
7:45 AM	31	71	40	10	38	10	13	105	16	41	186	17	578
8:00 AM	24	71	27	10	52	14	14	121	14	27	161	22	557
8:15 AM	21	74	28	10	41	11	15	117	13	25	154	12	521
8:30 AM	19	55	27	13	51	23	16	112	12	48	186	24	586
8:45 AM	22	58	21	11	48	25	14	100	9	38	171	11	528
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	178	573	200	73	395	120	110	767	89	259	1374	135	4273
Approach %	18.72	60.25	21.03	12.41	67.18	20.41	11.39	79.40	9.21	14.65	77.71	7.64	
App/Depart	951	/	818	588	/	743	966	/	1040	1768	/	1672	

AM Peak Hr Begins at: 745 AM

**PEAK**

Volumes	95	271	122	43	182	58	58	455	55	141	687	75	2242
Approach %	19.47	55.53	25.00	15.19	64.31	20.49	10.21	80.11	9.68	15.61	76.08	8.31	

**PEAK HR.**

FACTOR:	0.859	0.813	0.953	0.875	0.956
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CONTROL: **Signalized**  
 COMMENT 1:  
 GPS: **32.749554, -117.092298**

# Intersection Turning Movement

Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Euclid Ave.** DATE: **04/29/2015** LOCATION: **San Diego**  
 E-W STREET: **University Ave.** DAY: **WEDNESDAY** PROJECT#: **IC 085-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	1	0	1	1	0	1	2	0	1	2	0	
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM	16	58	26	12	49	19	20	127	20	27	138	7	519
11:15 AM	13	38	21	17	50	20	19	128	22	39	136	21	524
11:30 AM	22	45	37	15	62	13	22	133	17	24	126	9	525
11:45 AM	14	42	41	14	43	14	19	143	18	28	120	7	503
12:00 PM	12	35	31	10	59	16	23	155	24	43	133	12	553
12:15 PM	14	42	37	15	44	15	17	151	25	41	143	10	554
12:30 PM	10	44	47	16	54	18	21	132	23	38	141	20	564
12:45 PM	16	44	33	17	51	15	21	129	13	39	126	16	520
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	117	348	273	116	412	130	162	1098	162	279	1063	102	4262
Approach %	15.85	47.15	36.99	17.63	62.61	19.76	11.39	77.22	11.39	19.32	73.61	7.06	
App/Depart	738	/	612	658	/	853	1422	/	1487	1444	/	1310	

NOON Peak Hr Begins at: 1200 PM

PEAK

Volumes	52	165	148	58	208	64	82	567	85	161	543	58	2191
Approach %	14.25	45.21	40.55	17.58	63.03	19.39	11.17	77.25	11.58	21.13	71.26	7.61	

PEAK HR. FACTOR:

	0.903	0.938	0.908	0.957	0.971
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CONTROL: **Signalized**  
 COMMENT 1: **0**  
 GPS: **32.749554, -117.092298**

HOURS:

	FROM:		TO:	
AM	700	AM	900	AM
NOON	1100	AM	100	PM
PM	300	PM	500	PM

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Euclid Ave.**      DATE: **04/29/2015**      LOCATION: **San Diego**  
 E-W STREET: **University Ave.**      DAY: **WEDNESDAY**      PROJECT# **IC 085-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	1	0	1	1	0	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM	21	58	38	19	78	15	23	171	27	54	142	15	661
3:15 PM	16	52	38	16	68	19	15	133	28	47	145	14	591
3:30 PM	17	73	35	26	107	19	21	141	28	56	172	13	708
3:45 PM	22	71	22	14	94	36	69	151	21	58	211	21	790
4:00 PM	16	63	51	26	57	20	19	190	19	55	186	9	711
4:15 PM	11	50	42	24	73	10	15	197	18	41	150	15	646
4:30 PM	17	60	38	32	83	12	19	192	22	57	142	10	684
4:45 PM	19	46	36	21	64	16	25	187	22	52	131	17	636
5:00 PM													
5:15 PM													
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	139	473	300	178	624	147	206	1362	185	420	1279	114	5427
Approach %	15.24	51.86	32.89	18.76	65.75	15.49	11.75	77.70	10.55	23.17	70.55	6.29	
App/Depart	912	/	793	949	/	1229	1753	/	1840	1813	/	1565	

PM Peak Hr Begins at: 330 PM

**PEAK**

Volumes	66	257	150	90	331	85	124	679	86	210	719	58	2855
Approach %	13.95	54.33	31.71	17.79	65.42	16.80	13.95	76.38	9.67	21.28	72.85	5.88	

**PEAK HR.**

FACTOR:	0.910	0.832	0.922	0.851	0.903
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CONTROL: **Signalized**

COMMENT 1: **0**

GPS: **32.749554, -117.092298**



### Pedestrian & Bicycle Study

**N-S STREET:** Euclid Ave.  
**E-W STREET:** University Ave.

**Date:** 04/29/2015  
**Day:** WEDNESDAY

**City:** San Diego  
**Project #:** IC 085-15

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	17	12	6	9
7:15 AM	7	19	5	1
7:30 AM	0	10	1	10
7:45 AM	18	6	1	5
8:00 AM	11	12	2	3
8:15 AM	0	14	3	23
8:30 AM	18	3	16	20
8:45 AM	7	12	4	6
<b>TOTAL</b>	<b>78</b>	<b>88</b>	<b>38</b>	<b>77</b>

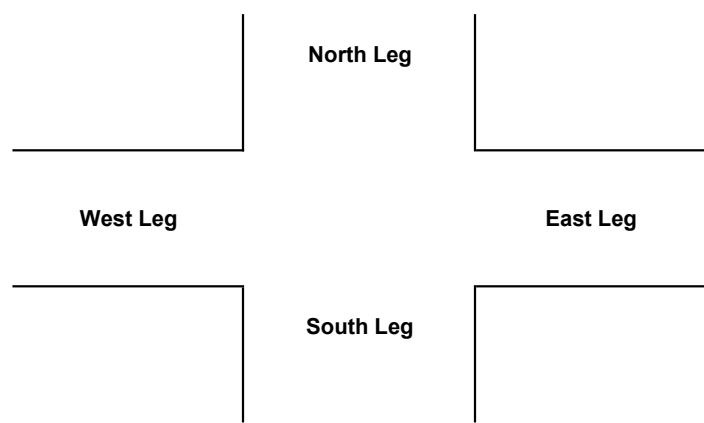
	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	1	2	1	0
7:30 AM	1	1	0	0
7:45 AM	0	0	0	0
8:00 AM	0	1	0	0
8:15 AM	1	1	0	0
8:30 AM	2	0	1	0
8:45 AM	1	0	0	0
<b>TOTAL</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
11:00 AM	3	8	6	6
11:15 AM	3	22	0	3
11:30 AM	9	8	14	12
11:45 AM	4	26	21	15
12:00 PM	8	13	9	3
12:15 PM	3	9	12	12
12:30 PM	12	16	4	13
12:45 PM	18	21	15	16
<b>TOTAL</b>	<b>60</b>	<b>123</b>	<b>81</b>	<b>80</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
11:00 AM	1	0	0	0
11:15 AM	0	1	0	0
11:30 AM	1	3	1	0
11:45 AM	0	3	0	0
12:00 PM	0	0	0	0
12:15 PM	0	0	0	0
12:30 PM	1	2	0	0
12:45 PM	1	0	1	0
<b>TOTAL</b>	<b>4</b>	<b>9</b>	<b>2</b>	<b>0</b>

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:00 PM	2	20	18	17
3:15 PM	3	19	17	23
3:30 PM	17	23	20	15
3:45 PM	9	11	10	20
4:00 PM	3	15	7	18
4:15 PM	10	11	8	15
4:30 PM	2	13	1	13
4:45 PM	2	8	9	32
<b>TOTAL</b>	<b>48</b>	<b>120</b>	<b>90</b>	<b>153</b>

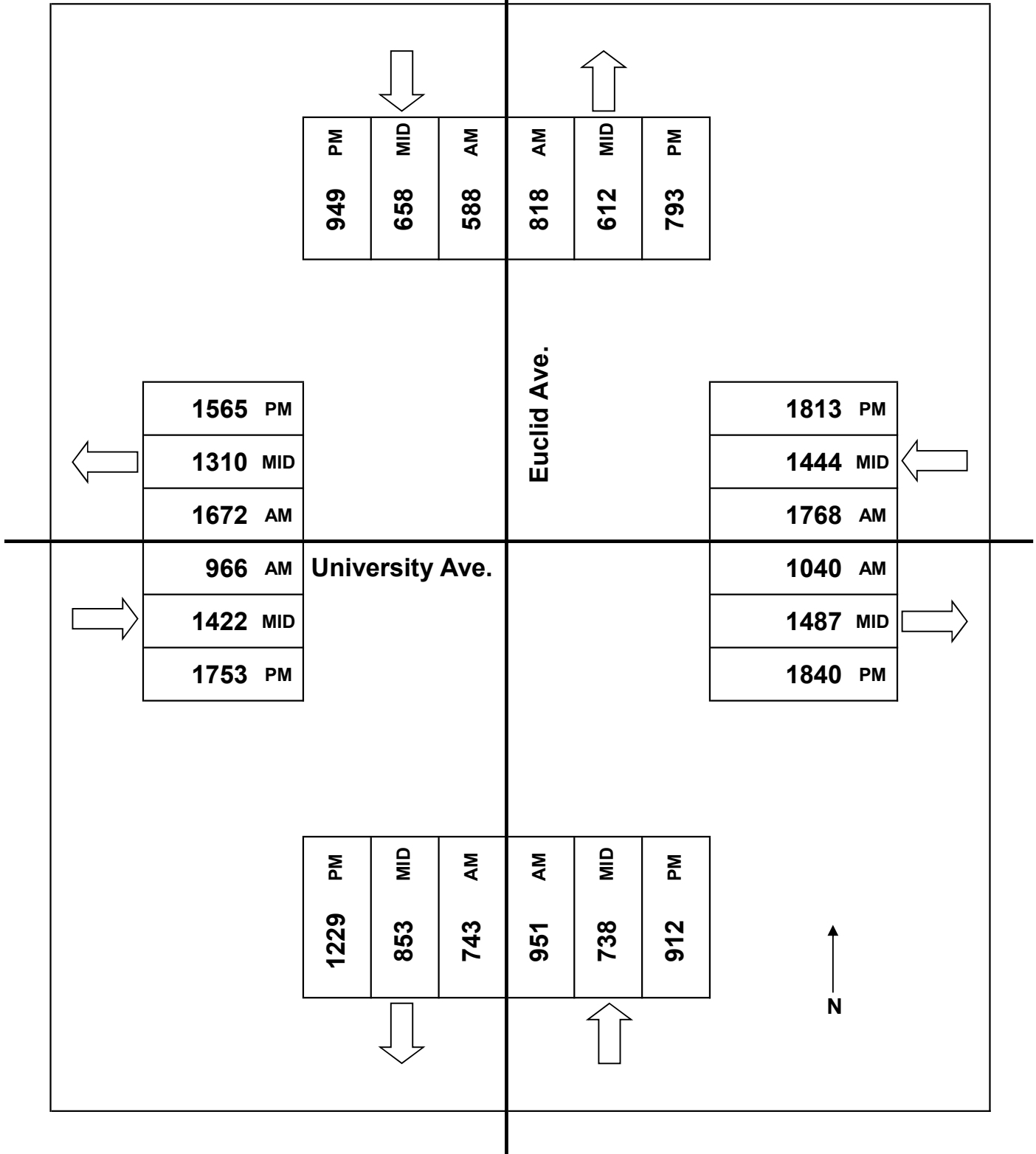
	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:00 PM	1	1	0	0
3:15 PM	3	2	0	0
3:30 PM	0	0	1	0
3:45 PM	1	0	1	0
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	2	1	1	0
<b>TOTAL</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>0</b>





JOB# IC 085-15  
VALIDATED: \_\_\_\_\_

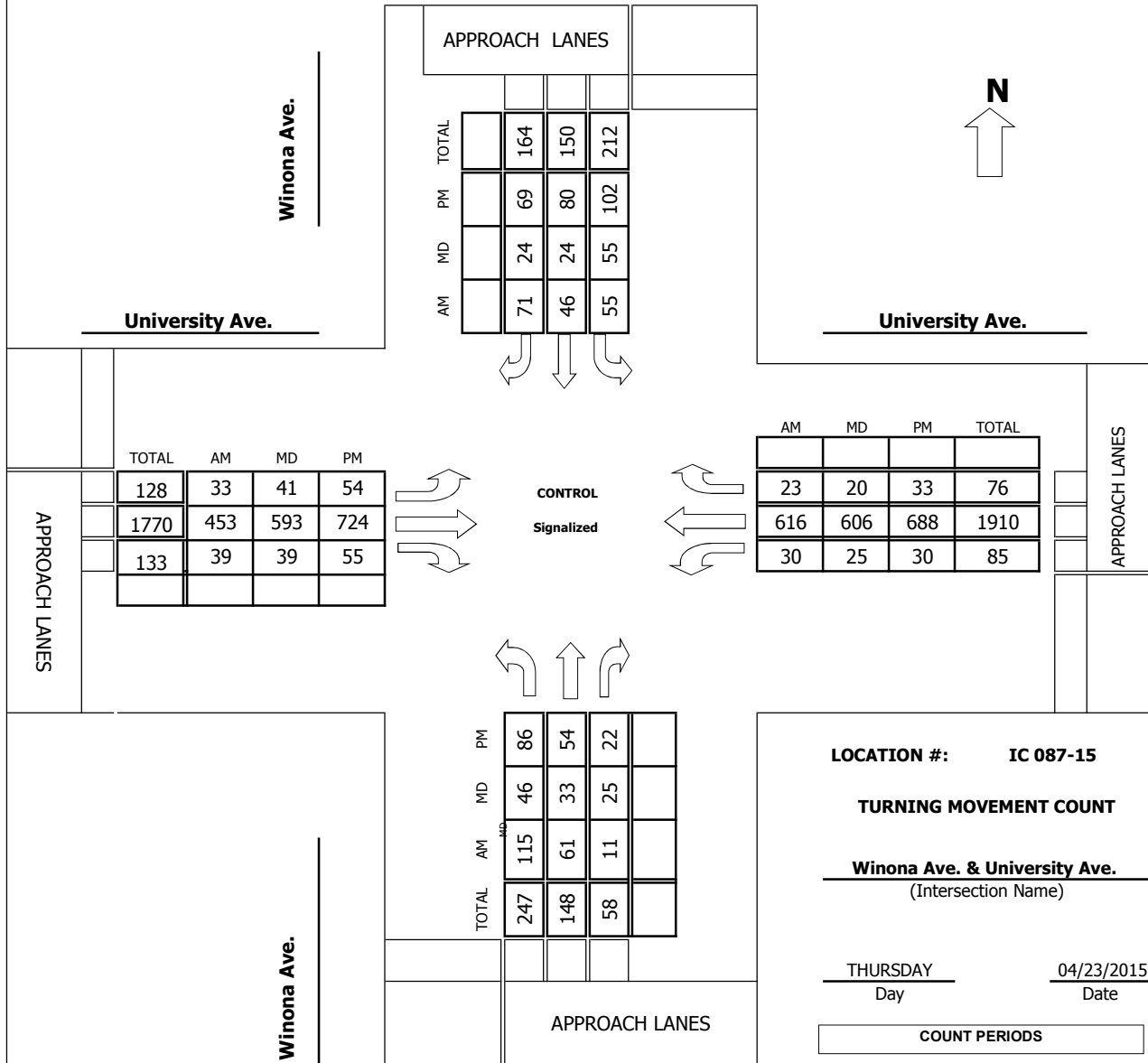
DATE: 04/29/2015  
DAY: WEDNESDAY



49) Winona Ave & University Ave

**Project #:** IC 087-15

**TMC SUMMARY OF Winona Ave. & University Ave.**



**LOCATION #:** IC 087-15

**TURNING MOVEMENT COUNT**

**Winona Ave. & University Ave.**  
 (Intersection Name)

THURSDAY                      04/23/2015  
 Day                                      Date

**COUNT PERIODS**

<b>AM</b>	700AM - 900AM
<b>NOON</b>	1100AM - 100PM
<b>PM</b>	300PM - 500PM

AM PEAK HOUR                      745 AM  
 NOON PEAK HOUR                      1115 AM  
 PM PEAK HOUR                      300 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **Winona Ave.**      DATE: **04/23/2015**      LOCATION: **San Diego**  
 E-W STREET: **University Ave.**      DAY: **THURSDAY**      PROJECT# **IC 087-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM	0	1	0	0	1	0	1	2	0	1	1	0	
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	15	13	8	9	6	13	10	77	7	6	147	2	313
7:15 AM	24	6	5	10	13	17	2	92	8	1	150	6	334
7:30 AM	30	16	5	13	10	12	4	93	6	3	156	6	354
7:45 AM	22	11	3	10	8	15	8	114	10	5	168	3	377
8:00 AM	30	17	2	14	14	10	5	123	9	7	148	6	385
8:15 AM	28	16	2	11	15	18	15	110	10	7	150	7	389
8:30 AM	35	17	4	20	9	28	5	106	10	11	150	7	402
8:45 AM	33	15	4	21	7	15	5	100	8	5	130	4	347
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	217	111	33	108	82	128	54	815	68	45	1199	41	2901
Approach %	60.11	30.75	9.14	33.96	25.79	40.25	5.76	86.98	7.26	3.50	93.31	3.19	
App/Depart	361	/	206	318	/	195	937	/	956	1285	/	1544	

AM Peak Hr Begins at: 745 AM

**PEAK**

Volumes	115	61	11	55	46	71	33	453	39	30	616	23	1553
Approach %	61.50	32.62	5.88	31.98	26.74	41.28	6.29	86.29	7.43	4.48	92.08	3.44	

**PEAK HR.**

FACTOR:	0.835	0.754	0.958	0.950	0.966
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CONTROL: **Signalized**  
 COMMENT 1:  
 GPS: **32.749534, -117.088008**

# Intersection Turning Movement

Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: Winona Ave.      DATE: 04/23/2015      LOCATION: San Diego  
 E-W STREET: University Ave.      DAY: THURSDAY      PROJECT# IC 087-15

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	2	0	1	1	0	
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM	12	6	6	9	5	10	10	139	6	5	138	4	350
11:15 AM	7	8	8	13	8	4	7	151	6	5	155	6	378
11:30 AM	17	5	5	13	8	5	10	155	14	6	156	5	399
11:45 AM	7	8	3	12	4	5	13	146	9	7	154	6	374
12:00 PM	15	12	9	17	4	10	11	141	10	7	141	3	380
12:15 PM	17	3	3	13	9	13	14	135	19	4	137	5	372
12:30 PM	19	6	3	8	9	13	8	154	13	2	119	1	355
12:45 PM	14	7	0	10	7	8	10	144	9	3	136	6	354
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	108	55	37	95	54	68	83	1165	86	39	1136	36	2962
Approach %	54.00	27.50	18.50	43.78	24.88	31.34	6.22	87.33	6.45	3.22	93.81	2.97	
App/Depart	200	/	174	217	/	179	1334	/	1297	1211	/	1312	

NOON Peak Hr Begins at: 1115 AM

PEAK

Volumes	46	33	25	55	24	24	41	593	39	25	606	20	1531
Approach %	44.23	31.73	24.04	53.40	23.30	23.30	6.09	88.11	5.79	3.84	93.09	3.07	

PEAK HR. FACTOR:

	0.722	0.831	0.940	0.975	0.959
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CONTROL: Signalized  
 COMMENT 1: 0  
 GPS: 32.749534, -117.088008

HOURS:

	FROM:		TO:	
AM	700	AM	900	AM
NOON	1100	AM	100	PM
PM	300	PM	500	PM

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: Winona Ave.      DATE: 04/23/2015      LOCATION: San Diego  
 E-W STREET: University Ave.      DAY: THURSDAY      PROJECT#: IC 087-15

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	2	0	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM	22	13	2	19	22	9	16	175	18	8	166	12	482
3:15 PM	13	15	10	24	16	25	12	178	12	6	203	11	525
3:30 PM	19	12	3	34	14	23	15	182	9	8	170	8	497
3:45 PM	32	14	7	25	28	12	11	189	16	8	149	2	493
4:00 PM	32	7	8	29	15	13	14	176	19	4	142	10	469
4:15 PM	20	10	5	17	11	10	9	175	14	6	168	6	451
4:30 PM	23	14	3	17	11	11	10	166	14	6	159	4	438
4:45 PM	24	17	3	26	17	15	6	158	15	8	148	4	441
5:00 PM													
5:15 PM													
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	185	102	41	191	134	118	93	1399	117	54	1305	57	3796
Approach %	56.40	31.10	12.50	43.12	30.25	26.64	5.78	86.95	7.27	3.81	92.16	4.03	
App/Depart	328	/	252	443	/	305	1609	/	1631	1416	/	1608	

PM Peak Hr Begins at: 300 PM

**PEAK**

Volumes	86	54	22	102	80	69	54	724	55	30	688	33	1997
Approach %	53.09	33.33	13.58	40.64	31.87	27.49	6.48	86.91	6.60	3.99	91.61	4.39	

**PEAK HR.**

FACTOR:	0.764	0.884	0.964	0.853	0.951
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CONTROL: Signalized  
 COMMENT 1: 0  
 GPS: 32.749534, -117.088008



### Pedestrian & Bicycle Study

**N-S STREET:** Winona Ave.  
**E-W STREET:** University Ave.

**Date:** 04/23/2015  
**Day:** THURSDAY

**City:** San Diego  
**Project #:** IC 087-15

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	4	6	4	0
7:15 AM	5	5	6	5
7:30 AM	7	10	8	9
7:45 AM	6	11	3	13
8:00 AM	4	9	2	3
8:15 AM	1	14	2	1
8:30 AM	2	8	11	12
8:45 AM	4	11	13	5
<b>TOTAL</b>	<b>33</b>	<b>74</b>	<b>49</b>	<b>48</b>

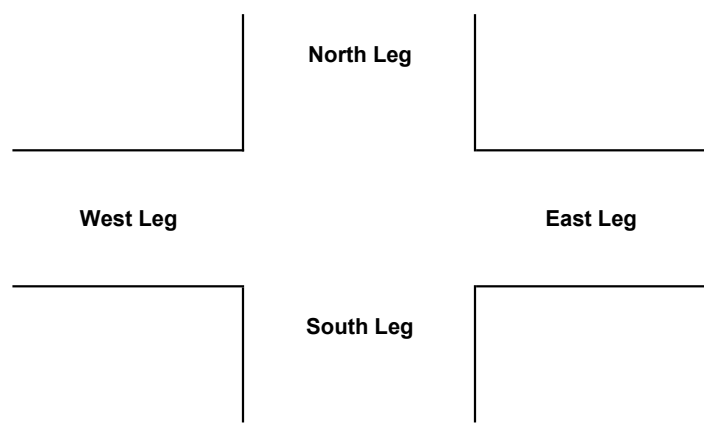
	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	1	0	0
7:15 AM	1	9	0	0
7:30 AM	1	0	2	0
7:45 AM	0	2	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	1
8:30 AM	1	0	0	0
8:45 AM	0	1	0	0
<b>TOTAL</b>	<b>3</b>	<b>13</b>	<b>2</b>	<b>1</b>

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
11:00 AM	2	18	1	7
11:15 AM	5	7	3	4
11:30 AM	8	7	3	2
11:45 AM	7	11	2	6
12:00 PM	16	14	19	12
12:15 PM	7	3	12	6
12:30 PM	5	8	5	4
12:45 PM	5	9	3	4
<b>TOTAL</b>	<b>55</b>	<b>77</b>	<b>48</b>	<b>45</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
11:00 AM	1	1	0	0
11:15 AM	2	1	1	0
11:30 AM	0	0	0	0
11:45 AM	0	1	0	0
12:00 PM	0	0	0	0
12:15 PM	1	0	0	0
12:30 PM	0	2	0	0
12:45 PM	1	1	0	0
<b>TOTAL</b>	<b>5</b>	<b>6</b>	<b>1</b>	<b>0</b>

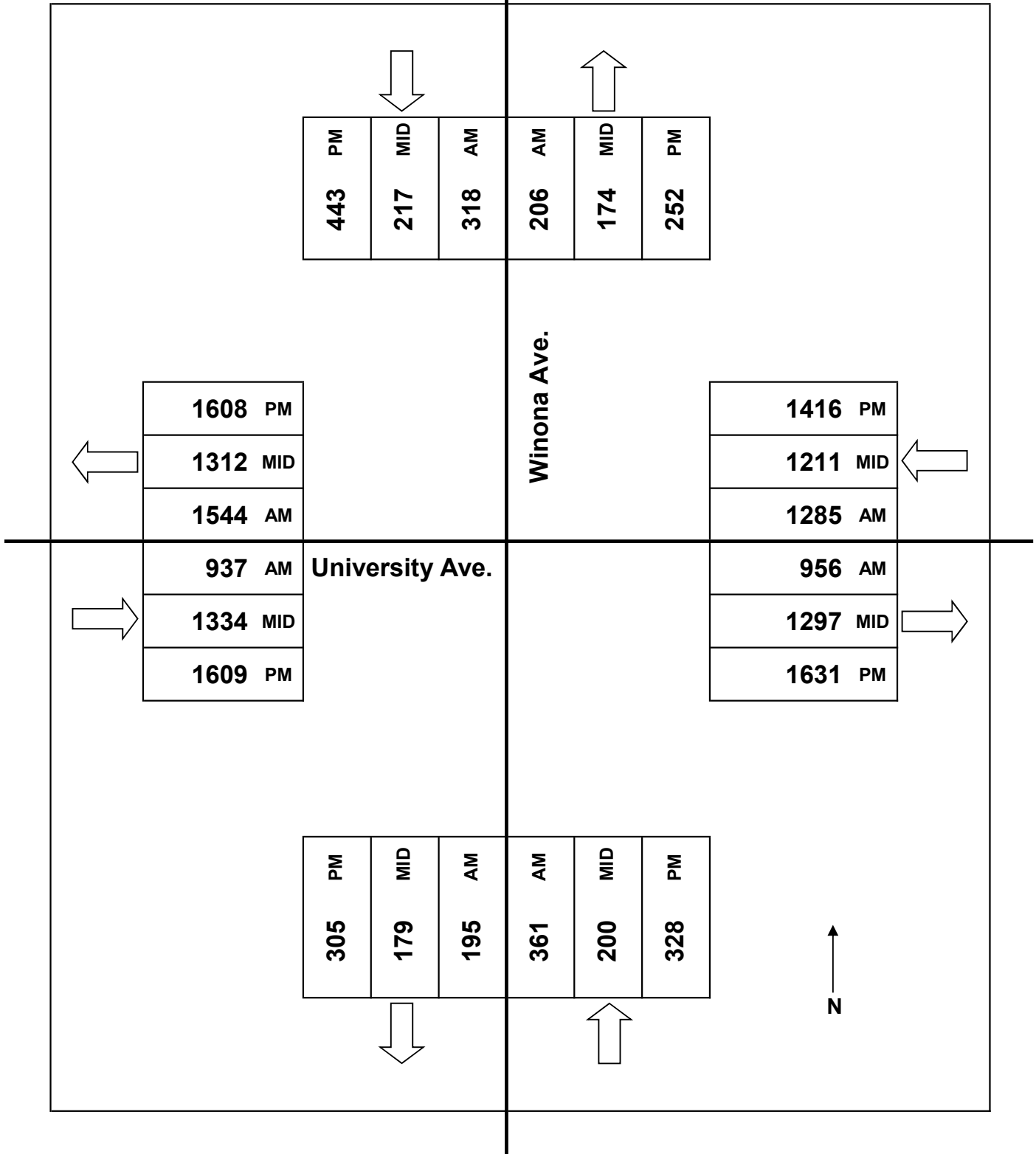
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:00 PM	12	7	5	33
3:15 PM	11	6	23	20
3:30 PM	8	6	8	22
3:45 PM	11	7	7	5
4:00 PM	5	6	3	7
4:15 PM	1	7	11	14
4:30 PM	3	10	4	14
4:45 PM	16	4	9	13
<b>TOTAL</b>	<b>67</b>	<b>53</b>	<b>70</b>	<b>128</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:00 PM	0	2	0	0
3:15 PM	0	0	0	0
3:30 PM	0	2	0	0
3:45 PM	0	0	0	0
4:00 PM	0	0	0	0
4:15 PM	4	1	0	0
4:30 PM	2	1	0	0
4:45 PM	2	0	0	0
<b>TOTAL</b>	<b>8</b>	<b>6</b>	<b>0</b>	<b>0</b>



JOB# IC 087-15  
VALIDATED: \_\_\_\_\_

DATE: 04/23/2015  
DAY: THURSDAY

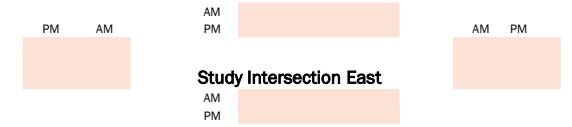
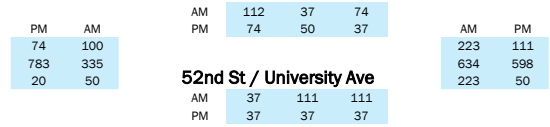
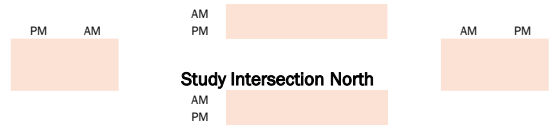
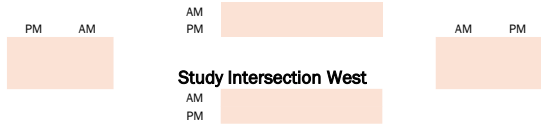




50) University Ave & 52nd St

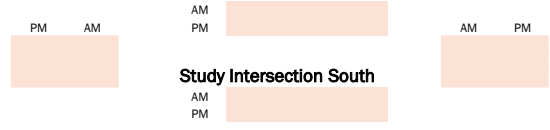
## 52nd St / University Ave

If intersection turning movements can be calculated using adjacent studied intersections, use that method  
 If they cannot, consult Replica and SANDAG TFIC to find the segment ADT for all legs of the intersection  
 Use these ADTs, and percentages of 7% and 9% for AM/PM respectively, to determine estimate of intersection turning movements  
 Fine-tune these volumes based upon surrounding study intersections



## Methodology

Only things that were changed in this intersection were adding volumes that were 0 based on volumes from Int 48. AM: EBL/EBR. PM: EBR/WBL/SBT



551) University Ave & 54th St

## 54th St / University Ave

If intersection turning movements can be calculated using adjacent studied intersections, use that method  
 If they cannot, consult Replica and SANDAG TFIC to find the segment ADT for all legs of the intersection

Use these ADTs, and percentages of 7% and 9% for AM/PM respectively, to determine estimate of intersection turning movements

Fine-tune these volumes based upon surrounding study intersections

PM	AM
74	100
783	335
20	50

AM	PM
112	74
37	50
37	37

### Study Intersection West

AM	PM
37	111
111	111
37	37

AM	PM
223	111
634	598
223	50

PM	AM

PM	AM
126	61
460	227
168	96

### Study Intersection North

AM	PM

AM	PM
67	238
100	756
169	465

### 54th St / University Ave

AM	PM
194	696
20	20
230	408

AM	PM

AM	PM
321	276
350	369
47	90

PM	AM

### Study Intersection East

AM	PM

AM	PM

## Methodology

PM	AM

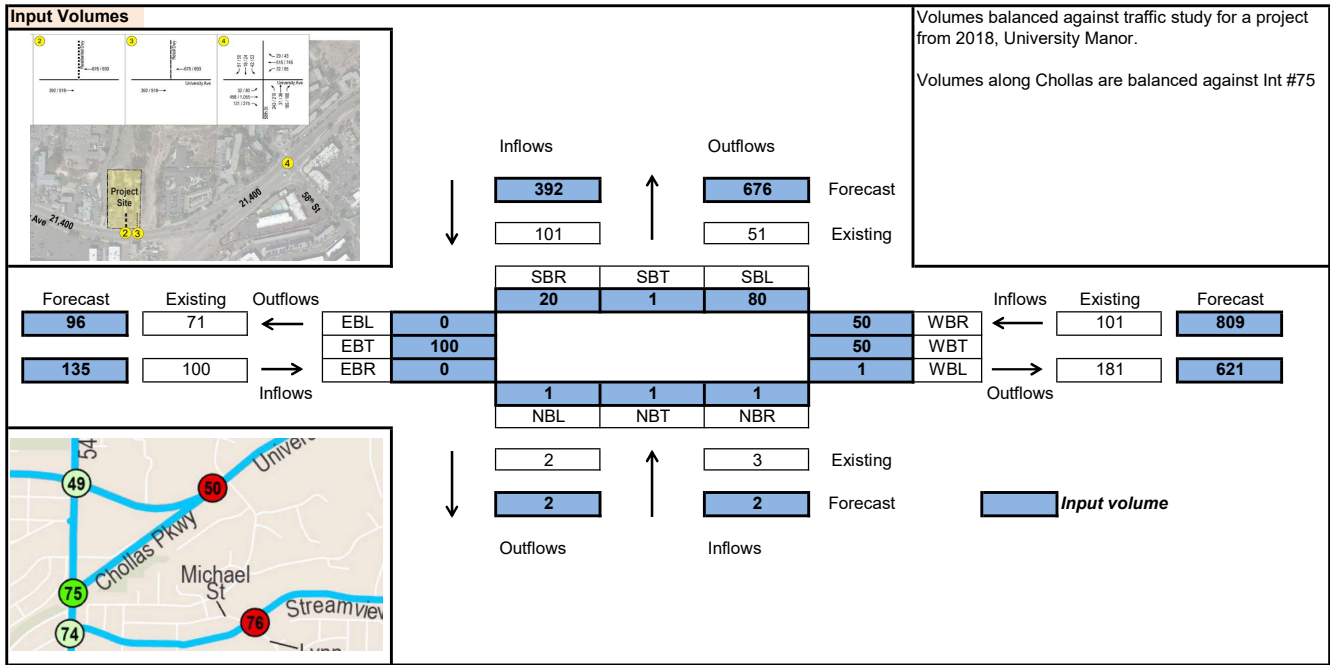
### Study Intersection South

AM	PM

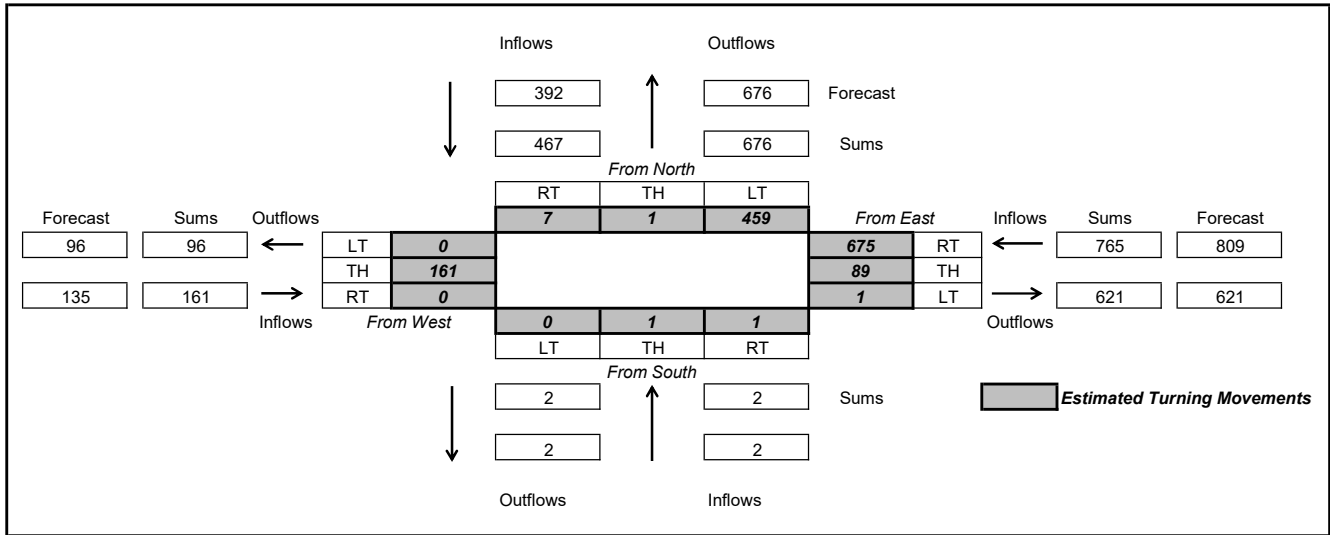
AM	PM

52) Chollas Pkwy & University Ave

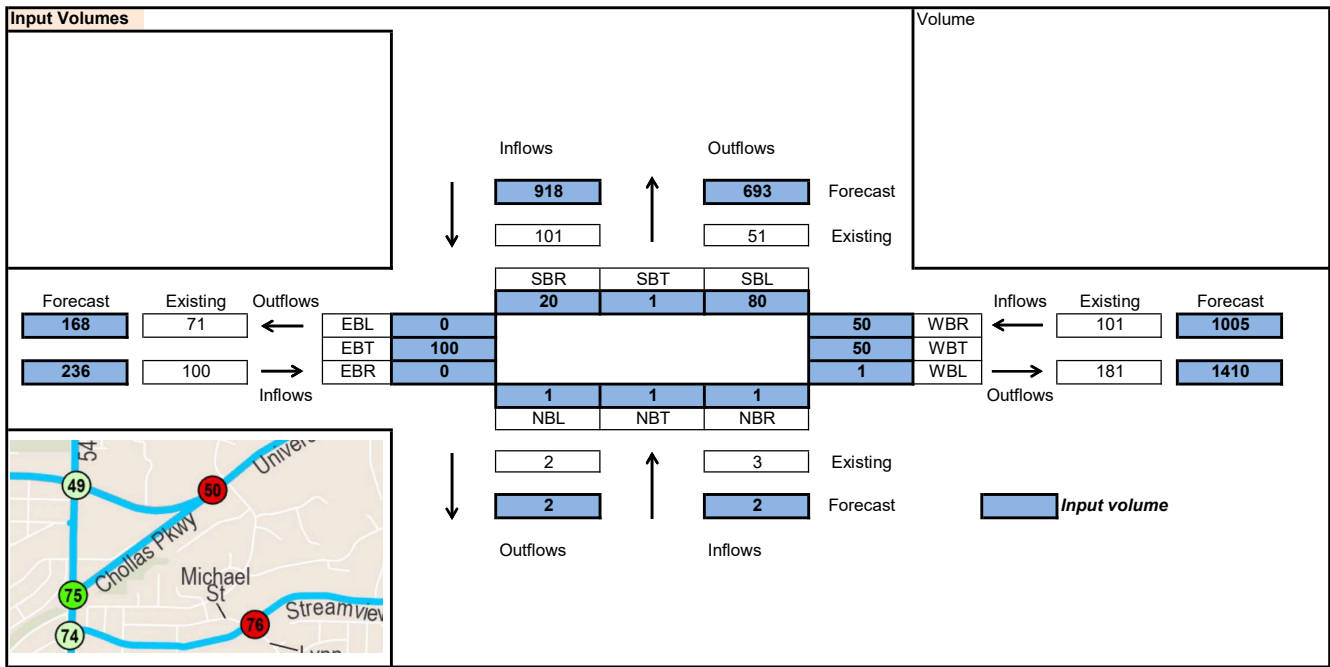
### Iterative Method Estimated Turning Movements



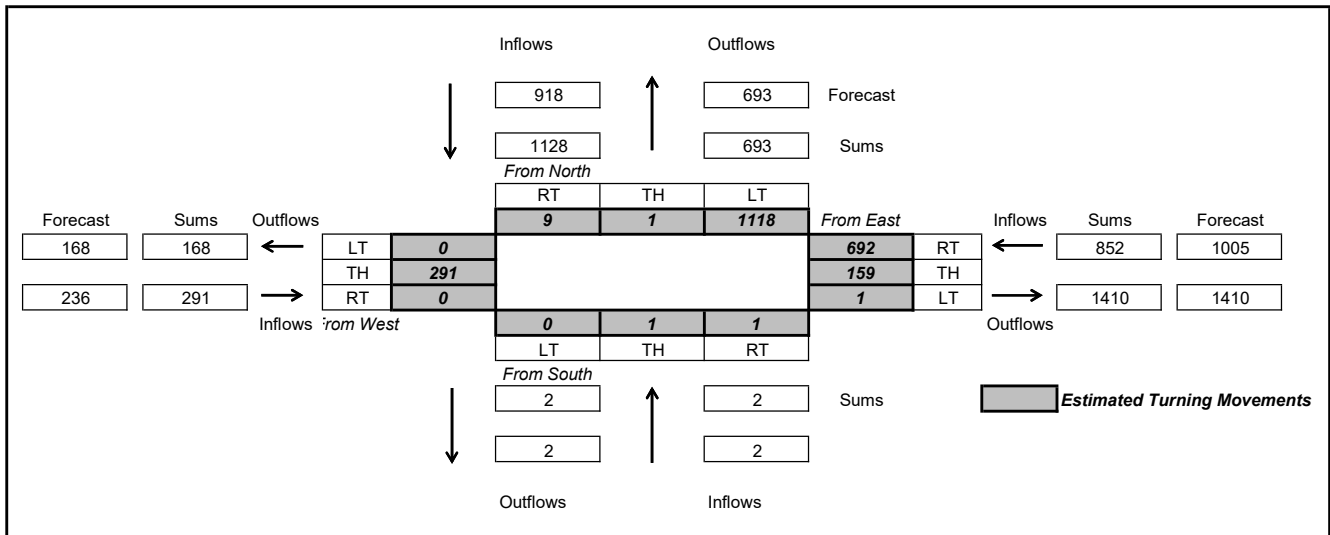
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



Estimated Turning Movements

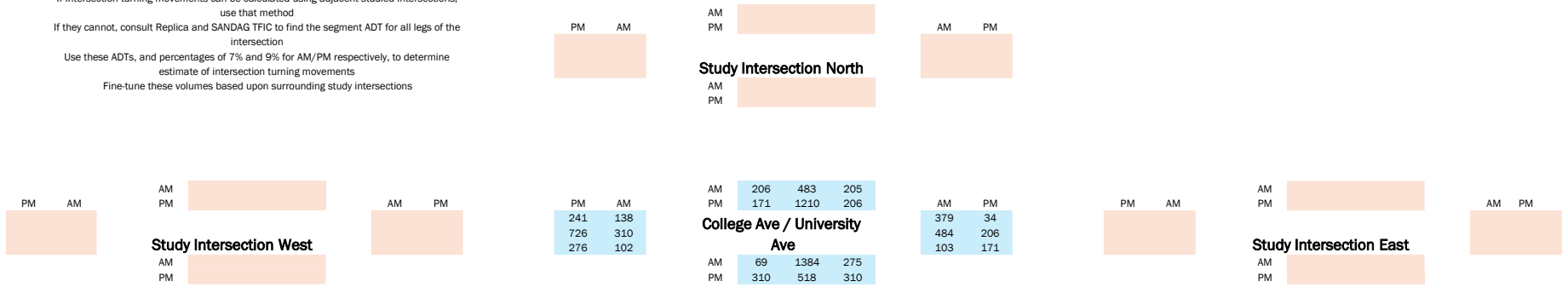


53) University Ave & College Ave



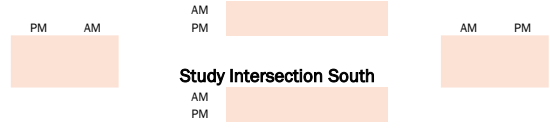
## College Ave / University Ave

If intersection turning movements can be calculated using adjacent studied intersections, use that method  
 If they cannot, consult Replica and SANDAG TFIC to find the segment ADT for all legs of the intersection  
 Use these ADTs, and percentages of 7% and 9% for AM/PM respectively, to determine estimate of intersection turning movements  
 Fine-tune these volumes based upon surrounding study intersections



## Methodology

While a Replica count, it was determined that the counts were reasonable and therefore not adjusted.



54) University Ave & Rolando Blvd

Summary

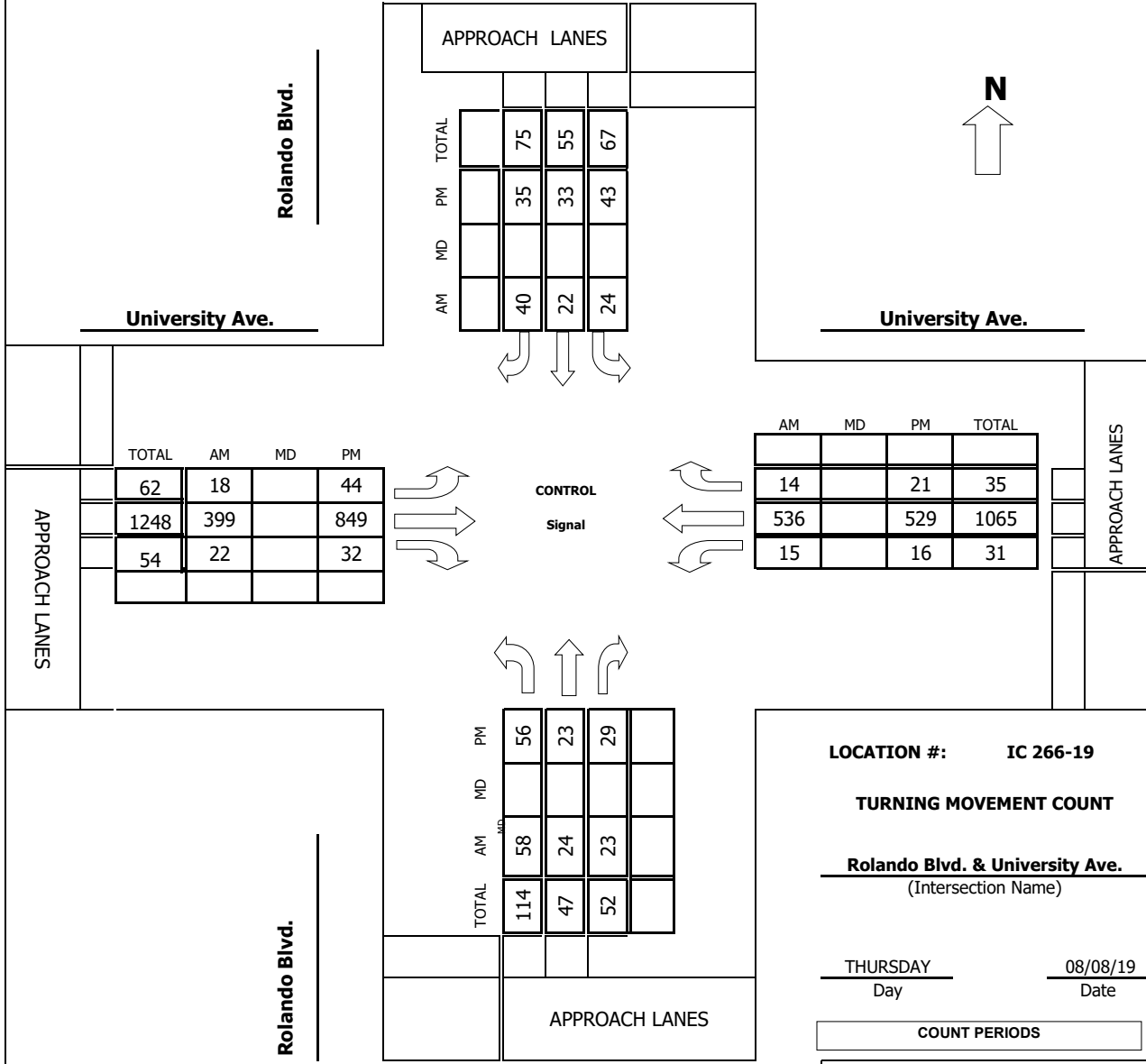
	Location		Latitude	Longitude	FILE NO	STUDY DATE	STUDY TIME	VEHICLES	PEDS	OTHER	BICYCLES	TOTAL	Mode Share PEDS	Mode Share OTHER	Mode Share BICYCLES	Mode Share Vehicles	
AM	Rolando Blvd.	&	University Ave.	32.754683	-117.058335	IC 266-19	08/08/19	0700-0900	2224	43	0	5	2272	1.9%	0.0%	0.2%	97.9%
PM	Rolando Blvd.	&	University Ave.	32.754683	-117.058335	IC 266-19	08/08/19	1545-1745	3196	59	0	4	3259	1.8%	0.0%	0.1%	98.1%

**Intersection Turning Movement  
Prepared by:**



**Project #:** IC 266-19

***TMC SUMMARY OF Rolando Blvd. & University Ave.***



TOTAL	AM	MD	PM
62	18		44
1248	399		849
54	22		32

AM	MD	PM	TOTAL
14		21	35
536		529	1065
15		16	31

TOTAL	AM	MD	PM
114	58	24	23
47	24	23	
52	23		29

**LOCATION #:** IC 266-19

**TURNING MOVEMENT COUNT**

**Rolando Blvd. & University Ave.**  
(Intersection Name)

THURSDAY                      08/08/19  
Day                                      Date

COUNT PERIODS	
<b>AM</b>	700AM - 900AM
<b>NOON</b>	-
<b>PM</b>	345PM - 545PM

AM PEAK HOUR                      745 AM  
NOON PEAK HOUR                      \_\_\_\_\_  
PM PEAK HOUR                      430 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **Rolando Blvd.**      DATE: **08/08/19**      LOCATION: **San Diego**  
 E-W STREET: **University Ave.**      DAY: **THURSDAY**      PROJECT# **IC 266-19**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM	0	1	0	0	1	0	1	2	0	1	2	0	
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	6	2	4	6	3	9	5	76	2	7	128	2	250
7:15 AM	7	1	2	7	1	11	7	69	2	8	133	4	252
7:30 AM	12	3	3	7	7	14	5	63	1	10	131	5	261
7:45 AM	17	8	6	5	10	10	3	95	9	10	128	2	303
8:00 AM	15	3	6	8	5	11	10	121	5	2	124	3	313
8:15 AM	11	7	6	5	3	10	3	99	5	3	141	3	296
8:30 AM	15	6	5	6	4	9	2	84	3	0	143	6	283
8:45 AM	12	4	8	7	0	6	0	79	6	3	139	2	266
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	95	34	40	51	33	80	35	686	33	43	1067	27	2224
Approach %	56.21	20.12	23.67	31.10	20.12	48.78	4.64	90.98	4.38	3.78	93.84	2.37	
App/Depart	169	/	96	164	/	109	754	/	777	1137	/	1242	

AM Peak Hr Begins at: 745 AM

**PEAK**

Volumes	58	24	23	24	22	40	18	399	22	15	536	14	1195
Approach %	55.24	22.86	21.90	27.91	25.58	46.51	4.10	90.89	5.01	2.65	94.87	2.48	

**PEAK HR.**

FACTOR:	0.847	0.860	0.807	0.948	0.954
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**CONTROL:**

Signal

**COMMENT 1:**

GPS: 32.754683      -117.058335



**Pedestrian & Bicycle Study**

N-S STREET: Rolando Blvd.  
E-W STREET: University Ave.

Date: 08/08/19  
Day: THURSDAY

City: San Diego  
Project #: IC 266-19

	PEDESTRIANS				GRAND TOTAL
	N-LEG	S-LEG	E-LEG	W-LEG	
7:00 AM	0	0	0	0	
7:15 AM	0	0	0	0	
7:30 AM	3	0	2	0	
7:45 AM	3	1	1	1	
8:00 AM	8	0	6	0	
8:15 AM	7	0	0	0	
8:30 AM	3	0	1	2	
8:45 AM	3	0	0	2	
<b>TOTAL</b>	<b>27</b>	<b>1</b>	<b>10</b>	<b>5</b>	<b>43</b>

	OTHER (SCOOTERS, SKATEBOARD, ETC)				GRAND TOTAL
	N-LEG	S-LEG	E-LEG	W-LEG	
7:00 AM	0	0	0	0	
7:15 AM	0	0	0	0	
7:30 AM	0	0	0	0	
7:45 AM	0	0	0	0	
8:00 AM	0	0	0	0	
8:15 AM	0	0	0	0	
8:30 AM	0	0	0	0	
8:45 AM	0	0	0	0	
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

	BICYCLES				GRAND TOTAL
	N-LEG	S-LEG	E-LEG	W-LEG	
7:00 AM	0	0	0	0	
7:15 AM	0	0	0	0	
7:30 AM	0	0	0	0	
7:45 AM	3	1	0	0	
8:00 AM	0	0	0	0	
8:15 AM	1	0	0	0	
8:30 AM	0	0	0	0	
8:45 AM	0	0	0	0	
<b>TOTAL</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>5</b>

	PEDESTRIANS				GRAND TOTAL
	N-LEG	S-LEG	E-LEG	W-LEG	
3:45 PM	4	4	2	3	
4:00 PM	1	1	0	0	
4:15 PM	7	3	0	4	
4:30 PM	3	0	2	0	
4:45 PM	6	1	0	2	
5:00 PM	7	5	0	0	
5:15 PM	2	0	0	0	
5:30 PM	2	0	0	0	
<b>TOTAL</b>	<b>32</b>	<b>14</b>	<b>4</b>	<b>9</b>	<b>59</b>

	OTHER (SCOOTERS, SKATEBOARD, ETC)				GRAND TOTAL
	N-LEG	S-LEG	E-LEG	W-LEG	
3:45 PM	0	0	0	0	
4:00 PM	0	0	0	0	
4:15 PM	0	0	0	0	
4:30 PM	0	0	0	0	
4:45 PM	0	0	0	0	
5:00 PM	0	0	0	0	
5:15 PM	0	0	0	0	
5:30 PM	0	0	0	0	
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

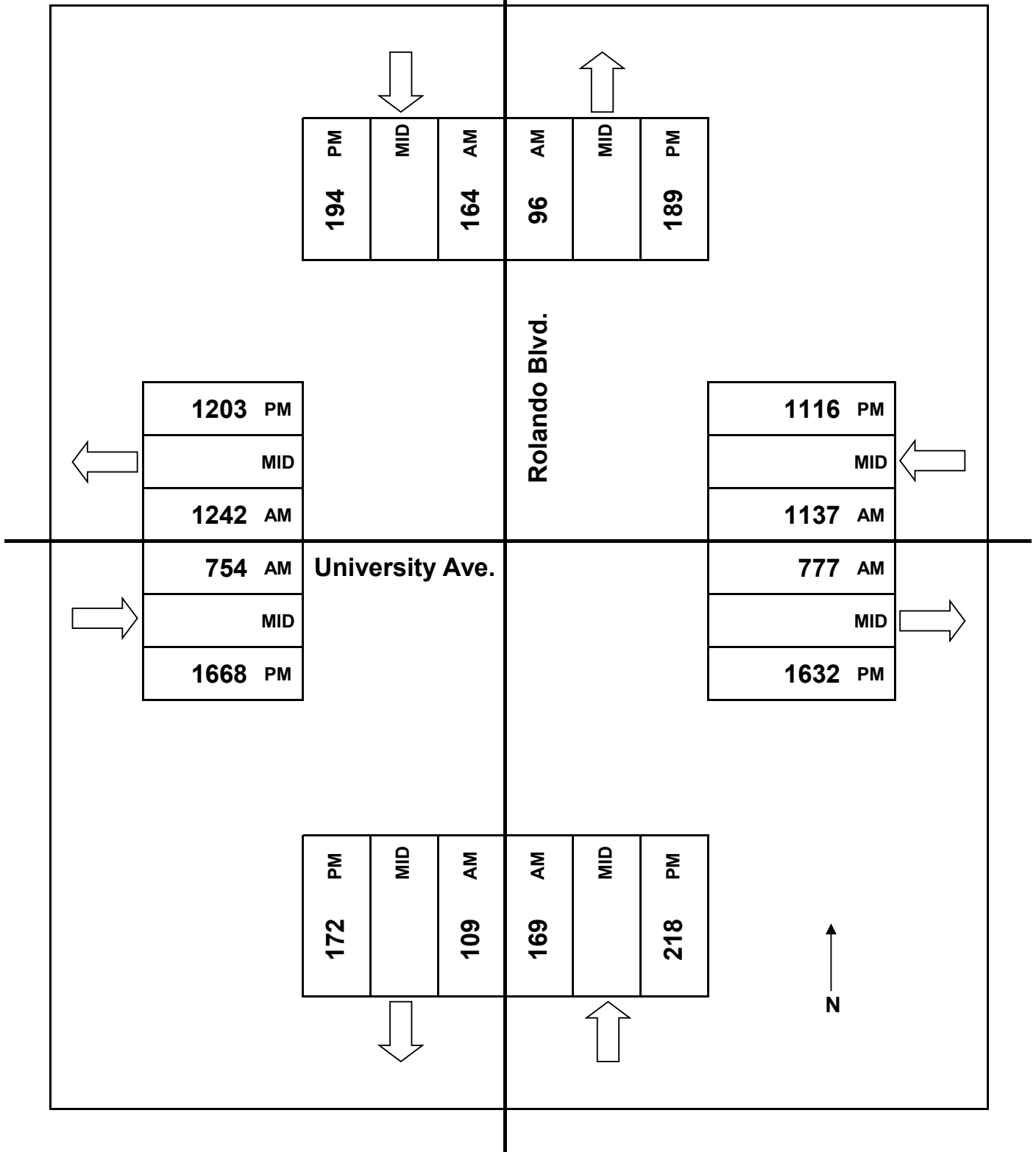
	BICYCLES				GRAND TOTAL
	N-LEG	S-LEG	E-LEG	W-LEG	
3:45 PM	0	2	0	0	
4:00 PM	0	0	0	0	
4:15 PM	1	0	0	0	
4:30 PM	0	0	0	0	
4:45 PM	0	0	0	0	
5:00 PM	0	0	0	0	
5:15 PM	0	0	0	0	
5:30 PM	0	1	0	0	
<b>TOTAL</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>4</b>

**MAP**



JOB# IC 266-19  
VALIDATED: \_\_\_\_\_

DATE: 08/08/19  
DAY: THURSDAY





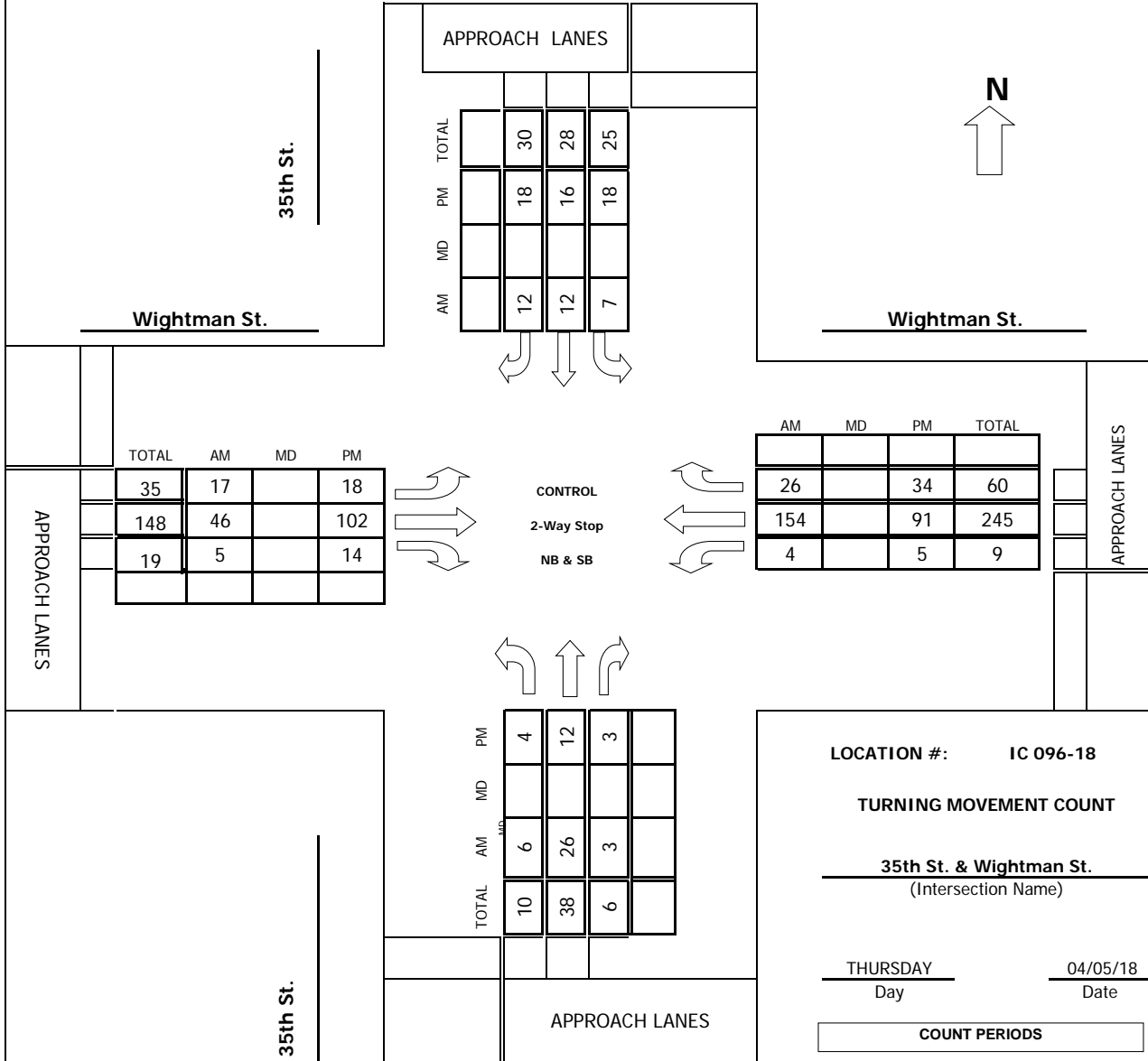
55) Wightman St & 35th St

**Intersection Turning Movement  
Prepared by:**



**Project #:** IC 096-18

**TMC SUMMARY OF 35th St. & Wightman St.**



TOTAL	AM	MD	PM
35	17		18
148	46		102
19	5		14

AM	MD	PM	TOTAL
26		34	60
154		91	245
4		5	9

TOTAL	AM	MD	PM
10	6		4
38	26		12
6	3		3

**LOCATION #:** IC 096-18

**TURNING MOVEMENT COUNT**

**35th St. & Wightman St.**  
(Intersection Name)

THURSDAY                      04/05/18  
Day                                      Date

COUNT PERIODS	
AM	700AM - 900AM
NOON	-
PM	200PM - 400PM

AM PEAK HOUR                      745 AM  
NOON PEAK HOUR                      \_\_\_\_\_  
PM PEAK HOUR                      300 PM

# Intersection Turning Movement

Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **35th St.**      DATE: **04/05/18**      LOCATION: **San Diego**  
 E-W STREET: **Wightman St.**      DAY: **THURSDAY**      PROJECT# **IC 096-18**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	5	1	0	1	6	3	8	1	0	19	9	53
7:15 AM	1	3	2	1	2	2	2	6	1	1	22	9	52
7:30 AM	0	6	0	2	1	5	5	9	2	0	30	6	66
7:45 AM	1	9	1	3	4	1	2	13	1	1	32	9	77
8:00 AM	3	5	1	1	1	4	4	16	3	2	41	5	86
8:15 AM	2	8	0	2	5	2	7	7	0	1	42	8	84
8:30 AM	0	4	1	1	2	5	4	10	1	0	39	4	71
8:45 AM	1	1	2	4	6	2	2	8	2	0	30	5	63
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	8	41	8	14	22	27	29	77	11	5	255	55	552
Approach %	14.04	71.93	14.04	22.22	34.92	42.86	24.79	65.81	9.40	1.59	80.95	17.46	
App/Depart	57	/	125	63	/	38	117	/	99	315	/	290	

AM Peak Hr Begins at: 745 AM

**PEAK**

Volumes	6	26	3	7	12	12	17	46	5	4	154	26	318
Approach %	17.14	74.29	8.57	22.58	38.71	38.71	25.00	67.65	7.35	2.17	83.70	14.13	

**PEAK HR.**

FACTOR:	0.795	0.861	0.739	0.902	0.924
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CONTROL: **2-Way Stop (NB & SB)**  
 COMMENT 1:  
 GPS: **32.747891, -117.118073**

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **35th St.**      DATE: **04/05/18**      LOCATION: **San Diego**  
 E-W STREET: **Wightman St.**      DAY: **THURSDAY**      PROJECT# **IC 096-18**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	1	0	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM	1	1	1	2	1	5	4	21	2	0	19	8	65
2:15 PM	0	1	2	4	2	2	1	25	4	2	22	5	70
2:30 PM	1	2	1	7	5	3	5	24	1	1	20	3	73
2:45 PM	3	3	0	10	2	6	2	25	5	0	19	6	81
3:00 PM	0	2	1	5	6	2	8	30	2	1	16	9	82
3:15 PM	1	5	2	8	3	5	5	33	6	1	20	5	94
3:30 PM	2	1	0	1	2	4	3	20	3	1	25	8	70
3:45 PM	1	4	0	4	5	7	2	19	3	2	30	12	89
4:00 PM													
4:15 PM													
4:30 PM													
4:45 PM													
5:00 PM													
5:15 PM													
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	9	19	7	41	26	34	30	197	26	8	171	56	624
Approach %	25.71	54.29	20.00	40.59	25.74	33.66	11.86	77.87	10.28	3.40	72.77	23.83	
App/Depart	35	/	105	101	/	60	253	/	245	235	/	214	

PM Peak Hr Begins at: 300 PM

**PEAK**

Volumes	4	12	3	18	16	18	18	102	14	5	91	34	335
Approach %	21.05	63.16	15.79	34.62	30.77	34.62	13.43	76.12	10.45	3.85	70.00	26.15	

**PEAK HR.**

FACTOR:	0.594	0.813	0.761	0.739	0.891
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CONTROL: **2-Way Stop (NB & SB)**  
 COMMENT 1: **0**  
 GPS: **32.747891, -117.118073**



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



veracitytrafficgroup

### Pedestrian & Bicycle Study

**N-S STREET:** 35th St.  
**E-W STREET:** Wightman St.

**Date:** 04/05/18  
**Day:** THURSDAY

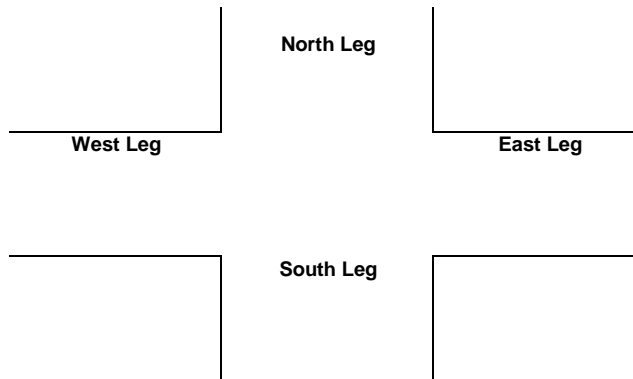
**City:** San Diego  
**Project #:** IC 096-18

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	1	1	1	2
7:15 AM	0	0	2	1
7:30 AM	1	0	1	1
7:45 AM	2	1	0	2
8:00 AM	1	1	1	1
8:15 AM	3	2	2	0
8:30 AM	2	1	1	2
8:45 AM	1	1	1	3
<b>TOTAL</b>	<b>11</b>	<b>7</b>	<b>9</b>	<b>12</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	1	0	1	0
7:15 AM	0	0	0	0
7:30 AM	1	1	0	0
7:45 AM	2	0	0	0
8:00 AM	1	1	0	1
8:15 AM	0	0	0	0
8:30 AM	1	0	0	0
8:45 AM	0	1	0	0
<b>TOTAL</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>1</b>

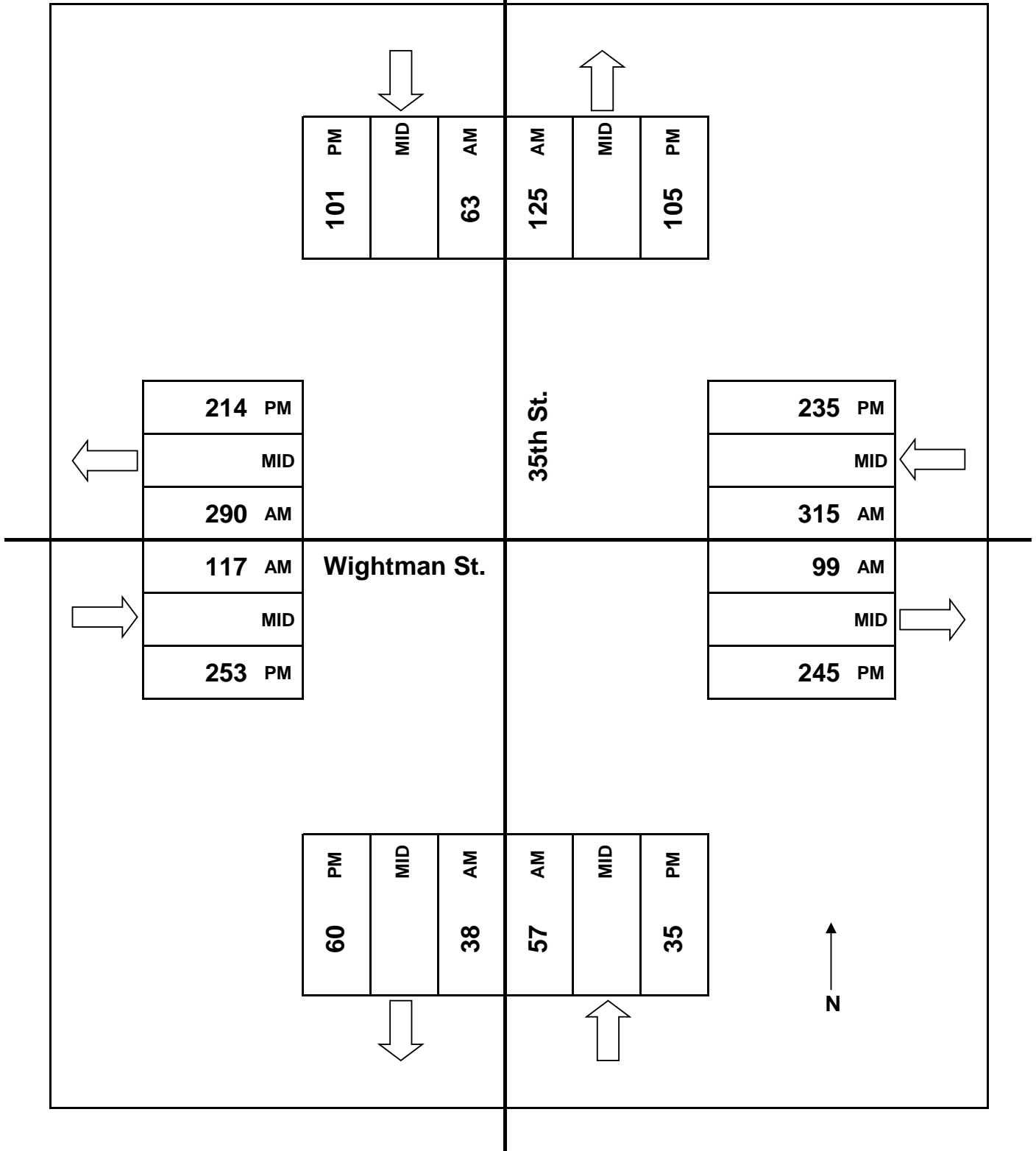
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
2:00 PM	1	1	1	0
2:15 PM	0	2	0	1
2:30 PM	0	1	1	2
2:45 PM	1	1	0	1
3:00 PM	2	0	0	0
3:15 PM	1	1	1	1
3:30 PM	0	2	0	1
3:45 PM	0	1	0	2
<b>TOTAL</b>	<b>5</b>	<b>9</b>	<b>3</b>	<b>8</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
2:00 PM	4	0	0	0
2:15 PM	0	1	0	0
2:30 PM	1	0	0	0
2:45 PM	0	2	0	0
3:00 PM	0	0	0	0
3:15 PM	0	0	1	0
3:30 PM	0	1	0	0
3:45 PM	0	0	0	0
<b>TOTAL</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>0</b>



JOB# IC 096-18  
VALIDATED: \_\_\_\_\_

DATE: 04/05/18  
DAY: THURSDAY



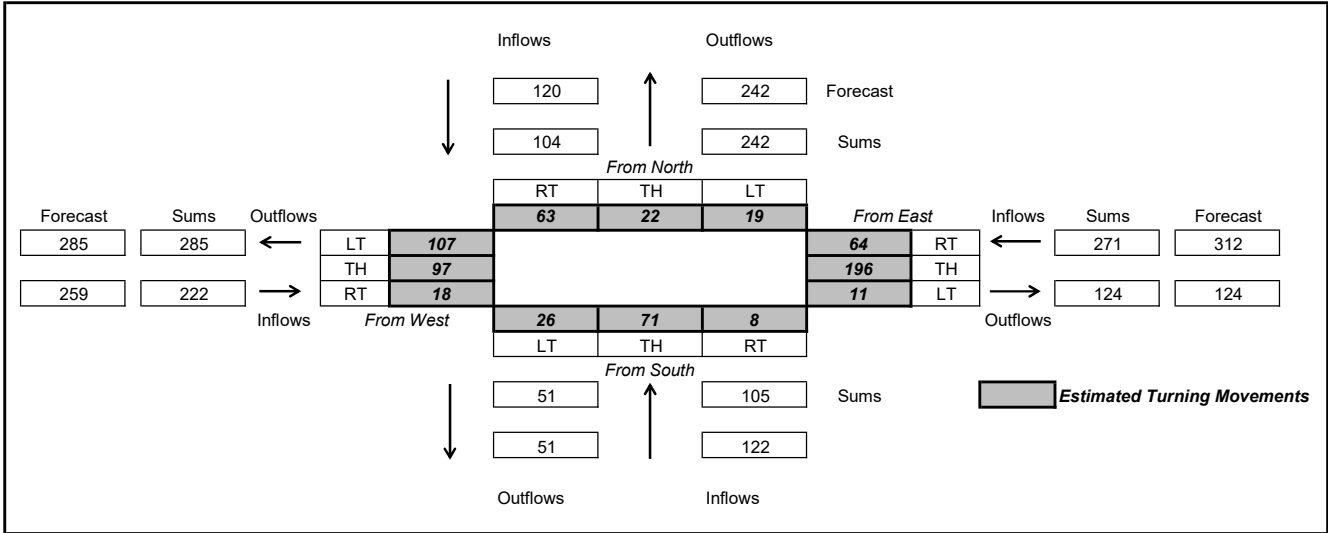
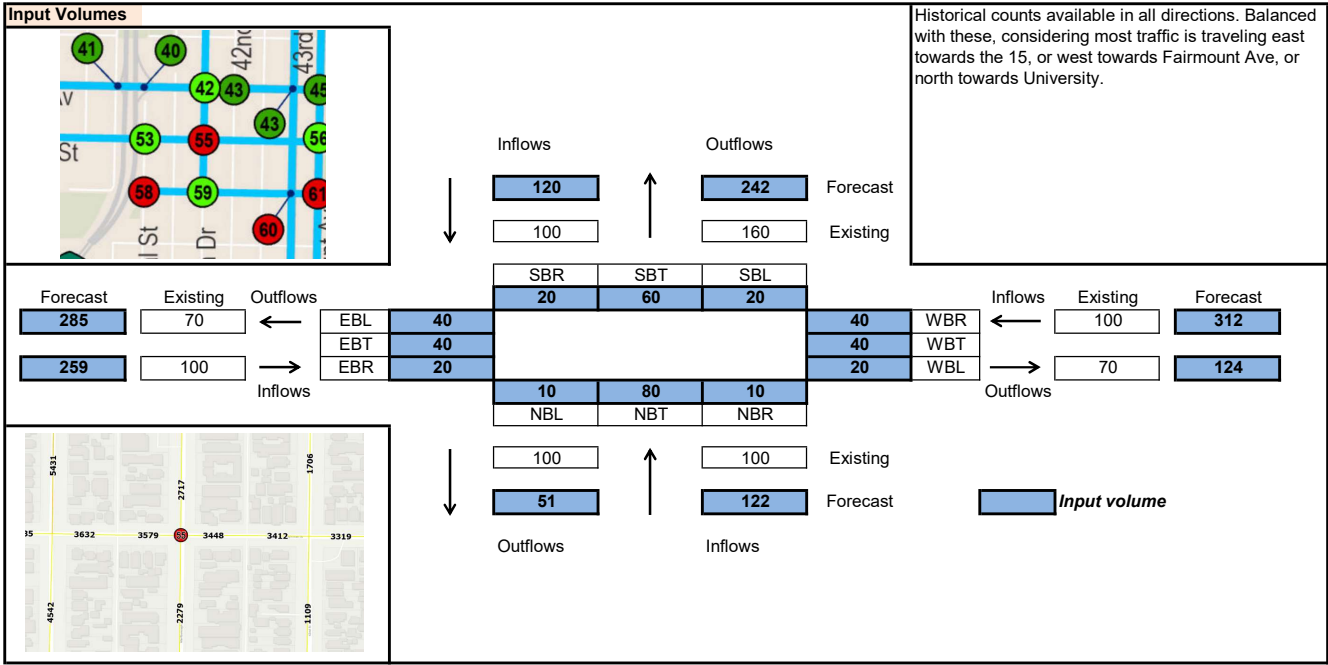
56) Wightman St & Central Ave



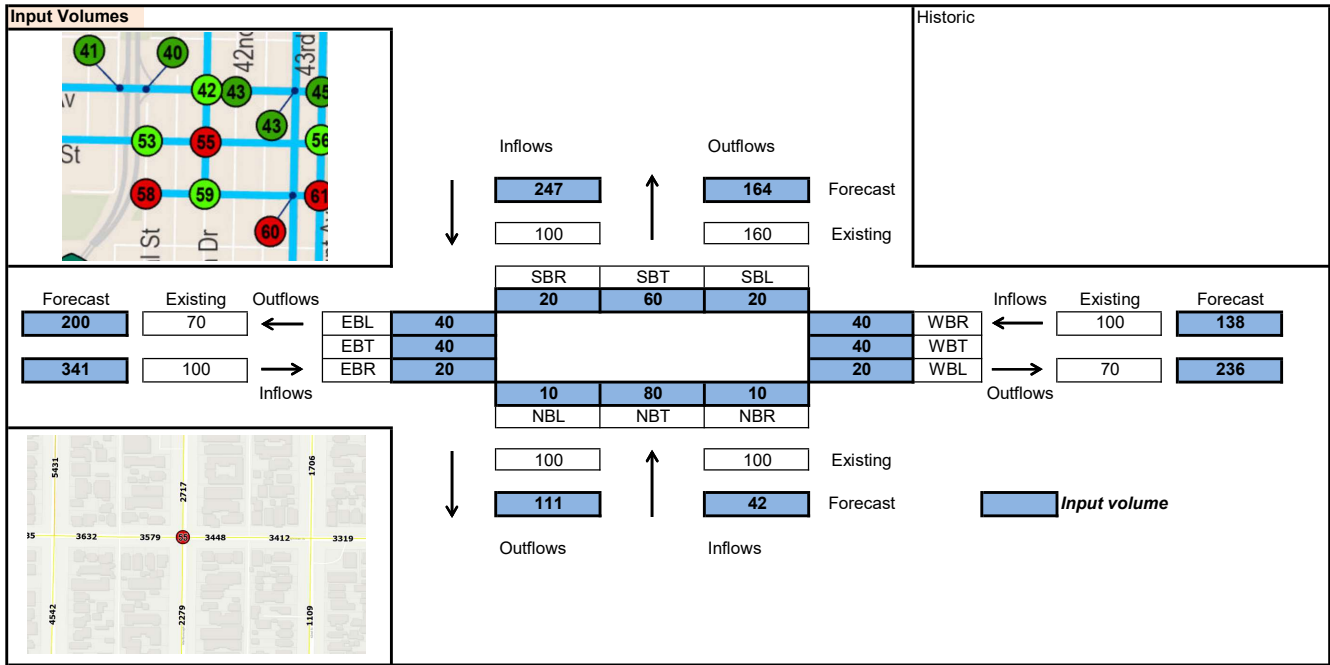


57) Wightman St & Marlborough Ave

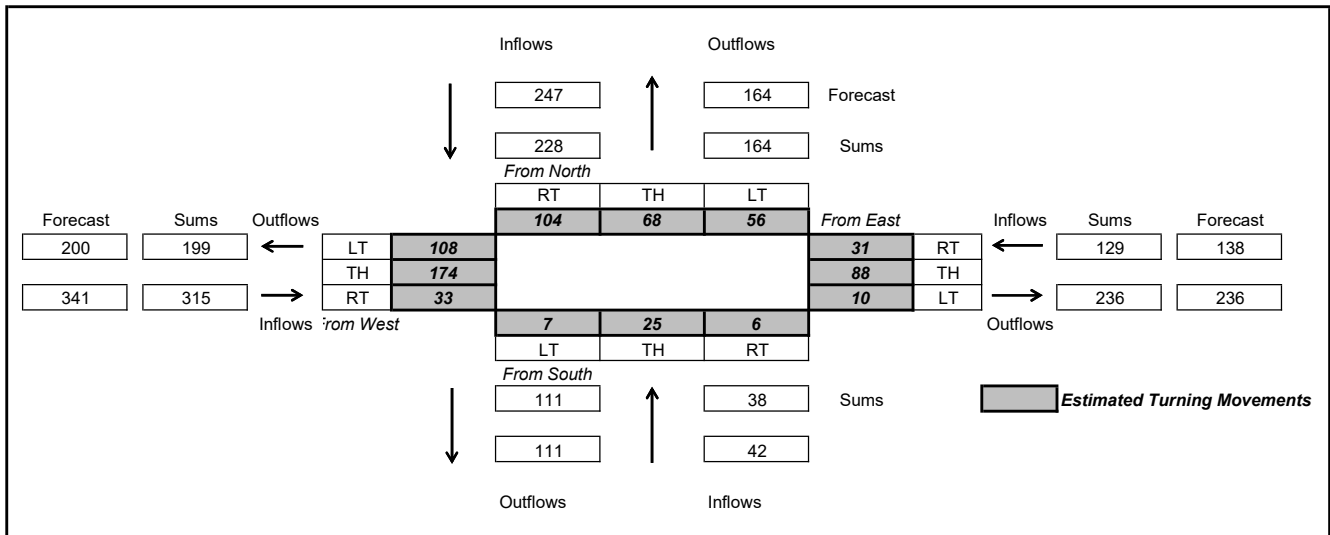
Iterative Method Estimated Turning Movements



### Iterative Method Estimated Turning Movements



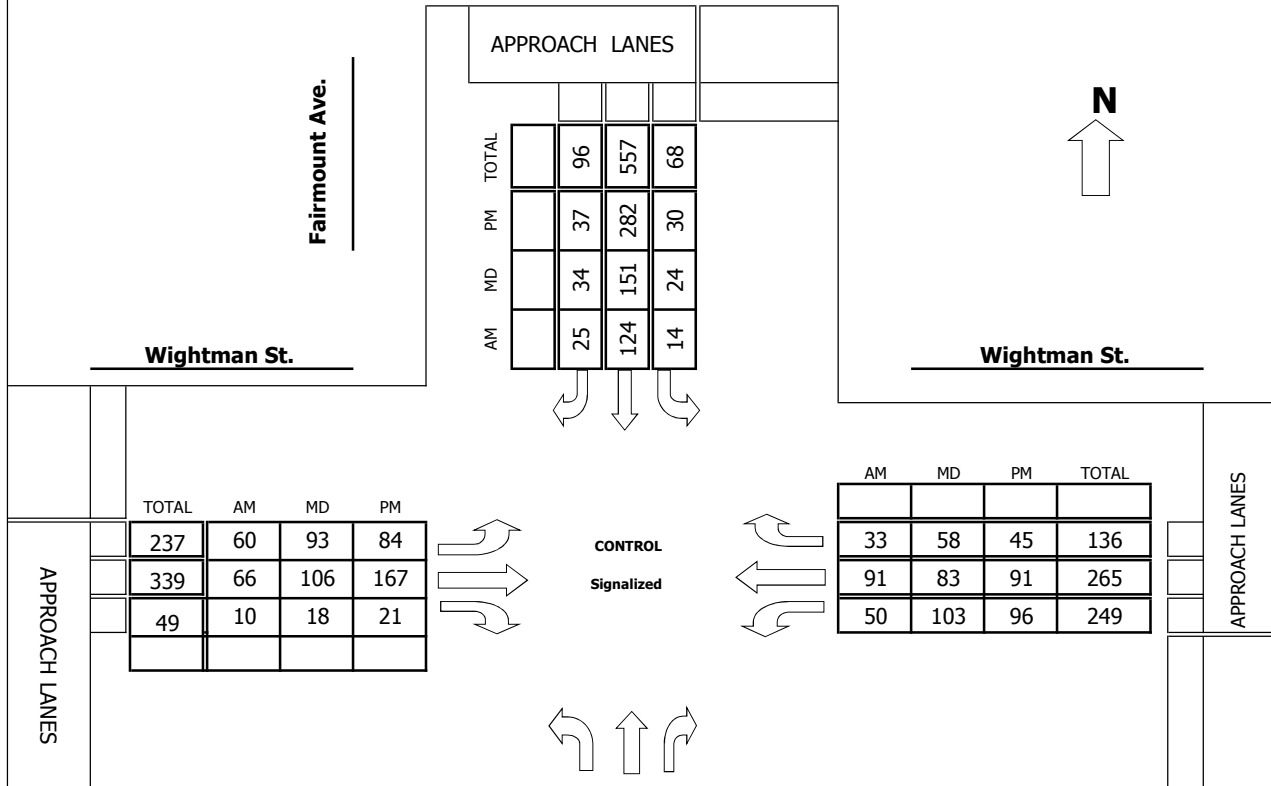
Estimated Turning Movements



58) Fairmount Ave & Wightman St

**Project #:** IC 081-15

**TMC SUMMARY OF Fairmount Ave. & Wightman St.**



TOTAL	AM	MD	PM
237	60	93	84
339	66	106	167
49	10	18	21

AM	MD	PM	TOTAL
33	58	45	136
91	83	91	265
50	103	96	249

TOTAL	AM	MD	PM
59	29	12	18
1486	773	329	384
216	76	53	87

**LOCATION #:** IC 081-15

**TURNING MOVEMENT COUNT**

**Fairmount Ave. & Wightman St.**  
(Intersection Name)

WEDNESDAY  
Day

04/08/2015  
Date

**COUNT PERIODS**

<b>AM</b>	700AM - 900AM
<b>NOON</b>	1100AM - 100PM
<b>PM</b>	300PM - 500PM

AM PEAK HOUR 700 AM

NOON PEAK HOUR 1130 AM

PM PEAK HOUR 300 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **Fairmount Ave.**      DATE: **04/08/2015**      LOCATION: **San Diego**  
 E-W STREET: **Wightman St.**      DAY: **WEDNESDAY**      PROJECT# **IC 081-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	201	20	3	24	2	15	17	4	11	13	4	314
7:15 AM	6	207	26	3	36	7	14	19	0	22	21	12	373
7:30 AM	12	204	17	1	40	7	9	10	2	10	31	11	354
7:45 AM	11	161	13	7	24	9	22	20	4	7	26	6	310
8:00 AM	5	163	22	2	34	9	12	6	2	17	21	10	303
8:15 AM	9	131	18	7	29	14	21	36	1	16	13	14	309
8:30 AM	8	117	20	7	38	8	21	8	3	10	18	13	271
8:45 AM	9	74	9	5	29	5	15	14	2	13	16	5	196
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	60	1258	145	35	254	61	129	130	18	106	159	75	2430
Approach %	4.10	85.99	9.91	10.00	72.57	17.43	46.57	46.93	6.50	31.18	46.76	22.06	
App/Depart	1463	/	1462	350	/	378	277	/	310	340	/	280	

AM Peak Hr Begins at: 700 AM

**PEAK**

Volumes	29	773	76	14	124	25	60	66	10	50	91	33	1351
Approach %	3.30	88.04	8.66	8.59	76.07	15.34	44.12	48.53	7.35	28.74	52.30	18.97	

**PEAK HR.**

FACTOR:	0.918	0.849	0.739	0.791	0.905
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CONTROL: **Signalized**  
 COMMENT 1:  
 GPS: **32.747808, -117.101052**

# Intersection Turning Movement

Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: Fairmount Ave.

DATE: 04/08/2015

LOCATION: San Diego

E-W STREET: Wightman St.

DAY: WEDNESDAY

PROJECT# IC 081-15

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	1	0	0	1	0	0	1	0	
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM	4	83	22	4	34	11	11	18	2	9	17	15	230
11:15 AM	7	77	18	9	32	12	13	13	2	23	20	10	236
11:30 AM	5	93	11	4	36	8	28	27	2	20	24	23	281
11:45 AM	4	92	13	5	44	11	23	19	7	22	24	13	277
12:00 PM	0	62	9	9	36	5	20	30	4	33	14	14	236
12:15 PM	3	82	20	6	35	10	22	30	5	28	21	8	270
12:30 PM	5	87	17	4	43	11	20	21	5	16	24	13	266
12:45 PM	4	84	12	8	50	15	20	18	4	17	23	17	272
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	32	660	122	49	310	83	157	176	31	168	167	113	2068
Approach %	3.93	81.08	14.99	11.09	70.14	18.78	43.13	48.35	8.52	37.50	37.28	25.22	
App/Depart	814	/	930	442	/	509	364	/	347	448	/	282	

NOON Peak Hr Begins at: 1130 AM

**PEAK**

Volumes	12	329	53	24	151	34	93	106	18	103	83	58	1064
Approach %	3.05	83.50	13.45	11.48	72.25	16.27	42.86	48.85	8.29	42.21	34.02	23.77	

**PEAK HR.**

FACTOR:	0.904	0.871	0.952	0.910	0.947
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CONTROL: Signalized

COMMENT 1: 0

GPS: 32.747808, -117.101052

HOURS:

	FROM:		TO:	
AM	700	AM	900	AM
NOON	1100	AM	100	PM
PM	300	PM	500	PM

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Fairmount Ave.**      DATE: **04/08/2015**      LOCATION: **San Diego**  
 E-W STREET: **Wightman St.**      DAY: **WEDNESDAY**      PROJECT# **IC 081-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM	2	97	28	8	70	13	18	49	11	31	24	15	366
3:15 PM	5	102	24	6	68	9	17	43	2	21	23	10	330
3:30 PM	6	96	13	6	64	9	29	46	4	25	20	7	325
3:45 PM	5	89	22	10	80	6	20	29	4	19	24	13	321
4:00 PM	5	92	24	5	61	10	17	36	3	24	20	10	307
4:15 PM	3	69	20	7	48	11	14	33	6	28	35	19	293
4:30 PM	4	99	23	11	74	10	24	31	5	23	27	10	341
4:45 PM	9	86	12	10	72	11	24	38	0	37	20	16	335
5:00 PM													
5:15 PM													
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	39	730	166	63	537	79	163	305	35	208	193	100	2618
Approach %	4.17	78.07	17.75	9.28	79.09	11.63	32.41	60.64	6.96	41.52	38.52	19.96	
App/Depart	935	/	993	679	/	780	503	/	534	501	/	311	

PM Peak Hr Begins at: 300 PM

**PEAK**

Volumes	18	384	87	30	282	37	84	167	21	96	91	45	1342
Approach %	3.68	78.53	17.79	8.60	80.80	10.60	30.88	61.40	7.72	41.38	39.22	19.40	

**PEAK HR.**

FACTOR:	0.933	0.909	0.861	0.829	0.917
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CONTROL: **Signalized**

COMMENT 1: **0**

GPS: **32.747808, -117.101052**





### Pedestrian & Bicycle Study

**N-S STREET:** Fairmount Ave.  
**E-W STREET:** Wightman St.

**Date:** 04/08/2015  
**Day:** WEDNESDAY

**City:** San Diego  
**Project #:** IC 081-15

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	11	8	6	3
7:15 AM	8	7	11	3
7:30 AM	8	16	6	7
7:45 AM	16	30	7	8
8:00 AM	20	36	13	21
8:15 AM	16	59	7	13
8:30 AM	21	89	17	18
8:45 AM	6	51	11	14
<b>TOTAL</b>	<b>106</b>	<b>296</b>	<b>78</b>	<b>87</b>

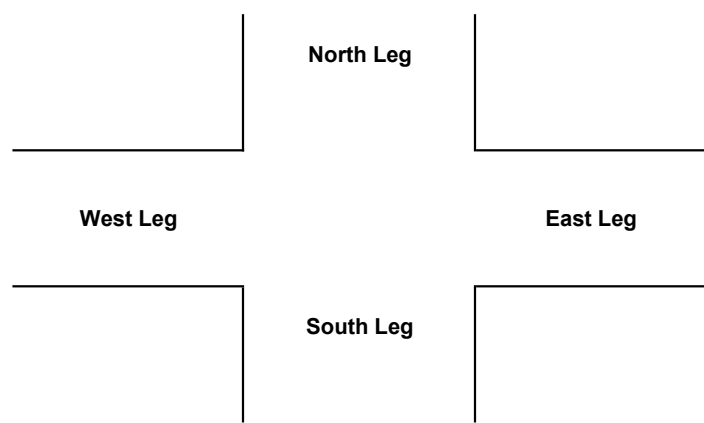
	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	5	0	0
7:15 AM	1	1	0	1
7:30 AM	0	0	0	0
7:45 AM	1	0	0	0
8:00 AM	1	1	0	1
8:15 AM	0	1	1	0
8:30 AM	1	1	0	0
8:45 AM	1	3	2	0
<b>TOTAL</b>	<b>5</b>	<b>12</b>	<b>3</b>	<b>2</b>

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
11:00 AM	18	17	35	10
11:15 AM	40	29	31	14
11:30 AM	47	25	43	55
11:45 AM	22	27	27	9
12:00 PM	27	33	14	18
12:15 PM	10	29	15	12
12:30 PM	14	38	9	15
12:45 PM	28	46	15	16
<b>TOTAL</b>	<b>206</b>	<b>244</b>	<b>189</b>	<b>149</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
11:00 AM	0	0	0	0
11:15 AM	1	0	0	0
11:30 AM	0	3	0	0
11:45 AM	0	0	0	1
12:00 PM	0	1	0	0
12:15 PM	0	0	1	0
12:30 PM	1	0	1	0
12:45 PM	0	3	0	1
<b>TOTAL</b>	<b>2</b>	<b>7</b>	<b>2</b>	<b>2</b>

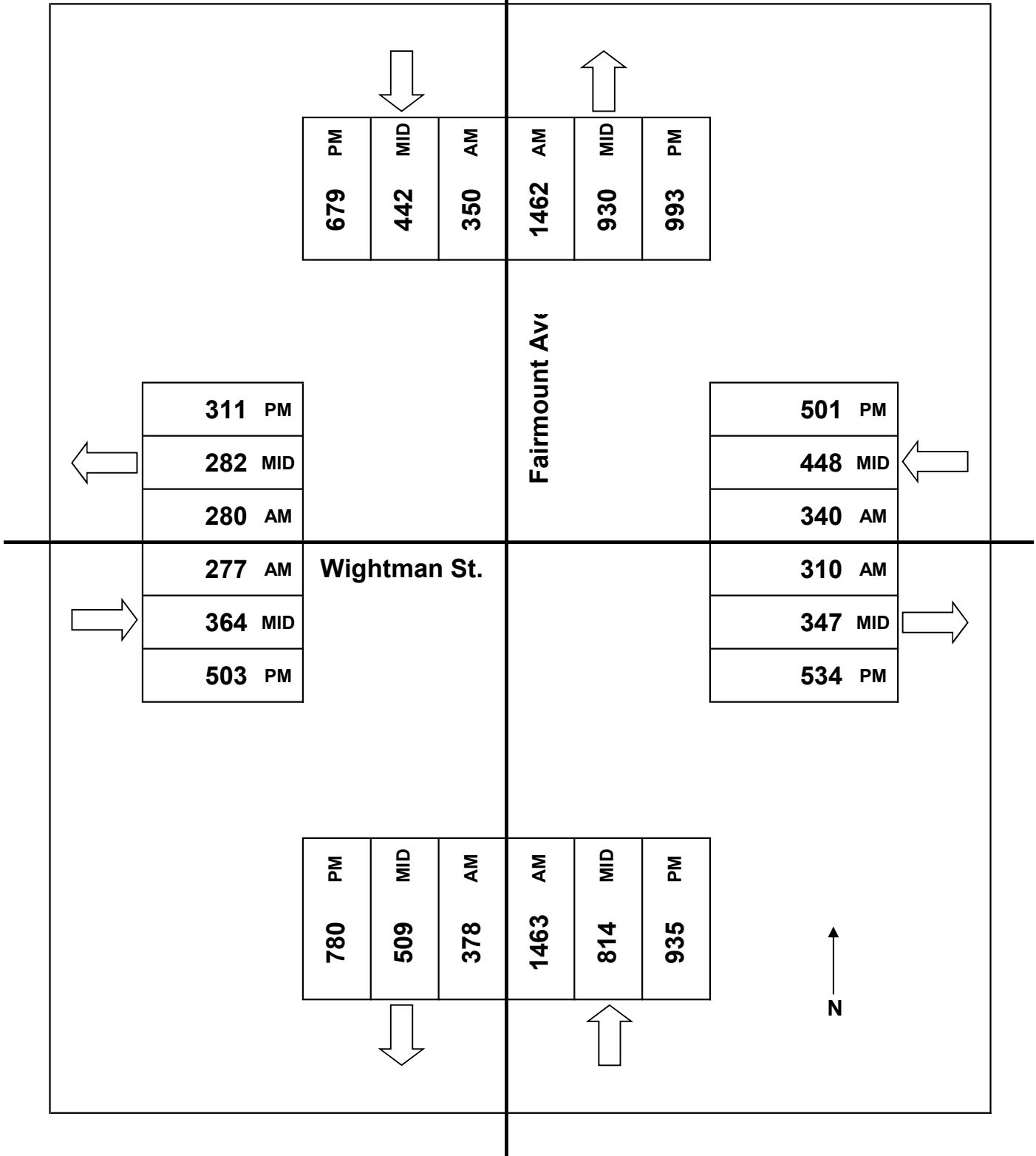
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:00 PM	23	12	10	3
3:15 PM	29	27	13	11
3:30 PM	16	16	16	12
3:45 PM	31	27	15	12
4:00 PM	22	26	21	15
4:15 PM	37	36	24	25
4:30 PM	32	46	5	9
4:45 PM	38	32	16	24
<b>TOTAL</b>	<b>228</b>	<b>222</b>	<b>120</b>	<b>111</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:00 PM	0	0	1	2
3:15 PM	0	0	0	1
3:30 PM	0	1	0	0
3:45 PM	1	1	0	1
4:00 PM	0	0	1	2
4:15 PM	0	1	0	0
4:30 PM	0	2	0	0
4:45 PM	1	3	2	0
<b>TOTAL</b>	<b>2</b>	<b>8</b>	<b>4</b>	<b>6</b>



JOB# IC 081-15  
VALIDATED: \_\_\_\_\_

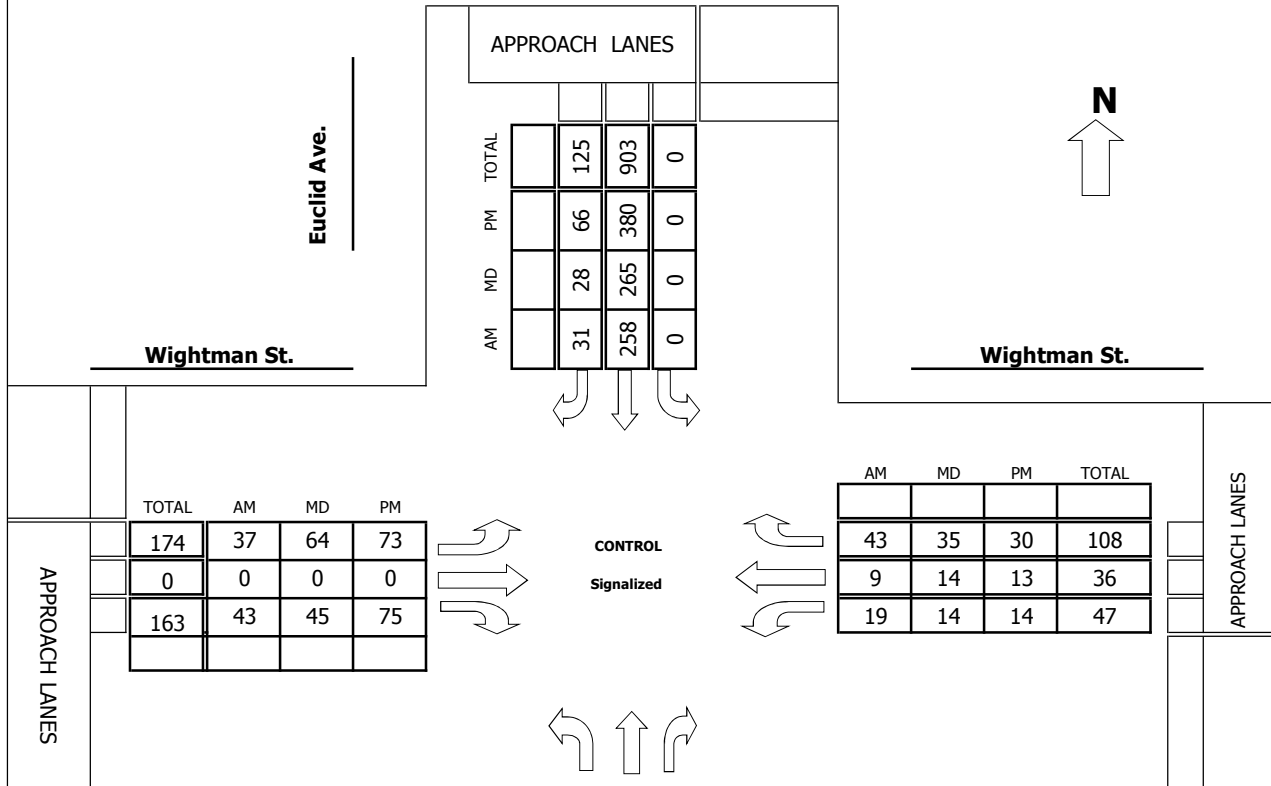
DATE: 04/08/2015  
DAY: WEDNESDAY



59) Euclid Ave & Wightman St

**Project #:** IC 086-15

**TMC SUMMARY OF Euclid Ave. & Wightman St.**



TOTAL	AM	MD	PM
174	37	64	73
0	0	0	0
163	43	45	75

AM	MD	PM	TOTAL
43	35	30	108
9	14	13	36
19	14	14	47

TOTAL	AM	MD	PM
203	109	36	58
1109	428	278	403
2	2	0	0

**LOCATION #:** IC 086-15

**TURNING MOVEMENT COUNT**

**Euclid Ave. & Wightman St.**  
 (Intersection Name)

TUESDAY  
 Day

04/07/2015  
 Date

**COUNT PERIODS**

<b>AM</b>	700AM - 900AM
<b>NOON</b>	1100AM - 100PM
<b>PM</b>	300PM - 500PM

AM PEAK HOUR 700 AM

NOON PEAK HOUR 1130 AM

PM PEAK HOUR 400 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Euclid Ave.**      DATE: **04/07/2015**      LOCATION: **San Diego**  
 E-W STREET: **Wightman St.**      DAY: **TUESDAY**      PROJECT# **IC 086-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	1	0	1	0	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	26	103	2	0	42	9	9	0	8	10	1	15	225
7:15 AM	28	98	0	0	69	7	5	0	10	2	1	15	235
7:30 AM	33	115	0	0	77	6	13	0	14	4	3	7	272
7:45 AM	22	112	0	0	70	9	10	0	11	3	4	6	247
8:00 AM	10	76	0	0	53	14	9	0	10	2	0	6	180
8:15 AM	25	95	1	0	59	15	6	0	7	2	0	9	219
8:30 AM	16	98	0	0	65	14	10	0	8	6	6	13	236
8:45 AM	9	86	0	0	61	16	10	0	13	3	2	12	212
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	169	783	3	0	496	90	72	0	81	32	17	83	1826
Approach %	17.70	81.99	0.31	0.00	84.64	15.36	47.06	0.00	52.94	24.24	12.88	62.88	
App/Depart	955	/	938	586	/	609	153	/	3	132	/	276	

AM Peak Hr Begins at: 700 AM

**PEAK**

Volumes	109	428	2	0	258	31	37	0	43	19	9	43	979
Approach %	20.22	79.41	0.37	0.00	89.27	10.73	46.25	0.00	53.75	26.76	12.68	60.56	

**PEAK HR.**

FACTOR:	0.910	0.870	0.741	0.683	0.900
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CONTROL: **Signalized; 1 Way Stop (WB ONLY)**  
 COMMENT 1:  
 GPS: **32.747509, -117.092272**

# Intersection Turning Movement

Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Euclid Ave.** DATE: **04/07/2015** LOCATION: **San Diego**  
 E-W STREET: **Wightman St.** DAY: **TUESDAY** PROJECT#: **IC 086-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	1	0	1	0	1	
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM	11	78	0	0	69	11	10	0	7	4	3	8	201
11:15 AM	10	69	0	0	55	3	7	0	11	4	0	9	168
11:30 AM	9	80	0	0	63	10	19	0	8	4	1	6	200
11:45 AM	9	67	0	0	72	5	20	0	18	3	9	6	209
12:00 PM	6	55	0	0	60	4	14	0	10	6	2	13	170
12:15 PM	12	76	0	0	70	9	11	0	9	1	2	10	200
12:30 PM	9	71	0	0	65	9	15	0	11	1	4	4	189
12:45 PM	9	70	0	0	55	9	22	0	10	3	1	7	186
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	75	566	0	0	509	60	118	0	84	26	22	63	1523
Approach %	11.70	88.30	0.00	0.00	89.46	10.54	58.42	0.00	41.58	23.42	19.82	56.76	
App/Depart	641	/	747	569	/	619	202	/	0	111	/	157	

NOON Peak Hr Begins at: 1130 AM

PEAK

Volumes	36	278	0	0	265	28	64	0	45	14	14	35	779
Approach %	11.46	88.54	0.00	0.00	90.44	9.56	58.72	0.00	41.28	22.22	22.22	55.56	

PEAK HR. FACTOR:

	0.882	0.927	0.717	0.750	0.932
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CONTROL: **Signalized; 1 Way Stop (WB ONLY)**  
 COMMENT 1: **0**  
 GPS: **32.747509, -117.092272**

HOURS:

	FROM:		TO:	
AM	700	AM	900	AM
NOON	1100	AM	100	PM
PM	300	PM	500	PM

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Euclid Ave.**      DATE: **04/07/2015**      LOCATION: **San Diego**  
 E-W STREET: **Wightman St.**      DAY: **TUESDAY**      PROJECT# **IC 086-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	1	1	0	1	0	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM	12	93	0	0	96	11	21	0	20	3	2	6	264
3:15 PM	10	89	0	0	85	18	9	0	14	2	1	6	234
3:30 PM	21	95	0	0	97	23	17	0	15	2	1	3	274
3:45 PM	15	108	0	0	93	11	20	0	16	5	0	4	272
4:00 PM	14	95	0	0	99	13	15	0	13	5	3	9	266
4:15 PM	12	89	0	0	90	18	10	0	16	6	4	13	258
4:30 PM	14	108	0	0	94	22	23	0	26	1	4	3	295
4:45 PM	18	111	0	0	97	13	25	0	20	2	2	5	293
5:00 PM													
5:15 PM													
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	116	788	0	0	751	129	140	0	140	26	17	49	2156
Approach %	12.83	87.17	0.00	0.00	85.34	14.66	50.00	0.00	50.00	28.26	18.48	53.26	
App/Depart	904	/	977	880	/	917	280	/	0	92	/	262	

PM Peak Hr Begins at: 400 PM

**PEAK**

Volumes	58	403	0	0	380	66	73	0	75	14	13	30	1112
Approach %	12.58	87.42	0.00	0.00	85.20	14.80	49.32	0.00	50.68	24.56	22.81	52.63	

**PEAK HR.**

FACTOR:	0.893	0.961	0.755	0.620	0.942
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CONTROL: **Signalized; 1 Way Stop (WB ONLY)**  
 COMMENT 1: **0**  
 GPS: **32.747509, -117.092272**



### Pedestrian & Bicycle Study

**N-S STREET:** Euclid Ave.  
**E-W STREET:** Wightman St.

**Date:** 04/07/2015  
**Day:** TUESDAY

**City:** San Diego  
**Project #:** IC 086-15

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	4	3	2	4
7:15 AM	1	6	3	1
7:30 AM	1	2	0	1
7:45 AM	2	4	2	1
8:00 AM	7	3	0	4
8:15 AM	3	1	1	3
8:30 AM	5	3	2	2
8:45 AM	4	0	1	4
<b>TOTAL</b>	<b>27</b>	<b>22</b>	<b>11</b>	<b>20</b>

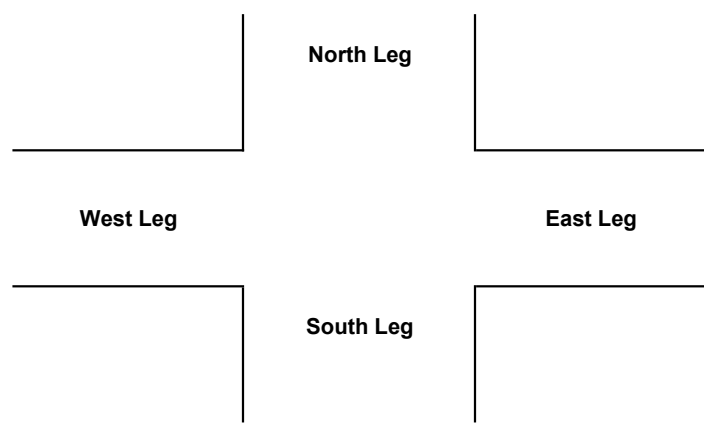
	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	1	0
7:15 AM	0	0	1	0
7:30 AM	1	1	0	1
7:45 AM	2	0	0	0
8:00 AM	0	1	0	0
8:15 AM	0	1	0	1
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
<b>TOTAL</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
11:00 AM	2	3	1	3
11:15 AM	1	2	1	1
11:30 AM	2	1	1	1
11:45 AM	1	4	1	3
12:00 PM	0	0	1	0
12:15 PM	2	3	4	1
12:30 PM	1	1	4	2
12:45 PM	7	4	1	4
<b>TOTAL</b>	<b>16</b>	<b>18</b>	<b>14</b>	<b>15</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
11:00 AM	0	0	0	0
11:15 AM	0	0	0	0
11:30 AM	0	0	0	0
11:45 AM	0	0	0	1
12:00 PM	1	2	2	1
12:15 PM	0	0	0	0
12:30 PM	0	2	0	0
12:45 PM	0	0	1	0
<b>TOTAL</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>2</b>

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:00 PM	0	2	1	2
3:15 PM	1	3	1	1
3:30 PM	2	9	8	2
3:45 PM	2	2	2	6
4:00 PM	1	3	3	0
4:15 PM	0	4	6	6
4:30 PM	1	6	0	5
4:45 PM	1	6	2	3
<b>TOTAL</b>	<b>8</b>	<b>35</b>	<b>23</b>	<b>25</b>

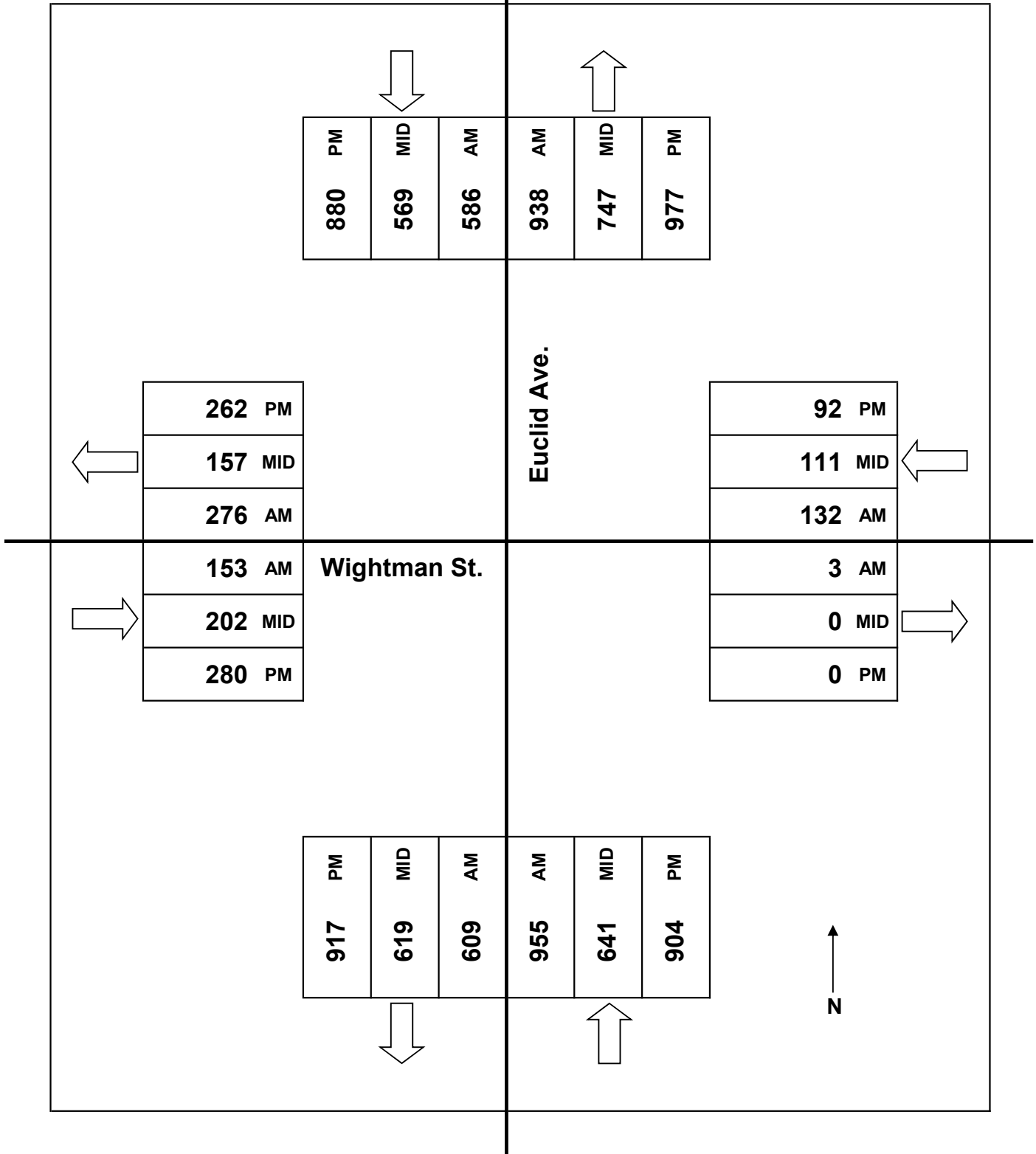
	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:00 PM	0	0	0	1
3:15 PM	0	0	0	0
3:30 PM	0	0	1	1
3:45 PM	0	1	0	0
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	3	0
4:45 PM	1	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>2</b>





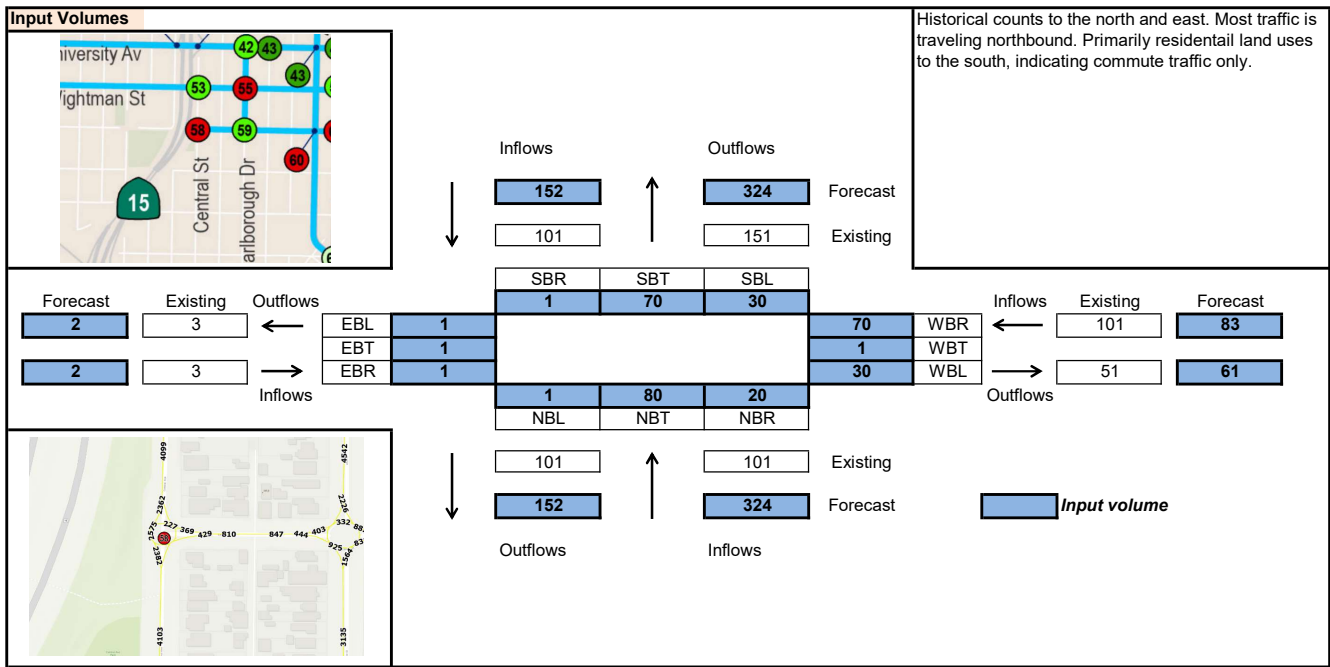
JOB# IC 086-15  
VALIDATED: \_\_\_\_\_

DATE: 04/07/2015  
DAY: TUESDAY

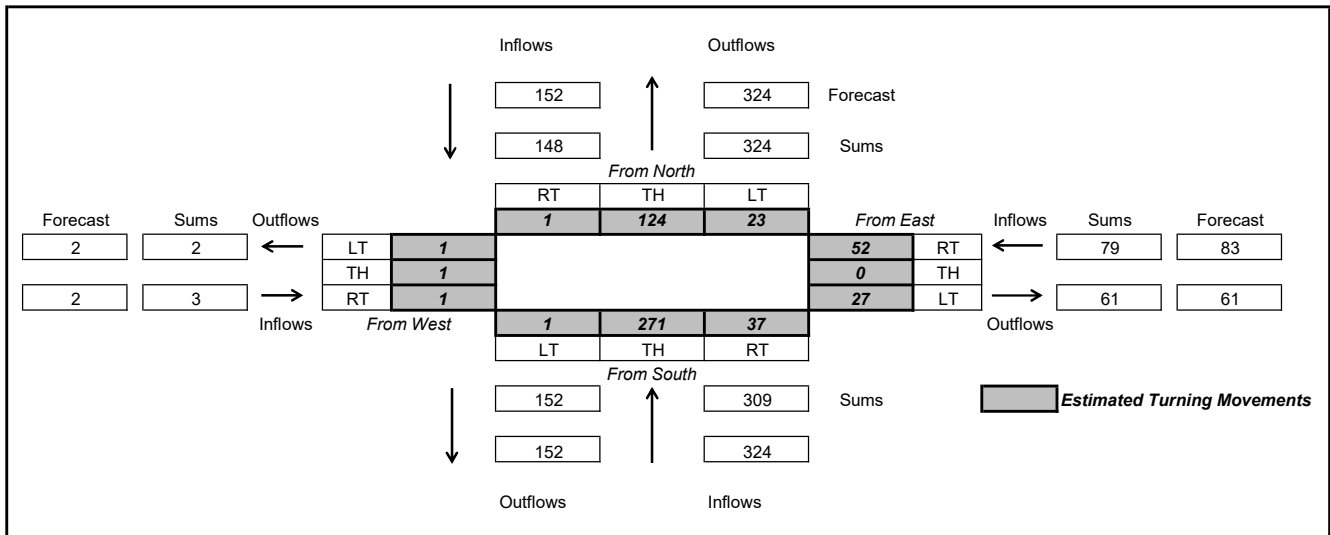


60) Landis St & Central Ave

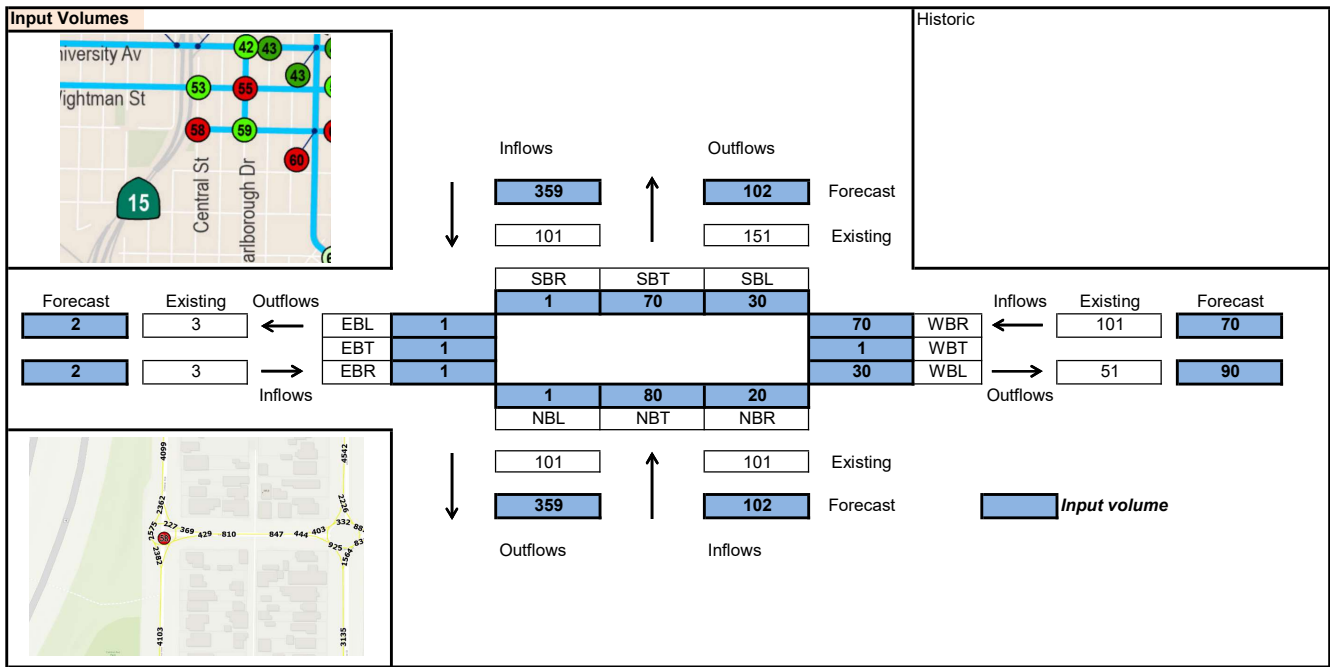
### Iterative Method Estimated Turning Movements



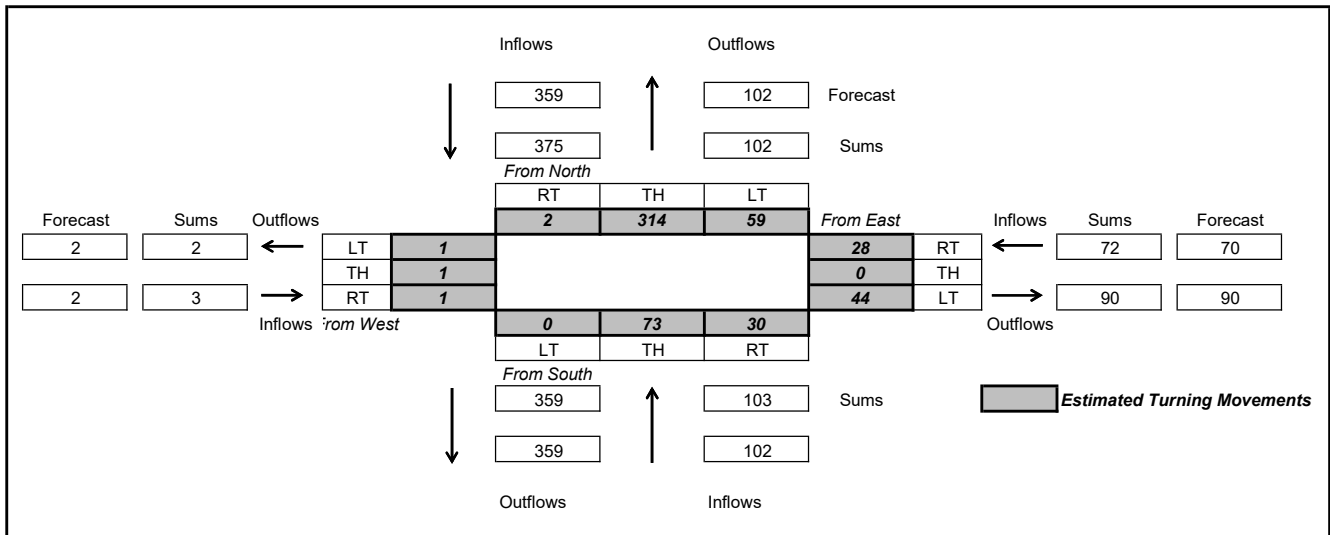
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



**Estimated Turning Movements**



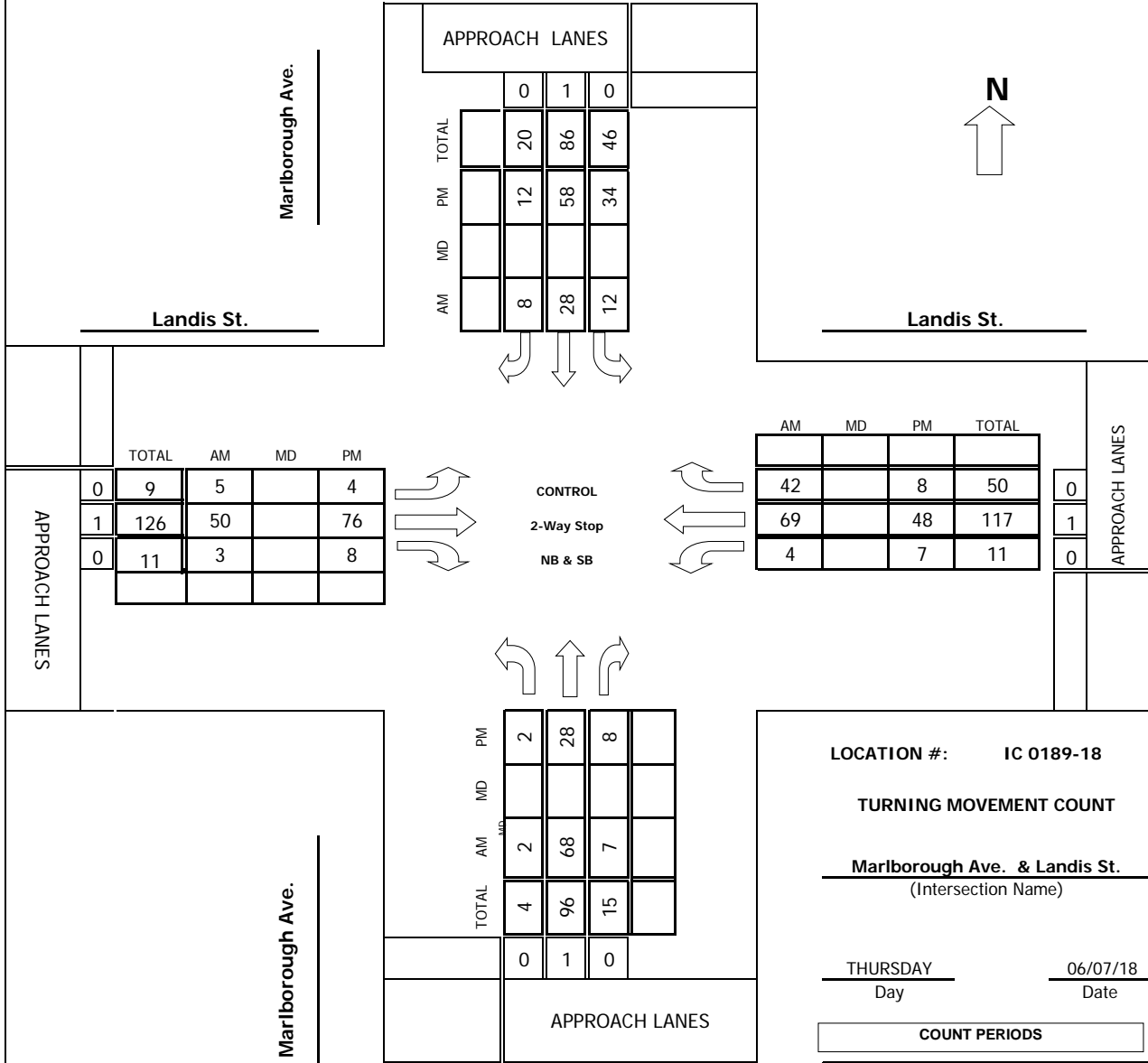
661) Landis St & Marlborough Ave

# Intersection Turning Movement Prepared by:



Project #: IC 0189-18

## TMC SUMMARY OF Marlborough Ave. & Landis St.



LOCATION #: IC 0189-18

**TURNING MOVEMENT COUNT**

Marlborough Ave. & Landis St.  
(Intersection Name)

THURSDAY  
Day

06/07/18  
Date

**COUNT PERIODS**

AM	700AM	-	900AM
NOON		-	
PM	200PM	-	400PM

AM PEAK HOUR 700 AM

NOON PEAK HOUR                     

PM PEAK HOUR 200 PM

# Intersection Turning Movement

Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **Marlborough Ave.**      DATE: **06/07/18**      LOCATION: **San Diego**  
 E-W STREET: **Landis St.**      DAY: **THURSDAY**      PROJECT# **IC 0189-18**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	14	1	2	8	1	1	10	1	2	21	7	68
7:15 AM	0	21	2	5	5	2	0	12	0	1	18	11	77
7:30 AM	1	20	1	2	9	2	1	15	1	1	14	10	77
7:45 AM	1	13	3	3	6	3	3	13	1	0	16	14	76
8:00 AM	1	16	2	6	3	1	2	10	1	1	15	8	66
8:15 AM	0	15	1	2	2	2	1	7	0	2	19	5	56
8:30 AM	1	10	4	5	5	5	2	8	1	3	10	9	63
8:45 AM	3	11	1	1	4	1	2	11	2	1	12	6	55
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	7	120	15	26	42	17	12	86	7	11	125	70	538
Approach %	4.93	84.51	10.56	30.59	49.41	20.00	11.43	81.90	6.67	5.34	60.68	33.98	
App/Depart	142	/	202	85	/	60	105	/	127	206	/	149	

AM Peak Hr Begins at: 700 AM

**PEAK**

Volumes	2	68	7	12	28	8	5	50	3	4	69	42	298
Approach %	2.60	88.31	9.09	25.00	58.33	16.67	8.62	86.21	5.17	3.48	60.00	36.52	

**PEAK HR.**

FACTOR:	0.837	0.923	0.853	0.958	0.968
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CONTROL: **2-Way Stop (NB & SB)**  
 COMMENT 1:  
 GPS: **32.745928, -117.105751**

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: Marlborough Ave.      DATE: 06/07/18      LOCATION: San Diego  
 E-W STREET: Landis St.      DAY: THURSDAY      PROJECT#: IC 0189-18

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
1:00 PM	0	1	0	0	1	0	0	1	0	0	1	0	
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM	1	6	2	10	9	3	2	18	2	1	13	2	69
2:15 PM	0	9	1	11	16	2	1	18	1	1	12	2	74
2:30 PM	1	5	4	7	13	5	0	21	4	2	9	3	74
2:45 PM	0	8	1	6	20	2	1	19	1	3	14	1	76
3:00 PM	1	2	2	2	21	1	2	15	0	2	11	4	63
3:15 PM	2	5	3	5	14	4	1	16	1	1	8	1	61
3:30 PM	1	2	3	4	15	1	1	13	2	4	13	2	61
3:45 PM	1	3	2	7	13	2	2	17	1	1	16	1	66
4:00 PM													
4:15 PM													
4:30 PM													
4:45 PM													
5:00 PM													
5:15 PM													
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	7	40	18	52	121	20	10	137	12	15	96	16	544
Approach %	10.77	61.54	27.69	26.94	62.69	10.36	6.29	86.16	7.55	11.81	75.59	12.60	
App/Depart	65	/	66	193	/	148	159	/	207	127	/	123	

PM Peak Hr Begins at: 200 PM

**PEAK**

Volumes	2	28	8	34	58	12	4	76	8	7	48	8	293
Approach %	5.26	73.68	21.05	32.69	55.77	11.54	4.55	86.36	9.09	11.11	76.19	12.70	

**PEAK HR.**

FACTOR:	0.950	0.897	0.880	0.875	0.964
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CONTROL: 2-Way Stop (NB & SB)  
 COMMENT 1: 0  
 GPS: 32.745928, -117.105751





**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



veracitytrafficgroup

### Pedestrian & Bicycle Study

**N-S STREET:** Marlborough Ave.  
**E-W STREET:** Landis St.

**Date:** 06/07/18  
**Day:** THURSDAY

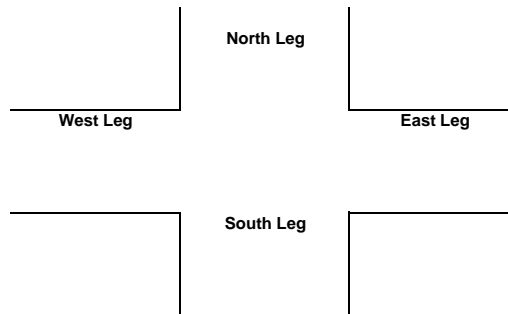
**City:** San Diego  
**Project #:** IC 0189-18

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	1	1	1	0
7:15 AM	0	2	2	0
7:30 AM	1	1	0	0
7:45 AM	0	0	1	0
8:00 AM	1	1	2	0
8:15 AM	2	1	1	0
8:30 AM	1	0	0	1
8:45 AM	0	0	1	1
<b>TOTAL</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>2</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	1	0	1	0
7:30 AM	0	0	1	0
7:45 AM	0	0	1	0
8:00 AM	0	1	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>

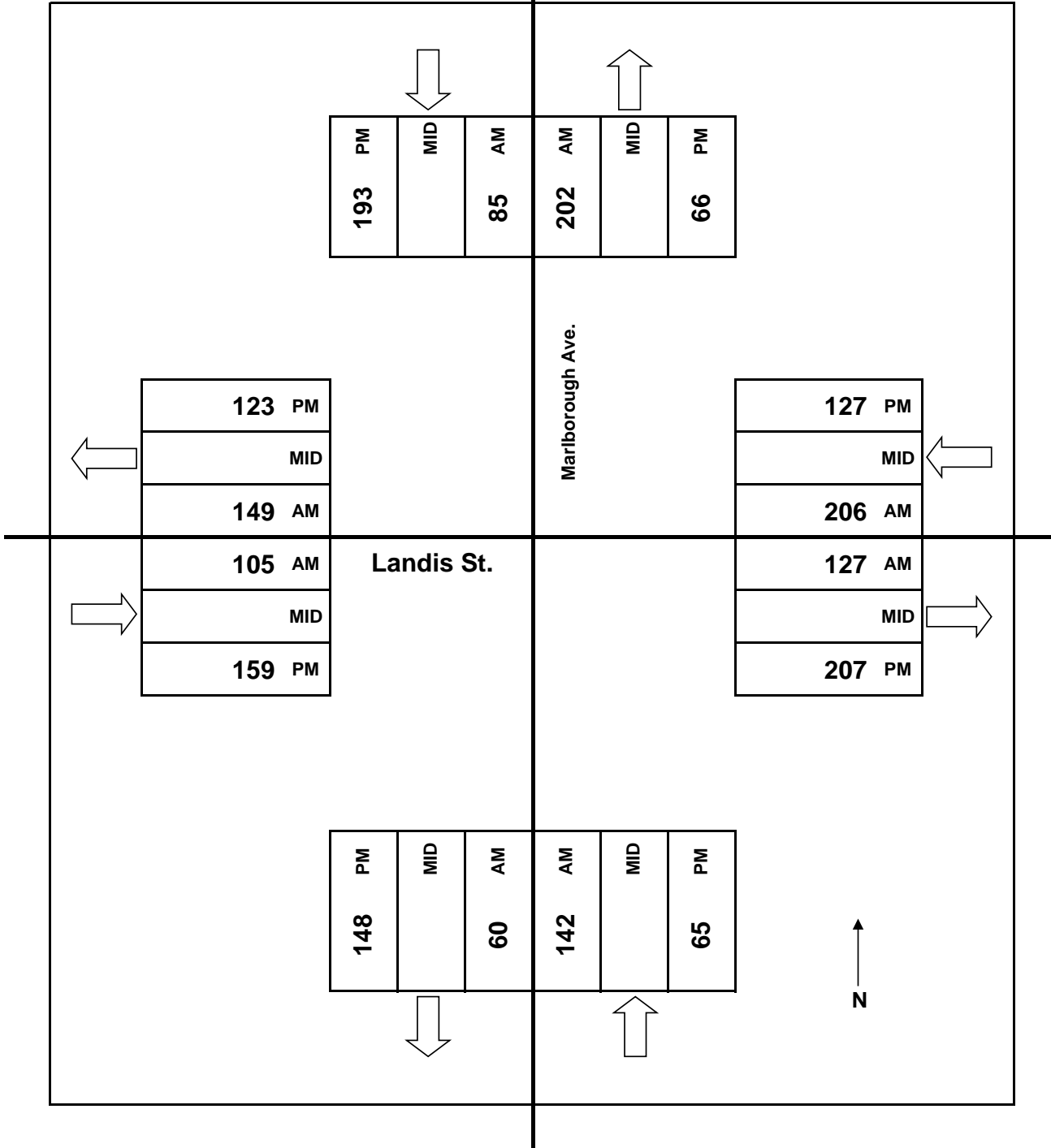
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	1	0	1
4:15 PM	1	0	1	2
4:30 PM	0	0	2	1
4:45 PM	0	1	1	4
5:00 PM	1	0	0	1
5:15 PM	0	0	1	2
5:30 PM	1	0	3	1
5:45 PM	0	1	2	0
<b>TOTAL</b>	<b>3</b>	<b>3</b>	<b>10</b>	<b>12</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	1
4:30 PM	0	0	1	1
4:45 PM	0	0	0	1
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>



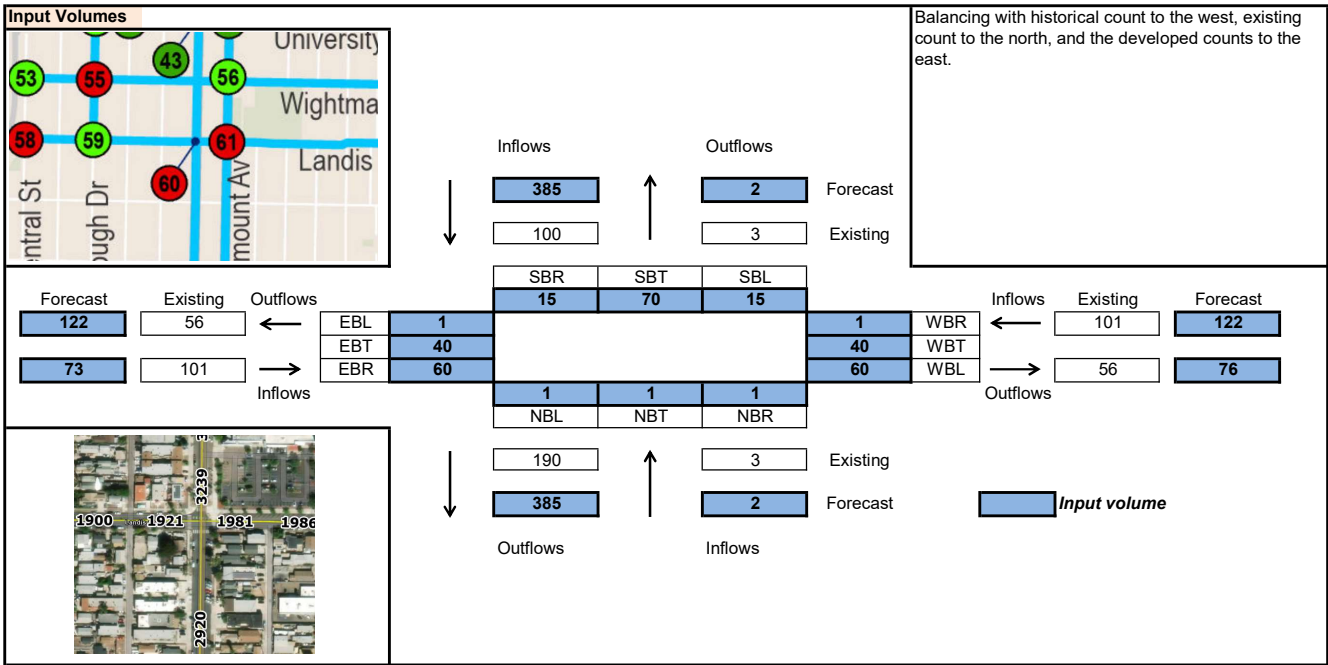
JOB# IC 0189-18  
VALIDATED: \_\_\_\_\_

DATE: 06/07/18  
DAY: THURSDAY

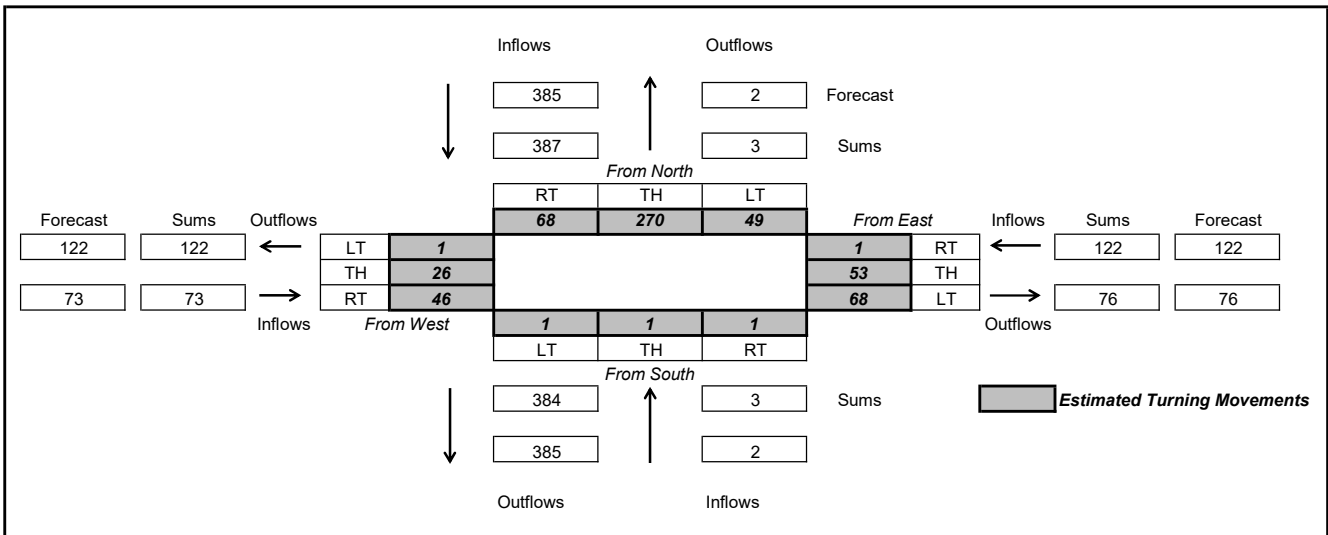


62) Landis St & 43rd St

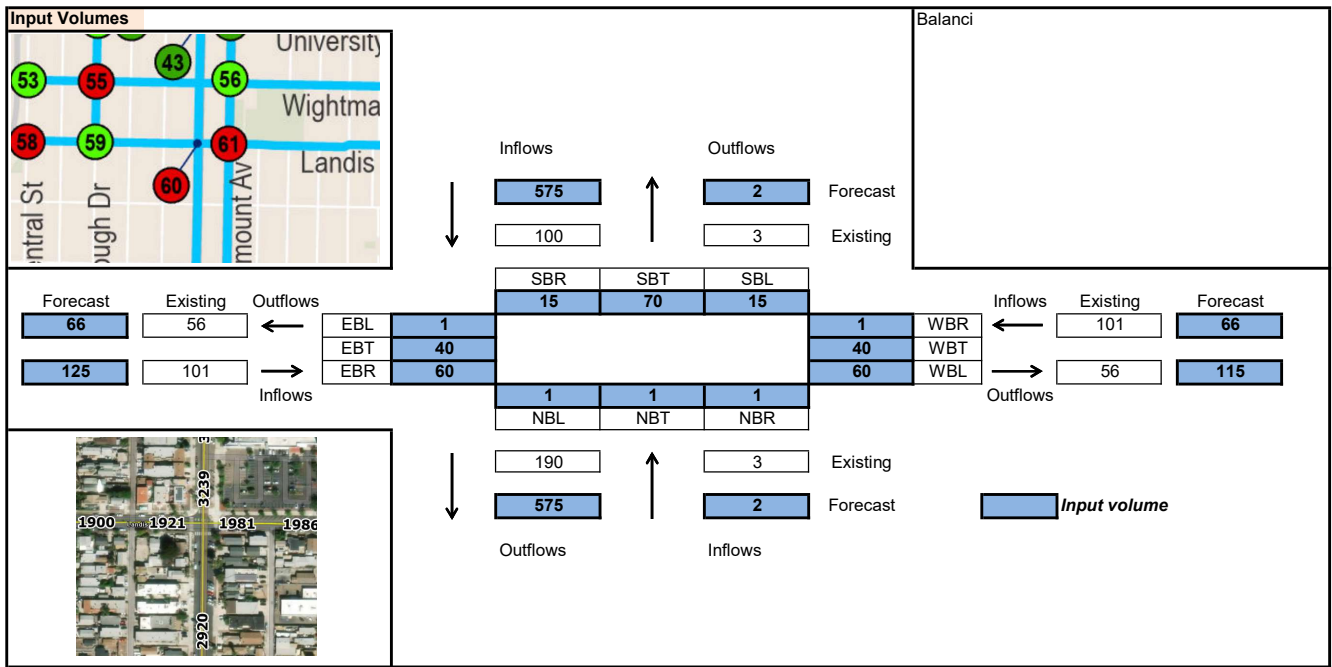
### Iterative Method Estimated Turning Movements



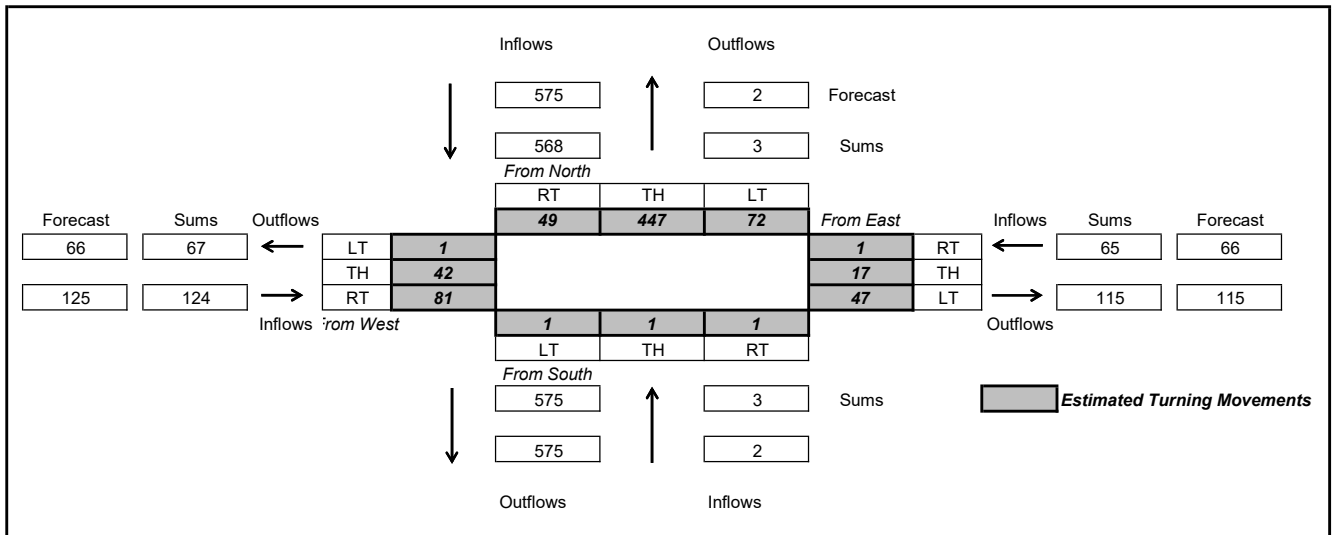
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



Estimated Turning Movements



63) Landis St & Fairmount Ave

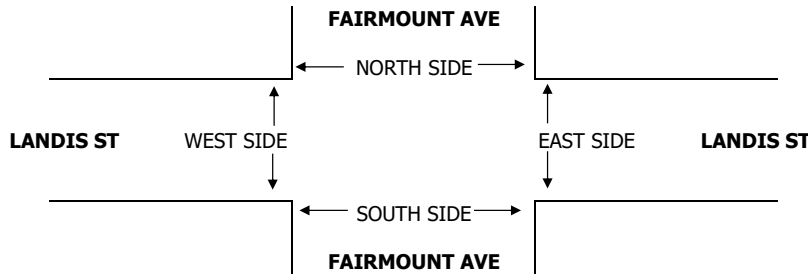
# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

DATE: 4/18/24 THURSDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	EAST SAN DIEGO FAIRMOUNT AVE LANDIS ST	PROJECT #: LOCATION #: CONTROL:	ETD24-0419-01 6 SIGNAL
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NOTES:  INCLUDES BIKE & PED	AM PM MD OTHER OTHER	▲ N ◀ W S ▶ E ▼
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	NORTHBOUND FAIRMOUNT AVE			SOUTHBOUND FAIRMOUNT AVE			EASTBOUND LANDIS ST			WESTBOUND LANDIS ST			TOTAL	U-TURNS						
	LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT		WR	NB X	SB X	EB X	WB X	TTL	
AM	7:00 AM	4	105	6	5	17	2	3	13	2	1	11	14	183					0	
	7:15 AM	8	118	7	5	29	2	5	24	0	7	19	5	229					0	
	7:30 AM	24	103	12	0	19	3	5	28	3	7	23	5	232					0	
	7:45 AM	33	78	37	2	22	13	3	20	5	10	35	11	269					0	
	8:00 AM	36	92	43	0	15	9	1	14	6	6	26	2	250					0	
	8:15 AM	34	79	26	2	16	5	2	20	6	8	44	4	246					0	
	8:30 AM	33	78	31	0	13	6	2	19	9	0	30	2	223					0	
	8:45 AM	25	78	20	2	29	7	4	21	7	2	31	6	232					0	
	VOLUMES	197	731	182	16	160	47	25	159	38	41	219	49	1,864	0	0	0	0	0	
	APPROACH %	18%	66%	16%	7%	72%	21%	11%	72%	17%	13%	71%	16%							
	APP/DEPART	1,110	/	805	223	/	239	222	/	357	309	/	463	0						
	BEGIN PEAK HR	7:30 AM																		
	VOLUMES	127	352	118	4	72	30	11	82	20	31	128	22	997						
	APPROACH %	21%	59%	20%	4%	68%	28%	10%	73%	18%	17%	71%	12%							
	PEAK HR FACTOR	0.873			0.716			0.785			0.808			0.927						
	APP/DEPART	597	/	385	106	/	123	113	/	204	181	/	285	0						
PM	4:00 PM	8	82	8	4	85	7	8	27	11	5	12	5	262					0	
	4:15 PM	11	92	7	4	90	3	7	46	5	5	17	6	293					0	
	4:30 PM	8	108	3	8	77	0	3	38	9	10	18	14	296					0	
	4:45 PM	13	114	6	5	81	5	7	33	7	7	24	17	319					0	
	5:00 PM	7	79	9	7	89	2	10	39	11	8	24	10	295					0	
	5:15 PM	5	101	10	6	80	3	7	44	8	8	17	6	295					0	
	5:30 PM	8	95	7	5	88	4	6	40	10	6	12	9	290					0	
	5:45 PM	6	84	5	6	63	2	5	37	3	8	15	14	248					0	
	VOLUMES	66	755	55	45	653	26	53	304	64	57	139	81	2,298	0	0	0	0	0	
	APPROACH %	8%	86%	6%	6%	90%	4%	13%	72%	15%	21%	50%	29%							
	APP/DEPART	876	/	889	724	/	774	421	/	404	277	/	231	0						
	BEGIN PEAK HR	4:30 PM																		
	VOLUMES	33	402	28	26	327	10	27	154	35	33	83	47	1,205						
	APPROACH %	7%	87%	6%	7%	90%	3%	13%	71%	16%	20%	51%	29%							
	PEAK HR FACTOR	0.870			0.926			0.900			0.849			0.944						
	APP/DEPART	463	/	476	363	/	395	216	/	208	163	/	126	0						



	AM	PM
7:00 AM		
7:15 AM		
7:30 AM		
7:45 AM		
8:00 AM		
8:15 AM		
8:30 AM		
8:45 AM		
TOTAL		
4:00 PM		
4:15 PM		
4:30 PM		
4:45 PM		
5:00 PM		
5:15 PM		
5:30 PM		
5:45 PM		
TOTAL		

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
1	0	3		4
5	2	6	1	14
3	2	1	6	12
11	2	4	3	20
2	5	10	8	25
1	3	6	2	12
2		6	3	11
5	3	4	1	13
30	17	40	24	111
12	3	8	6	29
11	7	4	1	23
11	3	4	7	25
14	4	6	3	27
7	5	8	3	23
10	4	7	3	24
3	5	7	2	17
11	10	14	5	40
79	41	58	30	208

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

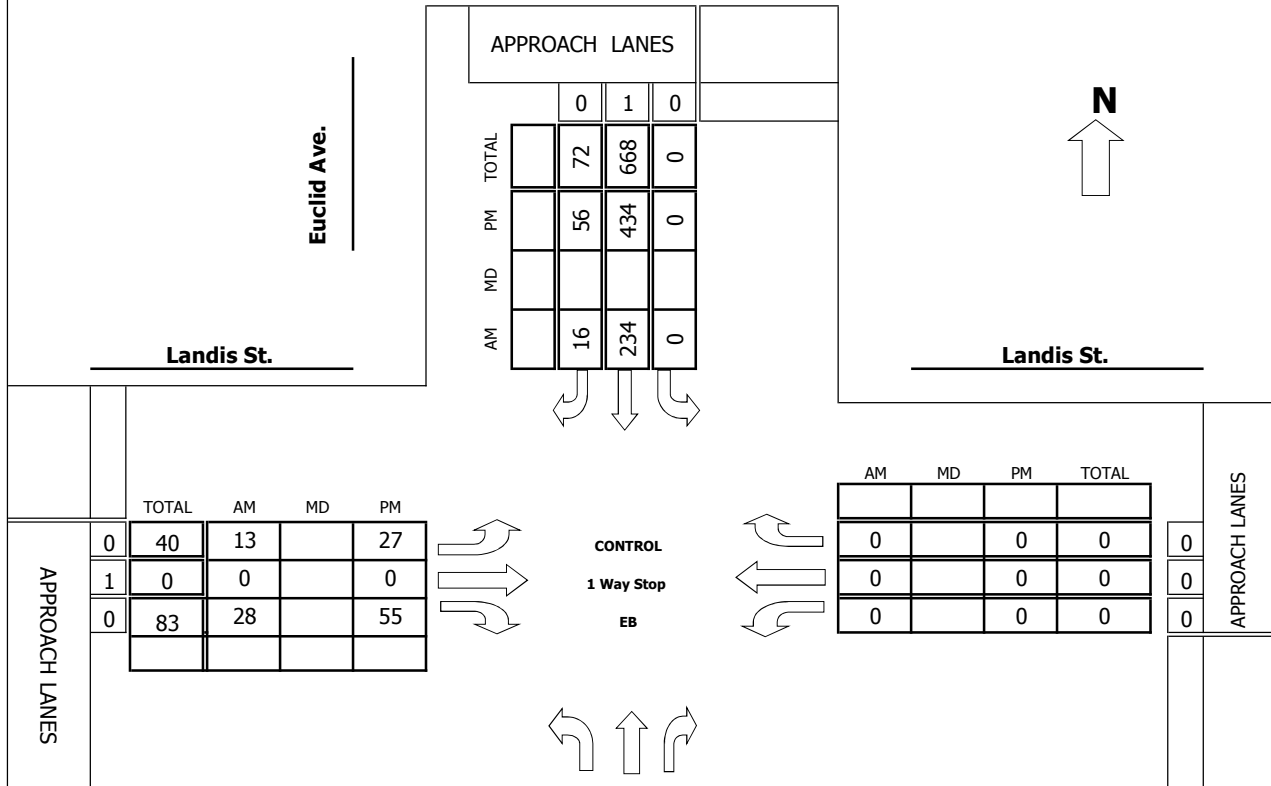
BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
2	2			4
				0
1				1
1			1	2
			1	1
				0
				0
		2		2
4	2	2	2	10
1	1			2
				0
1	1	1		3
	1			1
			1	1
		1		1
				0
	1	1		2
2	4	3	1	10

64) Landis St & Euclid Ave



**Project #:** IC 222-15

**TMC SUMMARY OF Euclid Ave. & Landis St.**



	TOTAL	AM	MD	PM
0	40	13		27
1	0	0		0
0	83	28		55

	TOTAL	AM	MD	PM
0	97	39	58	363
1	0	0	0	0
0	0	0	0	0

AM	MD	PM	TOTAL
0		0	0
0		0	0
0		0	0

**LOCATION #:** IC 222-15

**TURNING MOVEMENT COUNT**

**Euclid Ave. & Landis St.**  
 (Intersection Name)

WEDNESDAY                      07/29/2015  
 Day    Date

COUNT PERIODS	
<b>AM</b>	700AM - 900AM
<b>NOON</b>	-
<b>PM</b>	400PM - 600PM

AM PEAK HOUR                      715 AM  
 NOON PEAK HOUR                      \_\_\_\_\_  
 PM PEAK HOUR                      445 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Euclid Ave.**      DATE: **07/29/2015**      LOCATION: **San Diego**  
 E-W STREET: **Landis St.**      DAY: **WEDNESDAY**      PROJECT# **IC 222-15**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	0	1	0	0	1	0	0	1	0	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2	58	0	0	47	0	1	0	4	0	0	0	112
7:15 AM	14	99	0	0	44	1	4	0	8	0	0	0	170
7:30 AM	8	98	0	0	61	4	4	0	3	0	0	0	178
7:45 AM	11	92	0	0	71	6	5	0	11	0	0	0	196
8:00 AM	6	62	0	0	58	5	0	0	6	0	0	0	137
8:15 AM	13	60	0	0	55	6	5	0	4	0	0	0	143
8:30 AM	9	61	0	0	58	2	3	0	4	0	0	0	137
8:45 AM	4	63	0	0	69	4	5	0	8	0	0	0	153
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	67	593	0	0	463	28	27	0	48	0	0	0	1226
Approach %	10.15	89.85	0.00	0.00	94.30	5.70	36.00	0.00	64.00	####	####	####	
App/Depart	660	/	620	491	/	511	75	/	0	0	/	95	

AM Peak Hr Begins at: 7:15 AM

**PEAK**

Volumes	39	351	0	0	234	16	13	0	28	0	0	0	681
Approach %	10.00	90.00	0.00	0.00	93.60	6.40	31.71	0.00	68.29	####	####	####	

**PEAK HR.**

FACTOR:	0.863	0.812	0.641	0.000	0.869
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CONTROL: **1 Way Stop (EB)**  
 COMMENT 1:  
 GPS: **32.745954, -117.092411**

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **Euclid Ave.**      DATE: **07/29/2015**      LOCATION: **San Diego**  
 E-W STREET: **Landis St.**      DAY: **WEDNESDAY**      PROJECT# **IC 222-15**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	13	83	0	0	84	12	7	0	17	0	0	0	216
4:15 PM	15	75	0	0	99	7	2	0	12	0	0	0	210
4:30 PM	11	76	0	0	91	8	4	0	10	0	0	0	200
4:45 PM	12	102	0	0	111	13	6	0	17	0	0	0	261
5:00 PM	15	81	0	0	109	13	7	0	11	0	0	0	236
5:15 PM	15	83	0	0	105	15	5	0	18	0	0	0	241
5:30 PM	16	97	0	0	109	15	9	0	9	0	0	0	255
5:45 PM	14	88	0	0	118	12	5	0	5	0	0	0	242
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	111	685	0	0	826	95	45	0	99	0	0	0	1861
Approach %	13.94	86.06	0.00	0.00	89.69	10.31	31.25	0.00	68.75	####	####	####	
App/Depart	796	/	730	921	/	925	144	/	0	0	/	206	

PM Peak Hr Begins at: 445 PM

**PEAK**

Volumes	58	363	0	0	434	56	27	0	55	0	0	0	993
Approach %	13.78	86.22	0.00	0.00	88.57	11.43	32.93	0.00	67.07	####	####	####	

**PEAK HR.**

FACTOR:	0.923	0.988	0.891	0.000	0.951
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CONTROL: **1 Way Stop (EB)**  
 COMMENT 1: **0**  
 GPS: **32.745954, -117.092411**



## Pedestrian & Bicycle Study

**N-S STREET:** Euclid Ave.  
**E-W STREET:** Landis St.

**Date:** 07/29/2015  
**Day:** WEDNESDAY

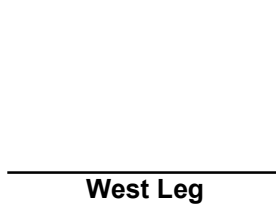
**City:** San Diego  
**Project #:** IC 222-15

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	1	0	0	1
7:30 AM	0	0	0	2
7:45 AM	0	0	0	1
8:00 AM	4	0	0	3
8:15 AM	1	0	0	1
8:30 AM	0	0	0	3
8:45 AM	0	0	0	1
<b>TOTAL</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>12</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	1
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

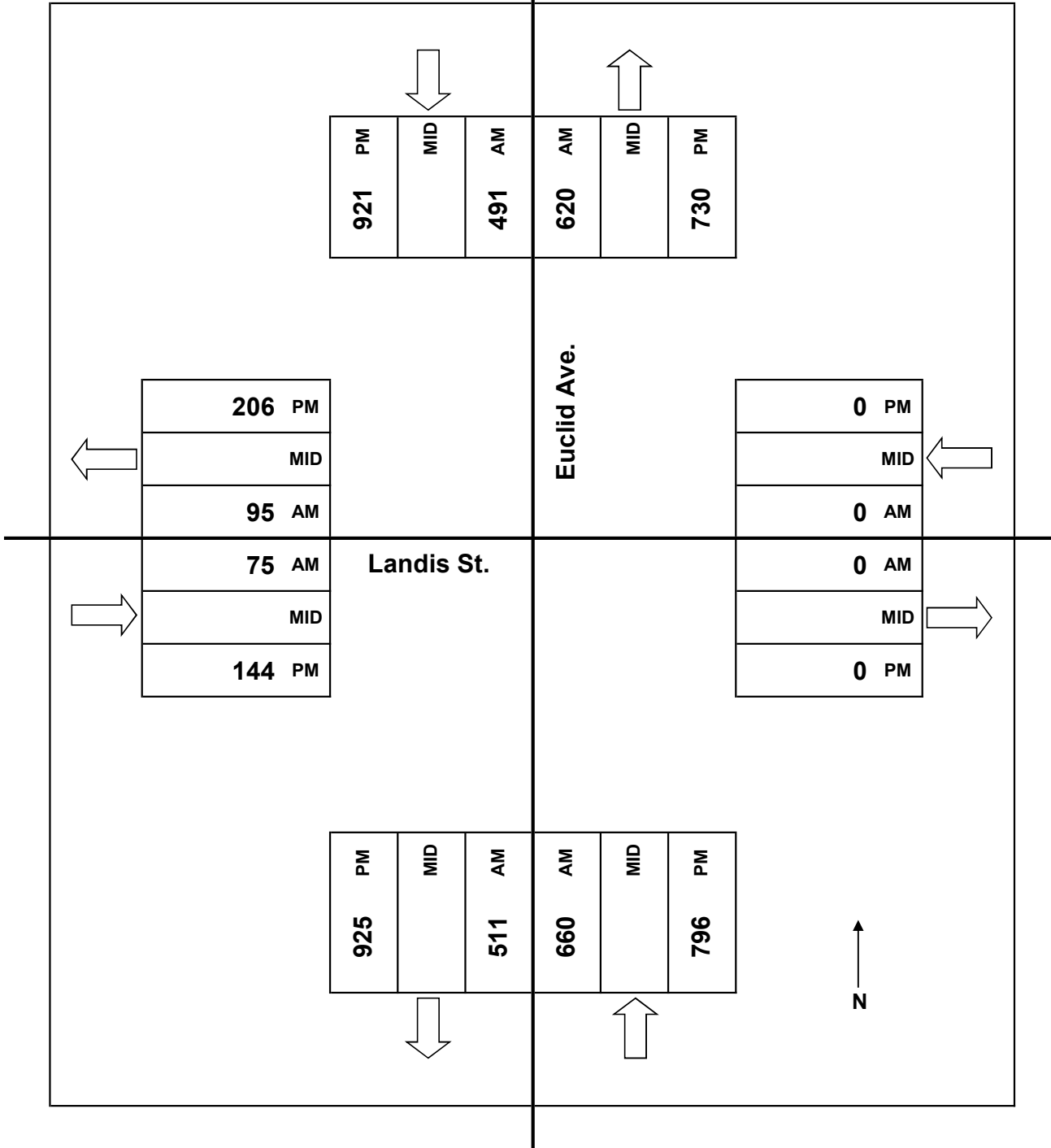
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	5	0	0	2
4:15 PM	3	0	0	1
4:30 PM	1	0	0	4
4:45 PM	0	0	0	2
5:00 PM	1	0	0	1
5:15 PM	2	0	0	5
5:30 PM	4	0	0	2
5:45 PM	3	0	0	3
<b>TOTAL</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>20</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	1	0	0	0
5:45 PM	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>



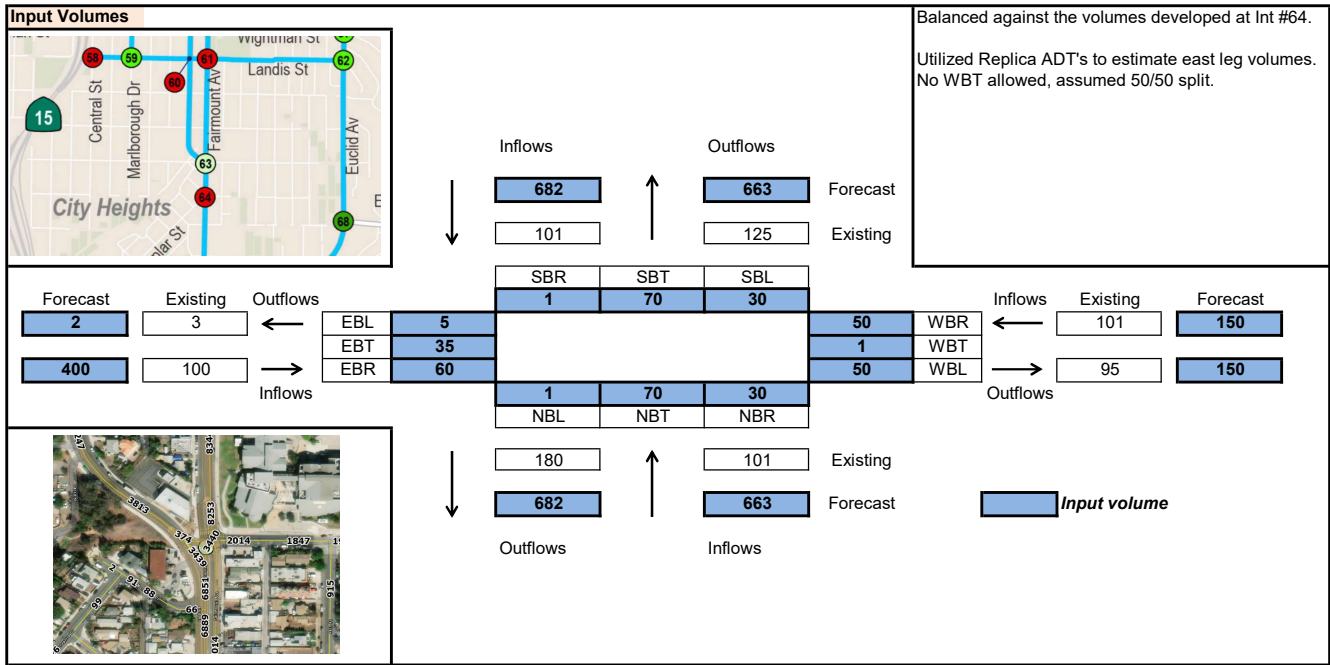
JOB# IC 222-15  
VALIDATED: \_\_\_\_\_

DATE: 07/29/2015  
DAY: WEDNESDAY

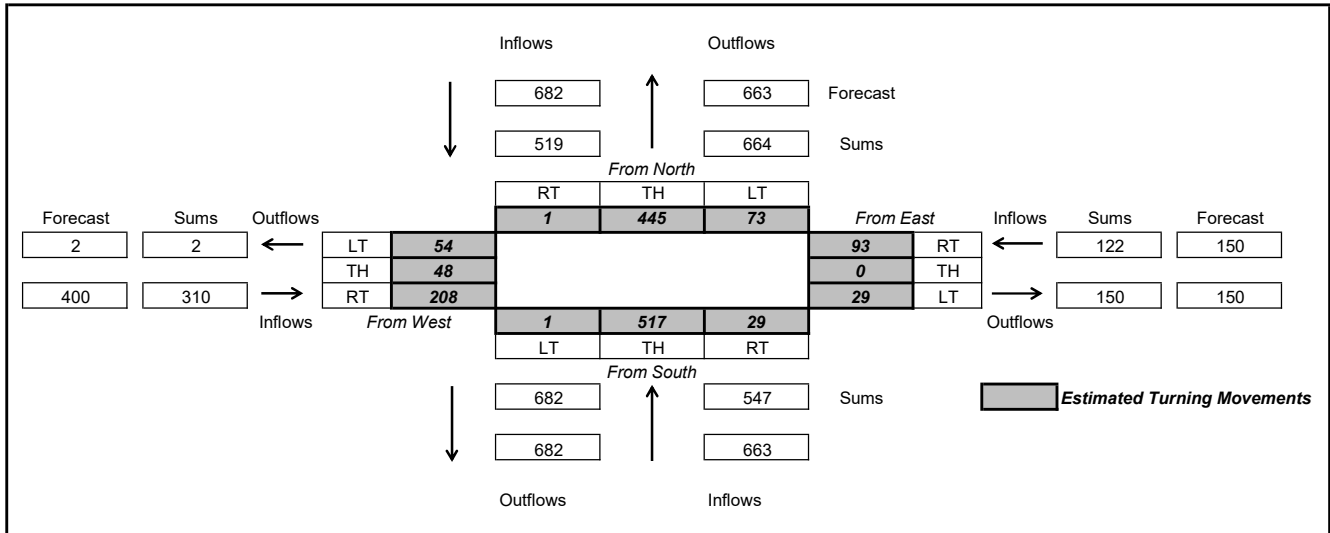


65) Fairmount Ave & 43rd St

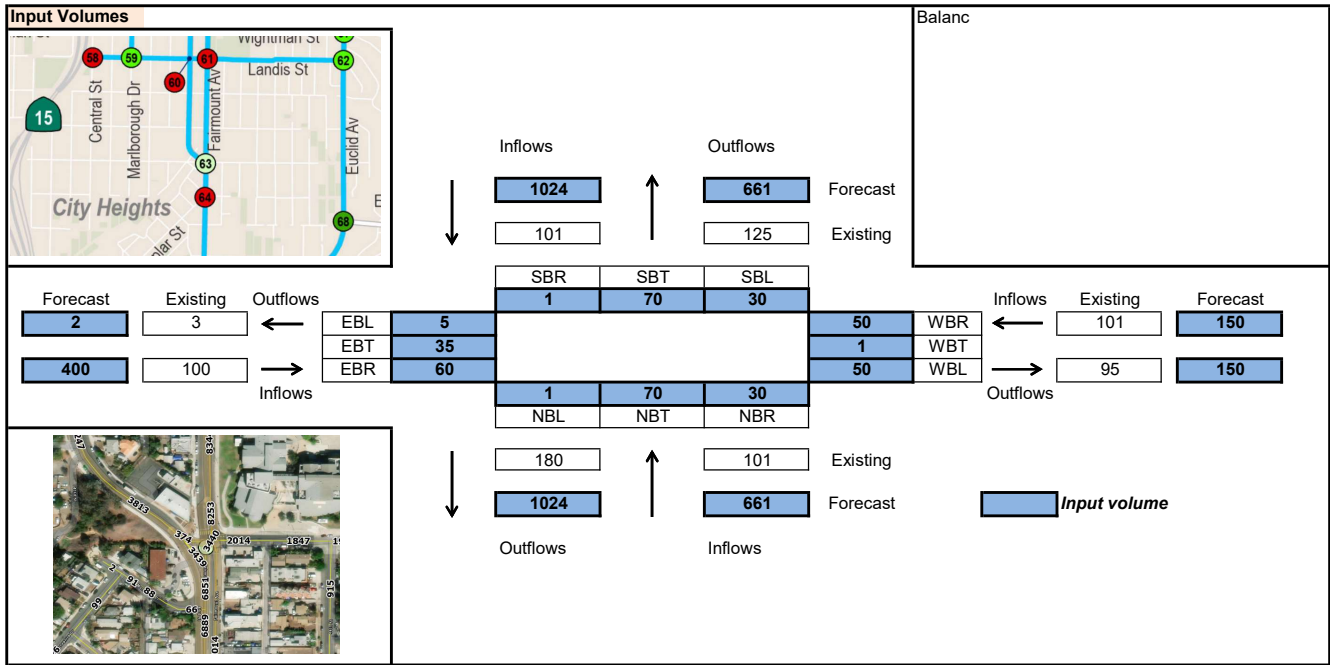
### Iterative Method Estimated Turning Movements



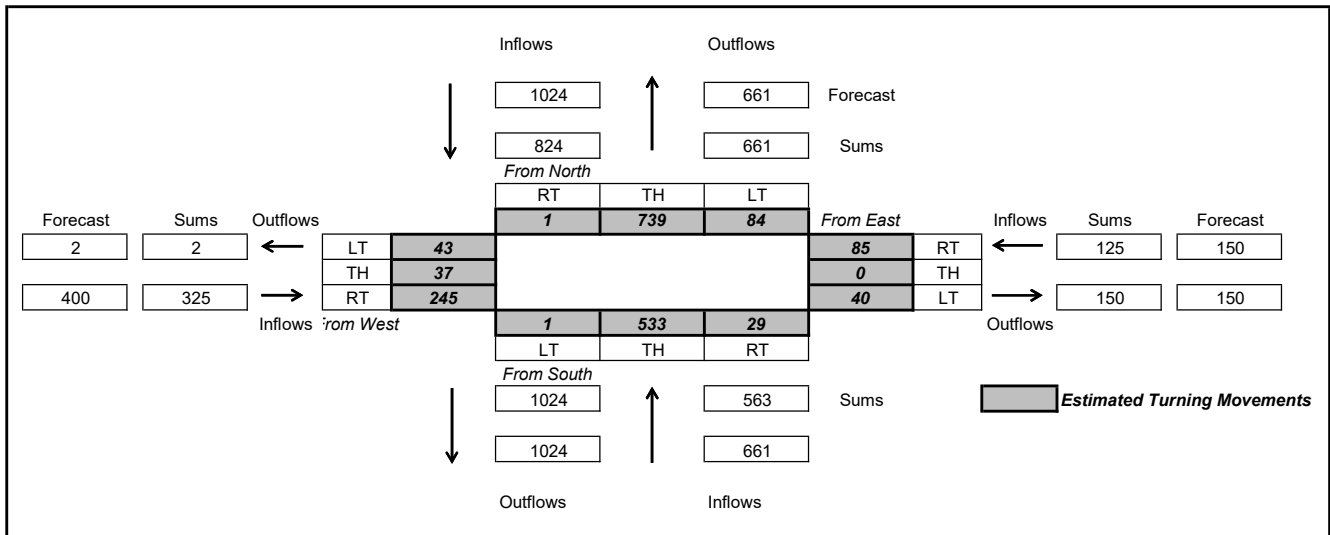
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



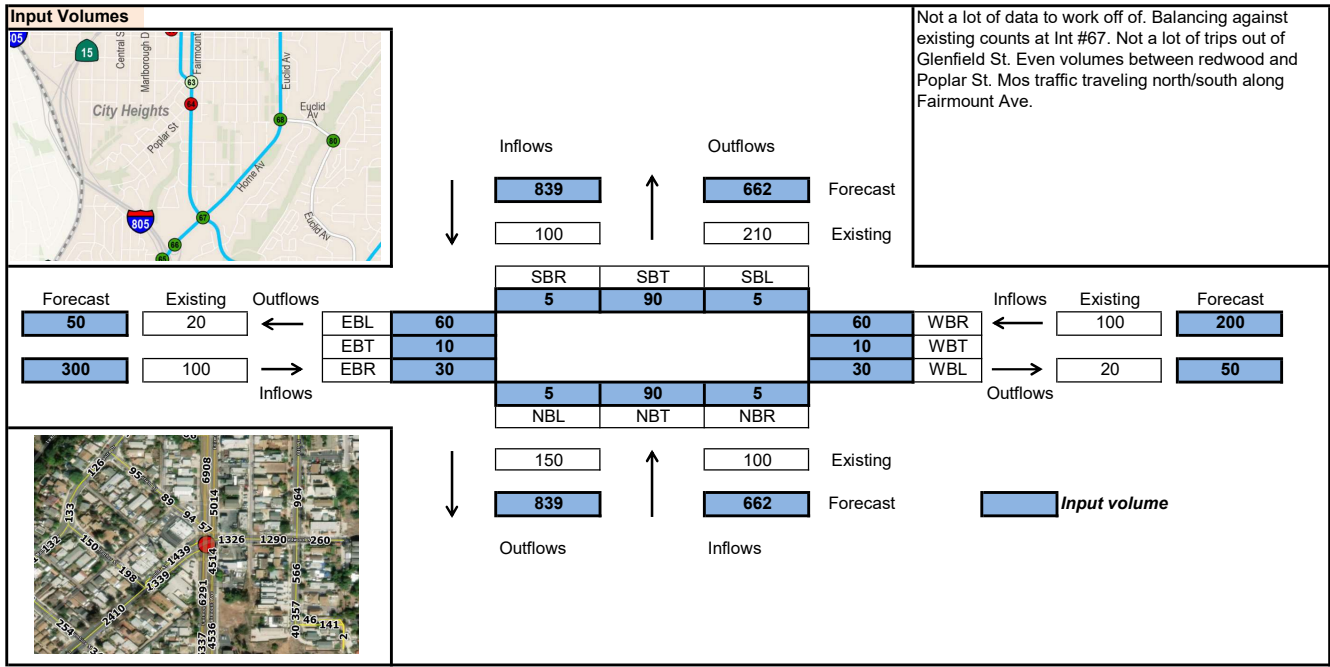
**Estimated Turning Movements**



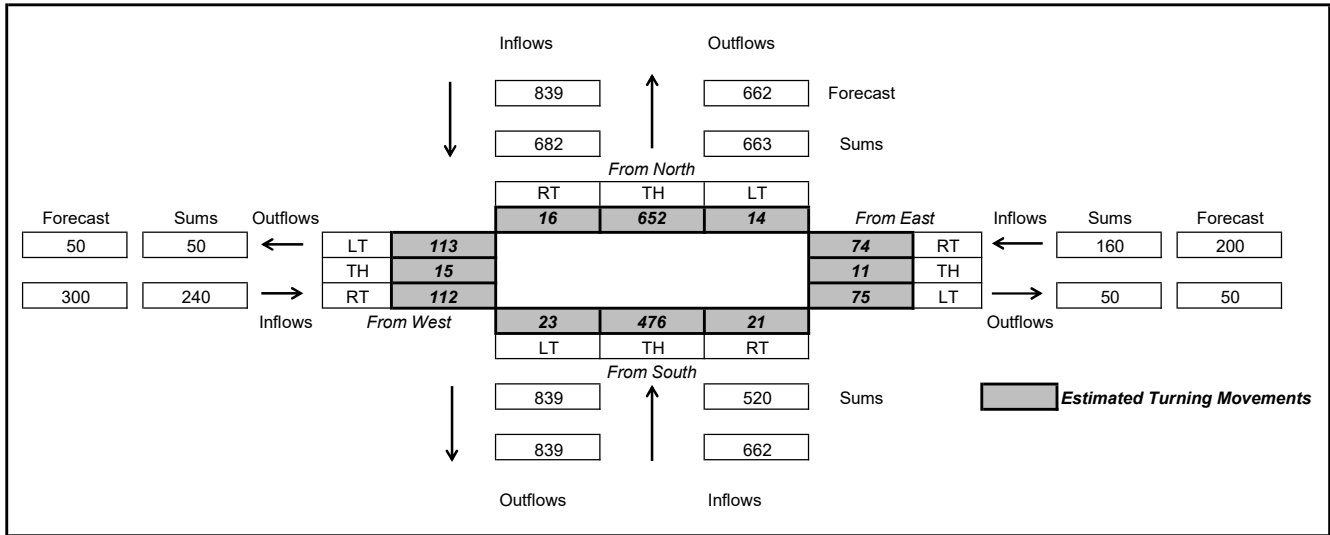


66) Fairmount Ave & Poplar St

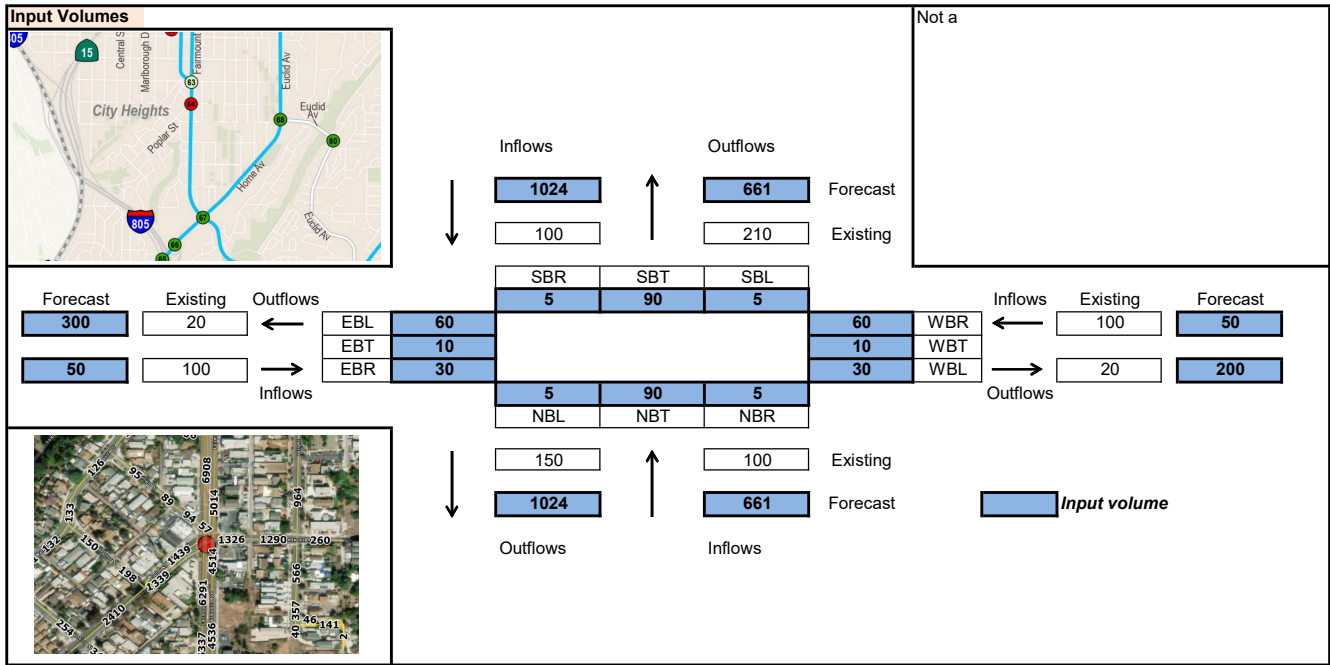
### Iterative Method Estimated Turning Movements



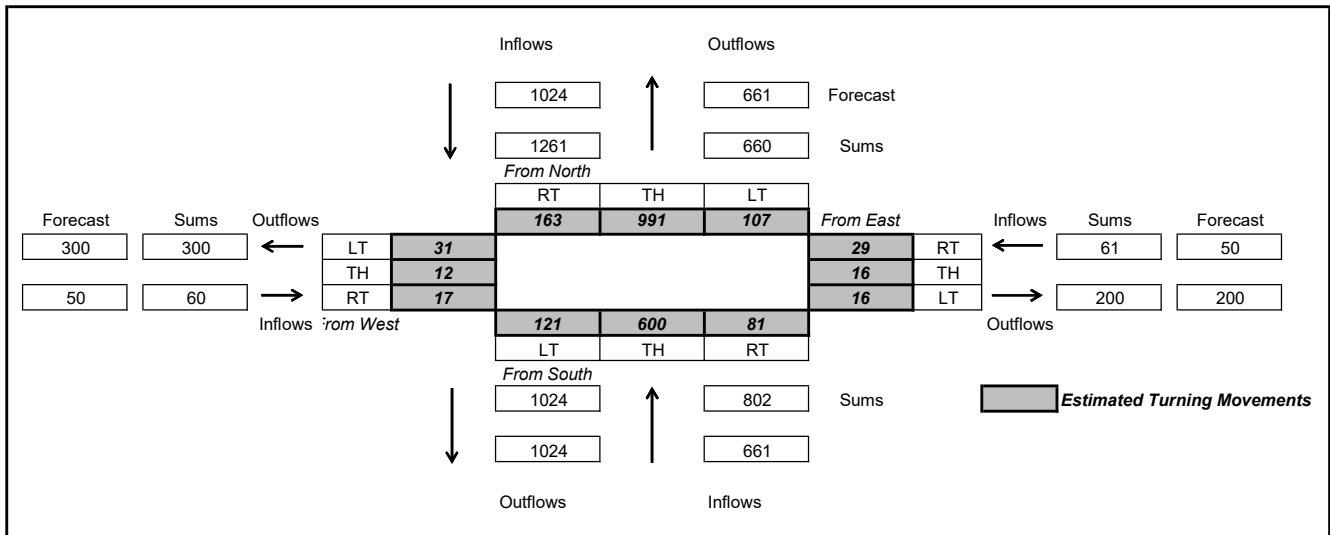
### Estimated Turning Movements



Iterative Method Estimated Turning Movements



Estimated Turning Movements



67) Home Ave & I-805 SB Ramps

City of San Diego  
 N/S: Home Avenue  
 E/W: I-805 Southbound Ramps  
 Weather: Clear

File Name : 21\_SDG\_Home\_805S AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Home Avenue Southbound				I-805 Southbound On Ramp Westbound				Home Avenue Northbound				I-805 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	96	92	0	188	0	0	0	0	0	73	33	106	36	0	25	61	355
07:15 AM	132	104	0	236	0	0	0	0	0	93	39	132	35	0	18	53	421
07:30 AM	146	133	0	279	0	0	0	0	0	93	35	128	33	0	24	57	464
07:45 AM	164	161	0	325	0	0	0	0	0	120	39	159	69	0	33	102	586
Total	538	490	0	1028	0	0	0	0	0	379	146	525	173	0	100	273	1826
08:00 AM	154	126	0	280	0	0	0	0	0	106	42	148	65	1	46	112	540
08:15 AM	140	112	0	252	0	0	0	0	0	98	43	141	50	0	45	95	488
08:30 AM	130	115	0	245	0	0	0	0	0	96	40	136	30	1	43	74	455
08:45 AM	135	123	0	258	0	0	0	0	0	97	29	126	44	0	39	83	467
Total	559	476	0	1035	0	0	0	0	0	397	154	551	189	2	173	364	1950
Grand Total	1097	966	0	2063	0	0	0	0	0	776	300	1076	362	2	273	637	3776
Apprch %	53.2	46.8	0		0	0	0		0	72.1	27.9		56.8	0.3	42.9		
Total %	29.1	25.6	0	54.6	0	0	0		0	20.6	7.9	28.5	9.6	0.1	7.2	16.9	

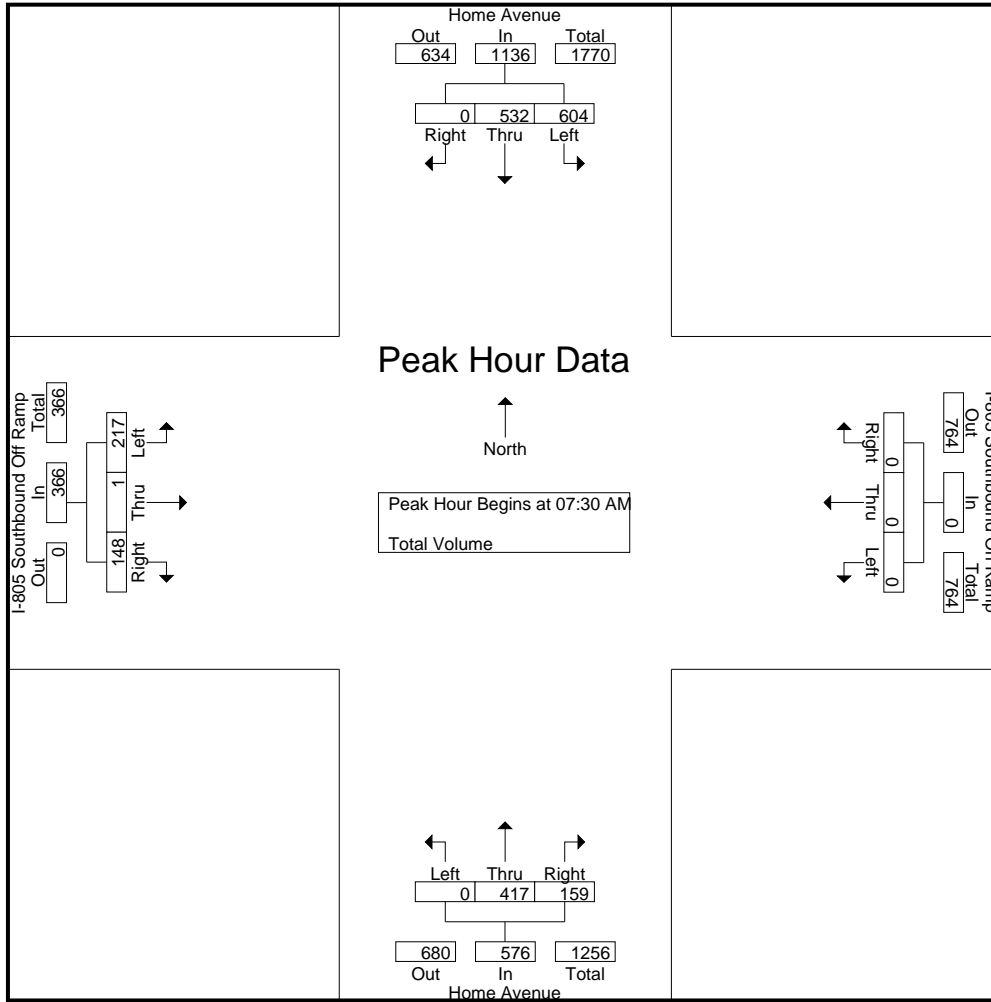
Start Time	Home Avenue Southbound				I-805 Southbound On Ramp Westbound				Home Avenue Northbound				I-805 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	146	133	0	279	0	0	0	0	0	93	35	128	33	0	24	57	464
07:45 AM	<b>164</b>	<b>161</b>	0	<b>325</b>	0	0	0	0	0	<b>120</b>	39	<b>159</b>	<b>69</b>	0	33	102	<b>586</b>
08:00 AM	154	126	0	280	0	0	0	0	0	106	42	148	65	1	46	112	540
08:15 AM	140	112	0	252	0	0	0	0	0	98	43	141	50	0	45	95	488
Total Volume	604	532	0	1136	0	0	0	0	0	417	159	576	217	1	148	366	2078
% App. Total	53.2	46.8	0		0	0	0		0	72.4	27.6		59.3	0.3	40.4		
PHF	.921	.826	.000	.874	.000	.000	.000	.000	.000	.869	.924	.906	.786	.250	.804	.817	.887

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM

City of San Diego  
 N/S: Home Avenue  
 E/W: I-805 Southbound Ramps  
 Weather: Clear

File Name : 21\_SDG\_Home\_805S AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:45 AM				07:45 AM			
+0 mins.	146	133	0	279	0	0	0	0	0	120	39	159	69	0	33	102
+15 mins.	164	161	0	325	0	0	0	0	0	106	42	148	65	1	46	112
+30 mins.	154	126	0	280	0	0	0	0	0	98	43	141	50	0	45	95
+45 mins.	140	112	0	252	0	0	0	0	0	96	40	136	30	1	43	74
Total Volume	604	532	0	1136	0	0	0	0	0	420	164	584	214	2	167	383
% App. Total	53.2	46.8	0		0	0	0	0	0	71.9	28.1		55.9	0.5	43.6	
PHF	.921	.826	.000	.874	.000	.000	.000	.000	.000	.875	.953	.918	.775	.500	.908	.855

City of San Diego  
 N/S: Home Avenue  
 E/W: I-805 Southbound Ramps  
 Weather: Clear

File Name : 21\_SDG\_Home\_805S MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

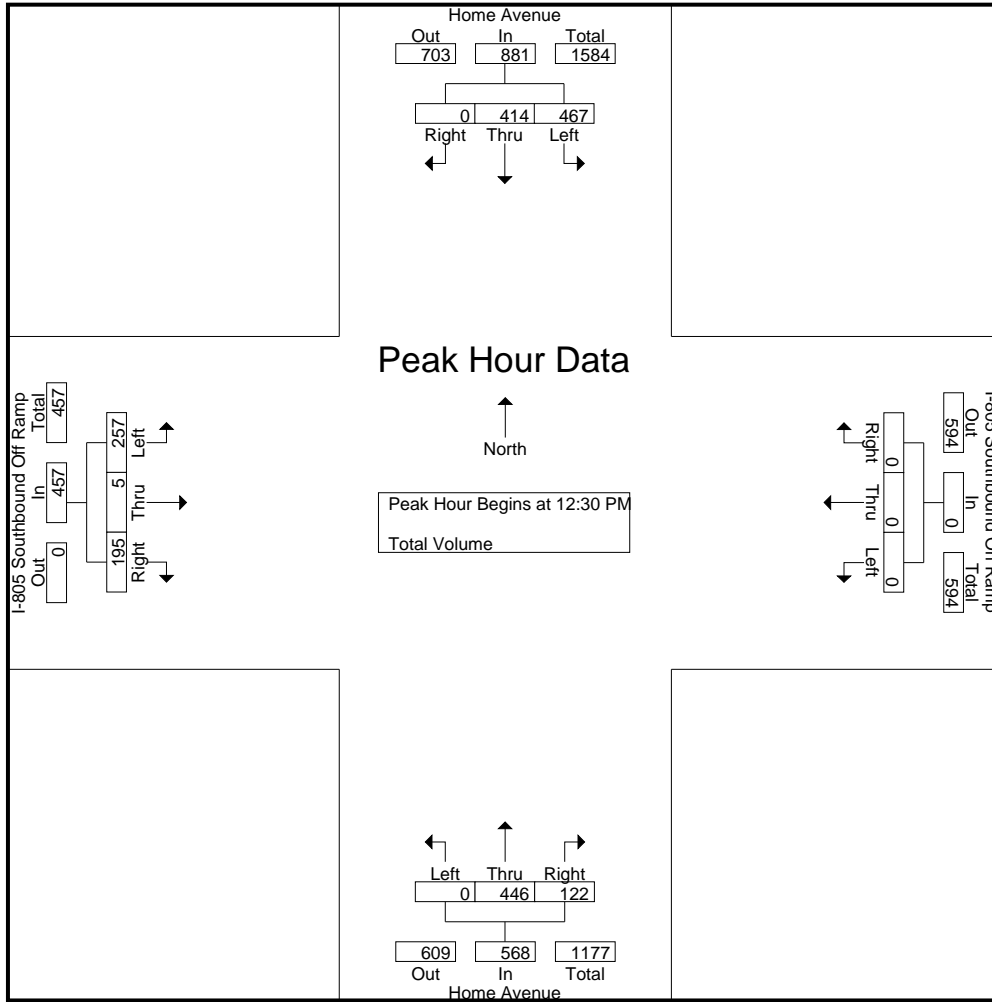
Start Time	Home Avenue Southbound				I-805 Southbound On Ramp Westbound				Home Avenue Northbound				I-805 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	105	109	0	214	0	0	0	0	0	117	30	147	44	0	41	85	446
11:45 AM	99	97	0	196	0	0	0	0	0	114	33	147	53	0	49	102	445
Total	204	206	0	410	0	0	0	0	0	231	63	294	97	0	90	187	891
12:00 PM	126	90	0	216	0	0	0	0	0	95	25	120	48	0	54	102	438
12:15 PM	117	122	0	239	0	0	0	0	0	96	24	120	60	0	43	103	462
12:30 PM	116	118	0	234	0	0	0	0	0	113	40	153	66	1	53	120	507
12:45 PM	132	118	0	250	0	0	0	0	0	103	21	124	56	0	45	101	475
Total	491	448	0	939	0	0	0	0	0	407	110	517	230	1	195	426	1882
01:00 PM	118	93	0	211	0	0	0	0	0	113	27	140	62	1	43	106	457
01:15 PM	101	85	0	186	0	0	0	0	0	117	34	151	73	3	54	130	467
Grand Total	914	832	0	1746	0	0	0	0	0	868	234	1102	462	5	382	849	3697
Apprch %	52.3	47.7	0		0	0	0		0	78.8	21.2		54.4	0.6	45		
Total %	24.7	22.5	0	47.2	0	0	0	0	0	23.5	6.3	29.8	12.5	0.1	10.3	23	

Start Time	Home Avenue Southbound				I-805 Southbound On Ramp Westbound				Home Avenue Northbound				I-805 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:30 PM	116	<b>118</b>	0	234	0	0	0	0	0	113	<b>40</b>	<b>153</b>	66	1	53	120	<b>507</b>
12:45 PM	<b>132</b>	118	0	<b>250</b>	0	0	0	0	0	103	21	124	56	0	45	101	475
01:00 PM	118	93	0	211	0	0	0	0	0	113	27	140	62	1	43	106	457
01:15 PM	101	85	0	186	0	0	0	0	0	<b>117</b>	34	151	<b>73</b>	<b>3</b>	<b>54</b>	<b>130</b>	467
Total Volume	467	414	0	881	0	0	0	0	0	446	122	568	257	5	195	457	1906
% App. Total	53	47	0		0	0	0		0	78.5	21.5		56.2	1.1	42.7		
PHF	.884	.877	.000	.881	.000	.000	.000	.000	.000	.953	.763	.928	.880	.417	.903	.879	.940

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:30 PM

City of San Diego  
 N/S: Home Avenue  
 E/W: I-805 Southbound Ramps  
 Weather: Clear

File Name : 21\_SDG\_Home\_805S MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:00 PM				11:30 AM				12:30 PM				12:30 PM			
+0 mins.	126	90	0	216	0	0	0	0	0	113	<b>40</b>	<b>153</b>	66	1	53	120
+15 mins.	117	<b>122</b>	0	239	0	0	0	0	0	103	21	124	56	0	45	101
+30 mins.	116	118	0	234	0	0	0	0	0	113	27	140	62	1	43	106
+45 mins.	<b>132</b>	118	0	<b>250</b>	0	0	0	0	0	<b>117</b>	34	151	<b>73</b>	<b>3</b>	<b>54</b>	<b>130</b>
Total Volume	491	448	0	939	0	0	0	0	0	446	122	568	257	5	195	457
% App. Total	52.3	47.7	0		0	0	0	0	0	78.5	21.5		56.2	1.1	42.7	
PHF	.930	.918	.000	.939	.000	.000	.000	.000	.000	.953	.763	.928	.880	.417	.903	.879



City of San Diego  
 N/S: Home Avenue  
 E/W: I-805 Southbound Ramps  
 Weather: Clear

File Name : 21\_SDG\_Home\_805S PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Home Avenue Southbound				I-805 Southbound On Ramp Westbound				Home Avenue Northbound				I-805 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	173	130	0	303	0	0	0	0	0	143	55	198	35	0	48	83	584
04:15 PM	176	122	0	298	0	0	0	0	0	138	44	182	32	1	31	64	544
04:30 PM	158	113	0	271	0	0	0	0	0	154	67	221	30	0	54	84	576
04:45 PM	158	126	0	284	0	0	0	0	0	123	57	180	39	0	44	83	547
Total	665	491	0	1156	0	0	0	0	0	558	223	781	136	1	177	314	2251
05:00 PM	165	84	0	249	0	0	0	0	0	141	59	200	51	0	47	98	547
05:15 PM	172	131	0	303	0	0	0	0	0	134	47	181	45	0	32	77	561
05:30 PM	192	126	0	318	0	0	0	0	0	136	65	201	47	0	29	76	595
05:45 PM	168	115	0	283	0	0	0	0	0	149	61	210	39	0	38	77	570
Total	697	456	0	1153	0	0	0	0	0	560	232	792	182	0	146	328	2273
Grand Total	1362	947	0	2309	0	0	0	0	0	1118	455	1573	318	1	323	642	4524
Apprch %	59	41	0		0	0	0		0	71.1	28.9		49.5	0.2	50.3		
Total %	30.1	20.9	0	51	0	0	0	0	0	24.7	10.1	34.8	7	0	7.1	14.2	

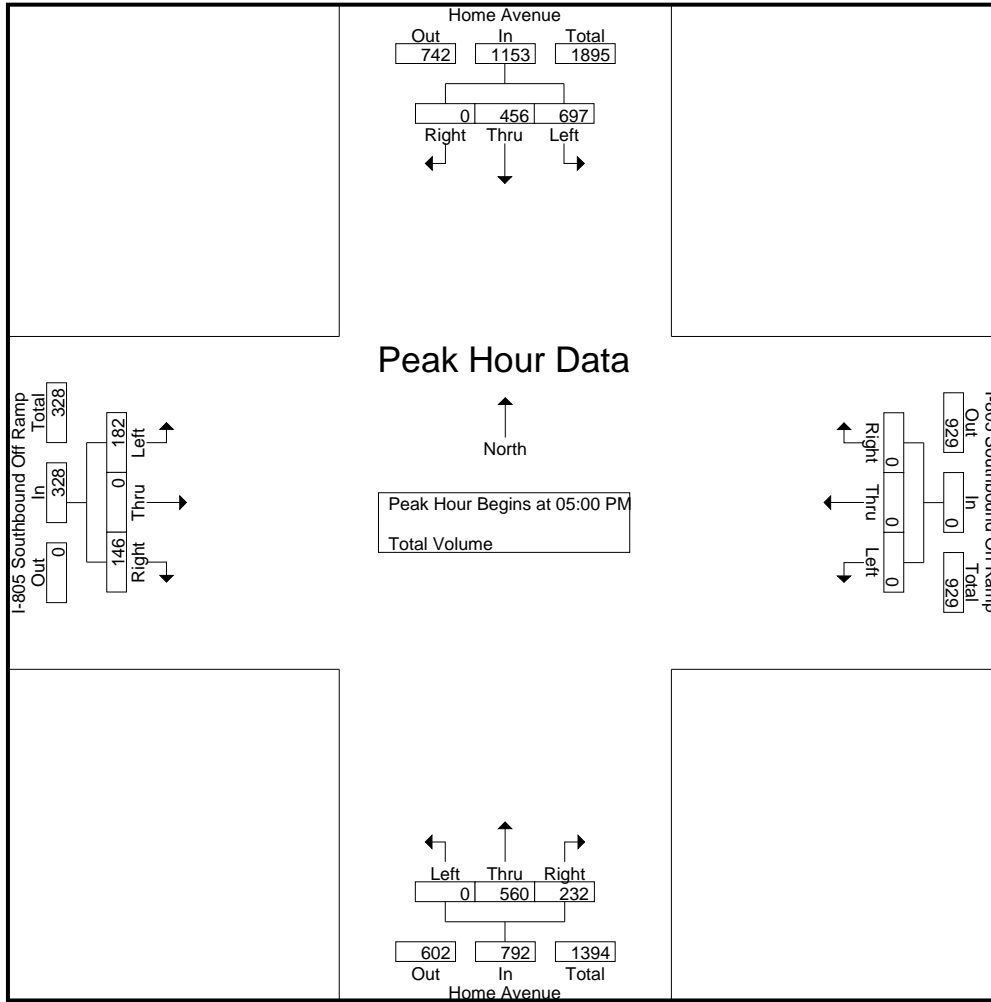
Start Time	Home Avenue Southbound				I-805 Southbound On Ramp Westbound				Home Avenue Northbound				I-805 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	165	84	0	249	0	0	0	0	0	141	59	200	<b>51</b>	0	<b>47</b>	<b>98</b>	547
05:15 PM	172	<b>131</b>	0	303	0	0	0	0	0	134	47	181	45	0	32	77	561
05:30 PM	<b>192</b>	126	0	<b>318</b>	0	0	0	0	0	136	<b>65</b>	201	47	0	29	76	<b>595</b>
05:45 PM	168	115	0	283	0	0	0	0	0	<b>149</b>	61	<b>210</b>	39	0	38	77	570
Total Volume	697	456	0	1153	0	0	0	0	0	560	232	792	182	0	146	328	2273
% App. Total	60.5	39.5	0		0	0	0		0	70.7	29.3		55.5	0	44.5		
PHF	.908	.870	.000	.906	.000	.000	.000	.000	.000	.940	.892	.943	.892	.000	.777	.837	.955

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

City of San Diego  
 N/S: Home Avenue  
 E/W: I-805 Southbound Ramps  
 Weather: Clear

File Name : 21\_SDG\_Home\_805S PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				05:00 PM				04:30 PM			
+0 mins.	173	130	0	303	0	0	0	0	0	141	59	200	30	0	54	84
+15 mins.	176	122	0	298	0	0	0	0	0	134	47	181	39	0	44	83
+30 mins.	158	113	0	271	0	0	0	0	0	136	65	201	51	0	47	98
+45 mins.	158	126	0	284	0	0	0	0	0	149	61	210	45	0	32	77
Total Volume	665	491	0	1156	0	0	0	0	0	560	232	792	165	0	177	342
% App. Total	57.5	42.5	0		0	0	0		0	70.7	29.3		48.2	0	51.8	
PHF	.945	.944	.000	.954	.000	.000	.000	.000	.000	.940	.892	.943	.809	.000	.819	.872

Location: San Diego  
 N/S: Home Avenue  
 E/W: I-805 SB Ramps



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Home Avenue	East Leg I-805 SB Ramps	South Leg Home Avenue	West Leg I-805 SB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	1	0	0	1
7:15 AM	0	2	0	1	3
7:30 AM	0	1	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	1	0	0	1
8:15 AM	0	2	0	1	3
8:30 AM	0	0	0	0	0
8:45 AM	0	3	0	0	3
TOTAL VOLUMES:	0	10	0	2	12

	North Leg Home Avenue	East Leg I-805 SB Ramps	South Leg Home Avenue	West Leg I-805 SB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	0	1	0	0	1
11:45 AM	0	3	0	0	3
12:00 PM	0	3	0	0	3
12:15 PM	0	0	0	0	0
12:30 PM	0	1	0	0	1
12:45 PM	0	2	0	1	3
1:00 PM	0	0	0	0	0
1:15 PM	0	0	0	0	0
TOTAL VOLUMES:	0	10	0	1	11

	North Leg Home Avenue	East Leg I-805 SB Ramps	South Leg Home Avenue	West Leg I-805 SB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	1	0	1	2
4:45 PM	0	2	0	1	3
5:00 PM	0	1	0	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	2	0	0	2
5:45 PM	0	1	0	1	2
TOTAL VOLUMES:	0	8	0	3	11

Location: San Diego  
 N/S: Home Avenue  
 E/W: I-805 SB Ramps



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Home Avenue			Westbound I-805 SB Ramps			Northbound Home Avenue			Eastbound I-805 SB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Home Avenue			Westbound I-805 SB Ramps			Northbound Home Avenue			Eastbound I-805 SB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Home Avenue			Westbound I-805 SB Ramps			Northbound Home Avenue			Eastbound I-805 SB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	2	0	0	0	0	4

68) I-805 NB Ramps & Home Ave

City of San Diego  
 N/S: Home Avenue  
 E/W: I-805 Northbound Ramps  
 Weather: Clear

File Name : 22\_SDG\_Home\_805N AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

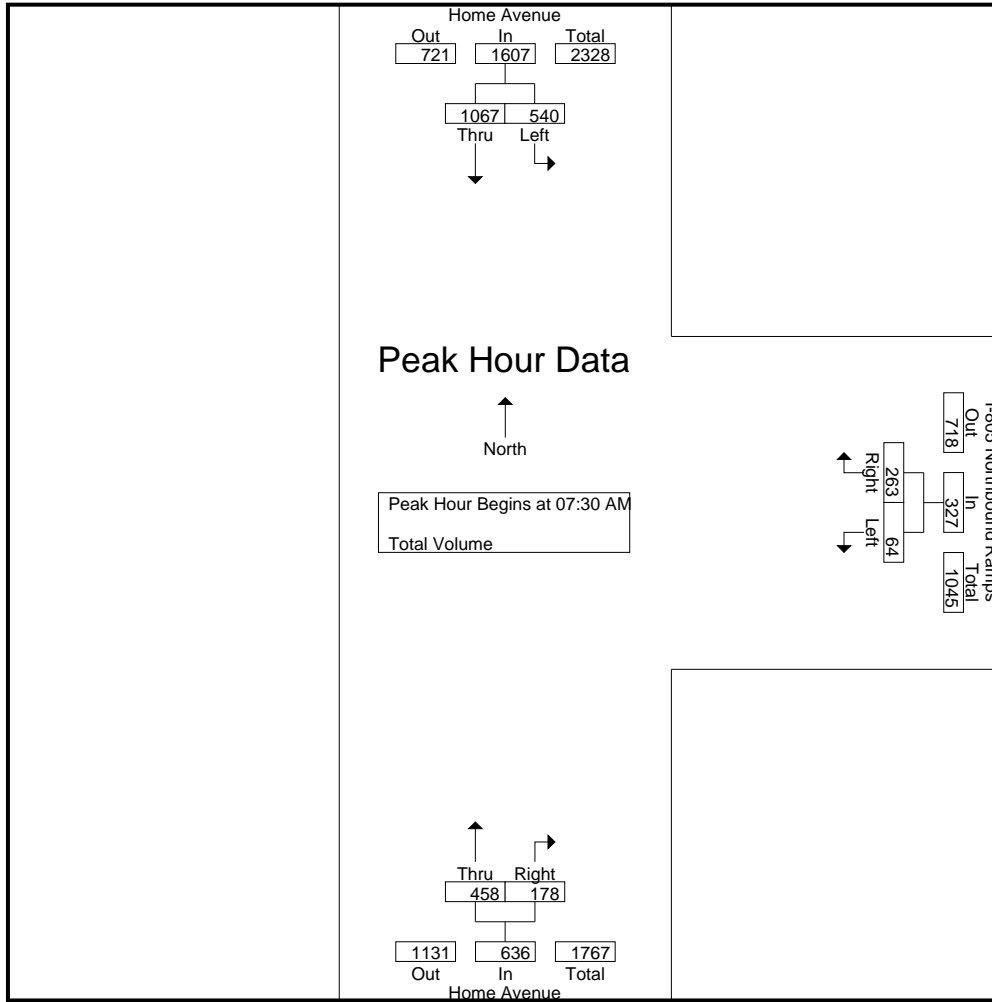
Start Time	Home Avenue Southbound			I-805 Northbound Ramps Westbound			Home Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	116	175	291	10	55	65	79	34	113	469
07:15 AM	127	228	355	12	46	58	81	45	126	539
07:30 AM	132	268	400	8	56	64	82	47	129	593
07:45 AM	137	316	453	18	69	87	131	50	181	721
Total	512	987	1499	48	226	274	373	176	549	2322
08:00 AM	130	255	385	12	72	84	132	47	179	648
08:15 AM	141	228	369	26	66	92	113	34	147	608
08:30 AM	107	215	322	27	64	91	74	40	114	527
08:45 AM	84	237	321	24	92	116	109	39	148	585
Total	462	935	1397	89	294	383	428	160	588	2368
Grand Total	974	1922	2896	137	520	657	801	336	1137	4690
Apprch %	33.6	66.4		20.9	79.1		70.4	29.6		
Total %	20.8	41	61.7	2.9	11.1	14	17.1	7.2	24.2	

Start Time	Home Avenue Southbound			I-805 Northbound Ramps Westbound			Home Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:30 AM	132	268	400	8	56	64	82	47	129	593
07:45 AM	137	<b>316</b>	<b>453</b>	18	69	87	131	<b>50</b>	<b>181</b>	<b>721</b>
08:00 AM	130	255	385	12	<b>72</b>	84	<b>132</b>	47	179	648
08:15 AM	<b>141</b>	228	369	<b>26</b>	66	<b>92</b>	113	34	147	608
Total Volume	540	1067	1607	64	263	327	458	178	636	2570
% App. Total	33.6	66.4		19.6	80.4		72	28		
PHF	.957	.844	.887	.615	.913	.889	.867	.890	.878	.891

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of San Diego  
 N/S: Home Avenue  
 E/W: I-805 Northbound Ramps  
 Weather: Clear

File Name : 22\_SDG\_Home\_805N AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:30 AM			08:00 AM			07:30 AM		
+0 mins.	132	268	400	12	72	84	82	47	129
+15 mins.	137	<b>316</b>	<b>453</b>	26	66	92	131	<b>50</b>	<b>181</b>
+30 mins.	130	255	385	<b>27</b>	64	91	<b>132</b>	47	179
+45 mins.	<b>141</b>	228	369	24	<b>92</b>	<b>116</b>	113	34	147
Total Volume	540	1067	1607	89	294	383	458	178	636
% App. Total	33.6	66.4		23.2	76.8		72	28	
PHF	.957	.844	.887	.824	.799	.825	.867	.890	.878

City of San Diego  
 N/S: Home Avenue  
 E/W: I-805 Northbound Ramps  
 Weather: Clear

File Name : 22\_SDG\_Home\_805N MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

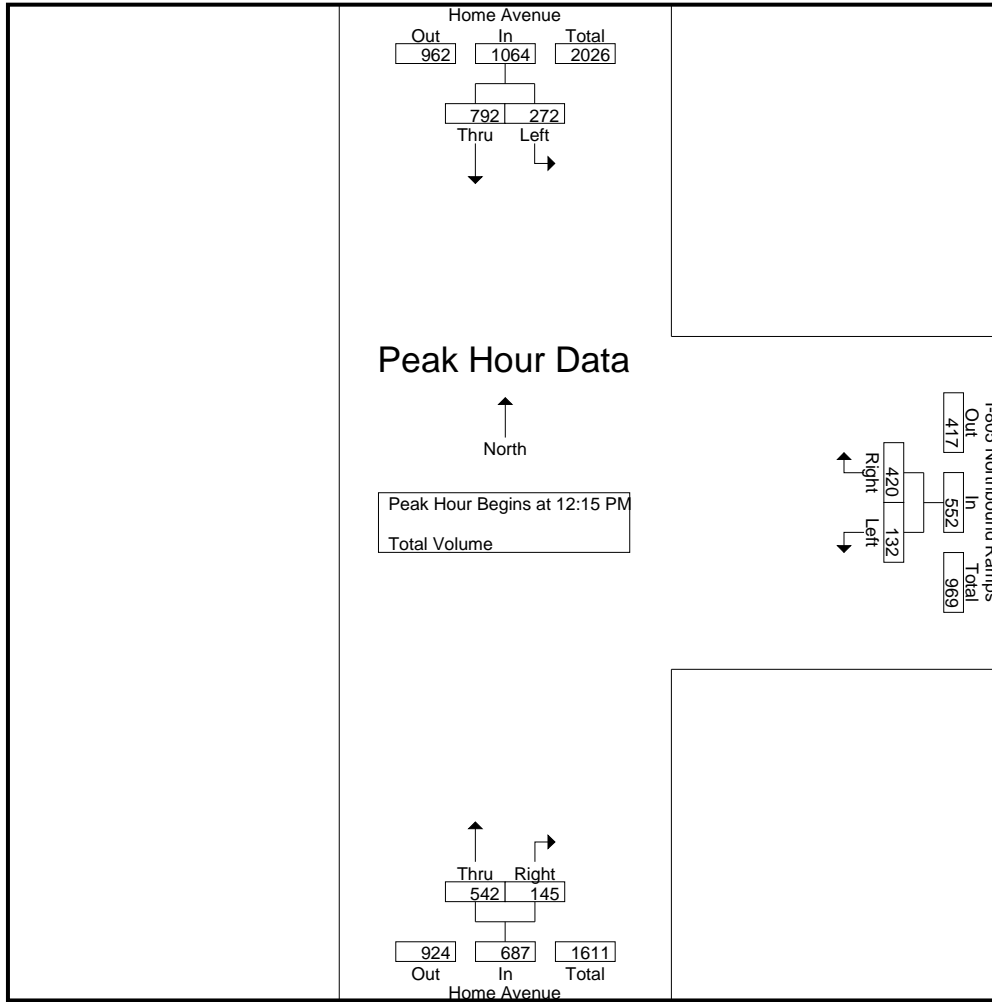
Groups Printed- Total Volume

Start Time	Home Avenue Southbound			I-805 Northbound Ramps Westbound			Home Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
11:30 AM	89	163	252	46	99	145	117	41	158	555
11:45 AM	62	167	229	34	75	109	145	32	177	515
Total	151	330	481	80	174	254	262	73	335	1070
12:00 PM	76	187	263	30	88	118	105	32	137	518
12:15 PM	73	196	269	35	113	148	133	35	168	585
12:30 PM	63	215	278	41	109	150	140	33	173	601
12:45 PM	78	198	276	33	89	122	129	39	168	566
Total	290	796	1086	139	399	538	507	139	646	2270
01:00 PM	58	183	241	23	109	132	140	38	178	551
01:15 PM	80	160	240	32	111	143	149	42	191	574
Grand Total	579	1469	2048	274	793	1067	1058	292	1350	4465
Apprch %	28.3	71.7		25.7	74.3		78.4	21.6		
Total %	13	32.9	45.9	6.1	17.8	23.9	23.7	6.5	30.2	

Start Time	Home Avenue Southbound			I-805 Northbound Ramps Westbound			Home Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
12:15 PM	73	196	269	35	<b>113</b>	148	133	35	168	585
12:30 PM	63	<b>215</b>	<b>278</b>	<b>41</b>	109	<b>150</b>	<b>140</b>	33	173	<b>601</b>
12:45 PM	<b>78</b>	198	276	33	89	122	129	<b>39</b>	168	566
01:00 PM	58	183	241	23	109	132	140	38	<b>178</b>	551
Total Volume	272	792	1064	132	420	552	542	145	687	2303
% App. Total	25.6	74.4		23.9	76.1		78.9	21.1		
PHF	.872	.921	.957	.805	.929	.920	.968	.929	.965	.958

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:15 PM





Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:00 PM			12:15 PM			12:30 PM		
+0 mins.	76	187	263	35	<b>113</b>	148	140	33	173
+15 mins.	73	196	269	<b>41</b>	109	<b>150</b>	129	39	168
+30 mins.	63	<b>215</b>	<b>278</b>	33	89	122	140	38	178
+45 mins.	<b>78</b>	198	276	23	109	132	<b>149</b>	<b>42</b>	<b>191</b>
Total Volume	290	796	1086	132	420	552	558	152	710
% App. Total	26.7	73.3		23.9	76.1		78.6	21.4	
PHF	.929	.926	.977	.805	.929	.920	.936	.905	.929

City of San Diego  
 N/S: Home Avenue  
 E/W: I-805 Northbound Ramps  
 Weather: Clear

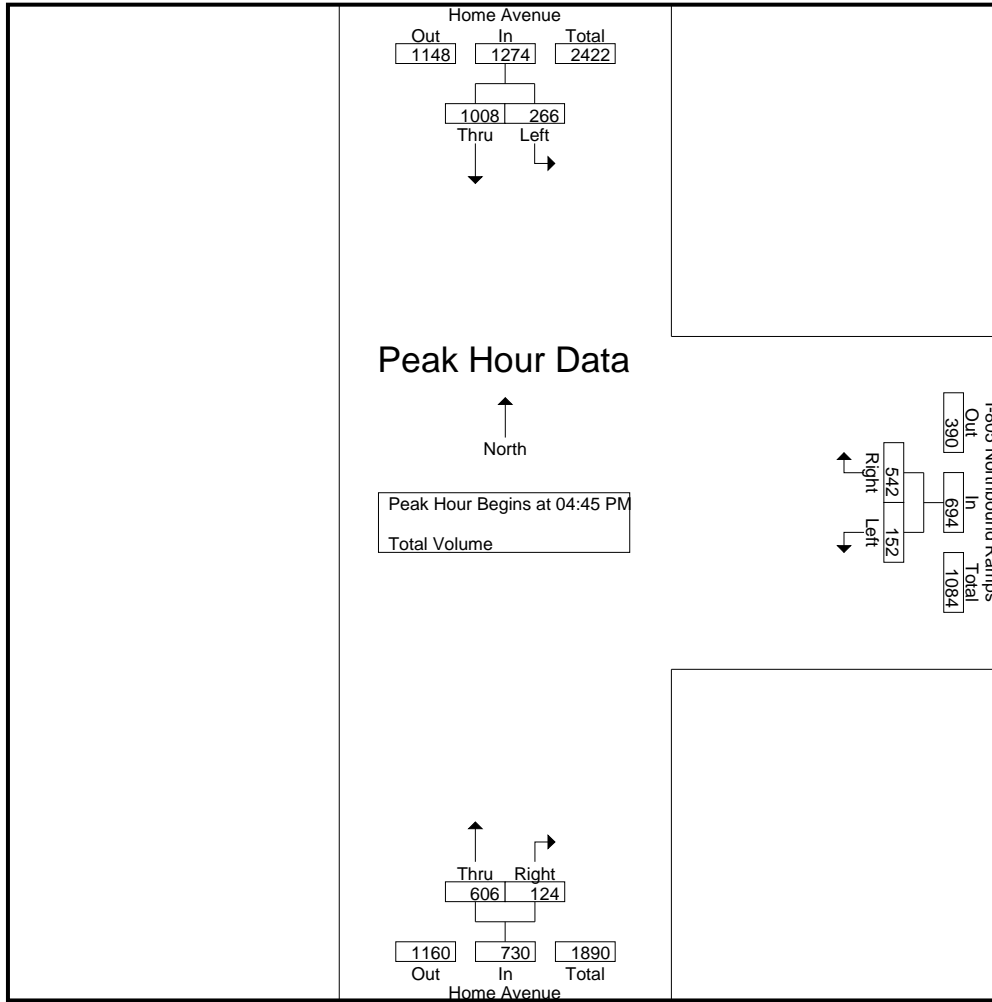
File Name : 22\_SDG\_Home\_805N PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Home Avenue Southbound			I-805 Northbound Ramps Westbound			Home Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	76	266	342	41	149	190	142	26	168	700
04:15 PM	78	242	320	40	129	169	156	27	183	672
04:30 PM	86	227	313	41	127	168	133	30	163	644
04:45 PM	78	246	324	44	110	154	151	33	184	662
Total	318	981	1299	166	515	681	582	116	698	2678
05:00 PM	75	239	314	29	138	167	140	32	172	653
05:15 PM	52	257	309	30	165	195	172	28	200	704
05:30 PM	61	266	327	49	129	178	143	31	174	679
05:45 PM	62	242	304	33	132	165	162	25	187	656
Total	250	1004	1254	141	564	705	617	116	733	2692
Grand Total	568	1985	2553	307	1079	1386	1199	232	1431	5370
Apprch %	22.2	77.8		22.2	77.8		83.8	16.2		
Total %	10.6	37	47.5	5.7	20.1	25.8	22.3	4.3	26.6	

Start Time	Home Avenue Southbound			I-805 Northbound Ramps Westbound			Home Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	<b>78</b>	246	324	44	110	154	151	<b>33</b>	184	662
05:00 PM	75	239	314	29	138	167	140	32	172	653
05:15 PM	52	257	309	30	<b>165</b>	<b>195</b>	<b>172</b>	28	<b>200</b>	<b>704</b>
05:30 PM	61	<b>266</b>	<b>327</b>	<b>49</b>	129	178	143	31	174	679
Total Volume	266	1008	1274	152	542	694	606	124	730	2698
% App. Total	20.9	79.1		21.9	78.1		83	17		
PHF	.853	.947	.974	.776	.821	.890	.881	.939	.913	.958

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:45 PM



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM			05:00 PM			05:00 PM		
+0 mins.	76	<b>266</b>	<b>342</b>	29	138	167	140	<b>32</b>	172
+15 mins.	78	242	320	30	<b>165</b>	<b>195</b>	<b>172</b>	28	<b>200</b>
+30 mins.	<b>86</b>	227	313	<b>49</b>	129	178	143	31	174
+45 mins.	78	246	324	33	132	165	162	25	187
Total Volume	318	981	1299	141	564	705	617	116	733
% App. Total	24.5	75.5		20	80		84.2	15.8	
PHF	.924	.922	.950	.719	.855	.904	.897	.906	.916

Location: San Diego  
 N/S: Home Avenue  
 E/W: I-805 NB Ramps



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Home Avenue	East Leg I-805 NB Ramps	South Leg Home Avenue	West Leg I-805 NB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	2	0	0	2
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	1	0	0	1
8:15 AM	0	3	0	0	3
8:30 AM	0	2	0	0	2
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	0	10	0	0	10

	North Leg Home Avenue	East Leg I-805 NB Ramps	South Leg Home Avenue	West Leg I-805 NB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	0	0	0	0	0
11:45 AM	0	1	0	0	1
12:00 PM	0	4	0	0	4
12:15 PM	0	2	0	0	2
12:30 PM	0	1	0	0	1
12:45 PM	0	2	0	0	2
1:00 PM	0	0	0	0	0
1:15 PM	0	0	0	0	0
TOTAL VOLUMES:	0	10	0	0	10

	North Leg Home Avenue	East Leg I-805 NB Ramps	South Leg Home Avenue	West Leg I-805 NB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	0	1	0	0	1
4:30 PM	0	2	0	0	2
4:45 PM	0	1	0	0	1
5:00 PM	0	1	0	0	1
5:15 PM	0	1	0	0	1
5:30 PM	0	1	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	8	0	0	8

Location: San Diego  
 N/S: Home Avenue  
 E/W: I-805 NB Ramps



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Home Avenue			Westbound I-805 NB Ramps			Northbound Home Avenue			Eastbound I-805 NB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Home Avenue			Westbound I-805 NB Ramps			Northbound Home Avenue			Eastbound I-805 NB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Home Avenue			Westbound I-805 NB Ramps			Northbound Home Avenue			Eastbound I-805 NB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	1	0	0	0	0	3

69) Home Ave & Fairmount Ave

City of San Diego  
 N/S: Home Avenue  
 E/W: Fairmount Avenue  
 Weather: Clear

File Name : 23\_SDG\_Home\_Fair AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

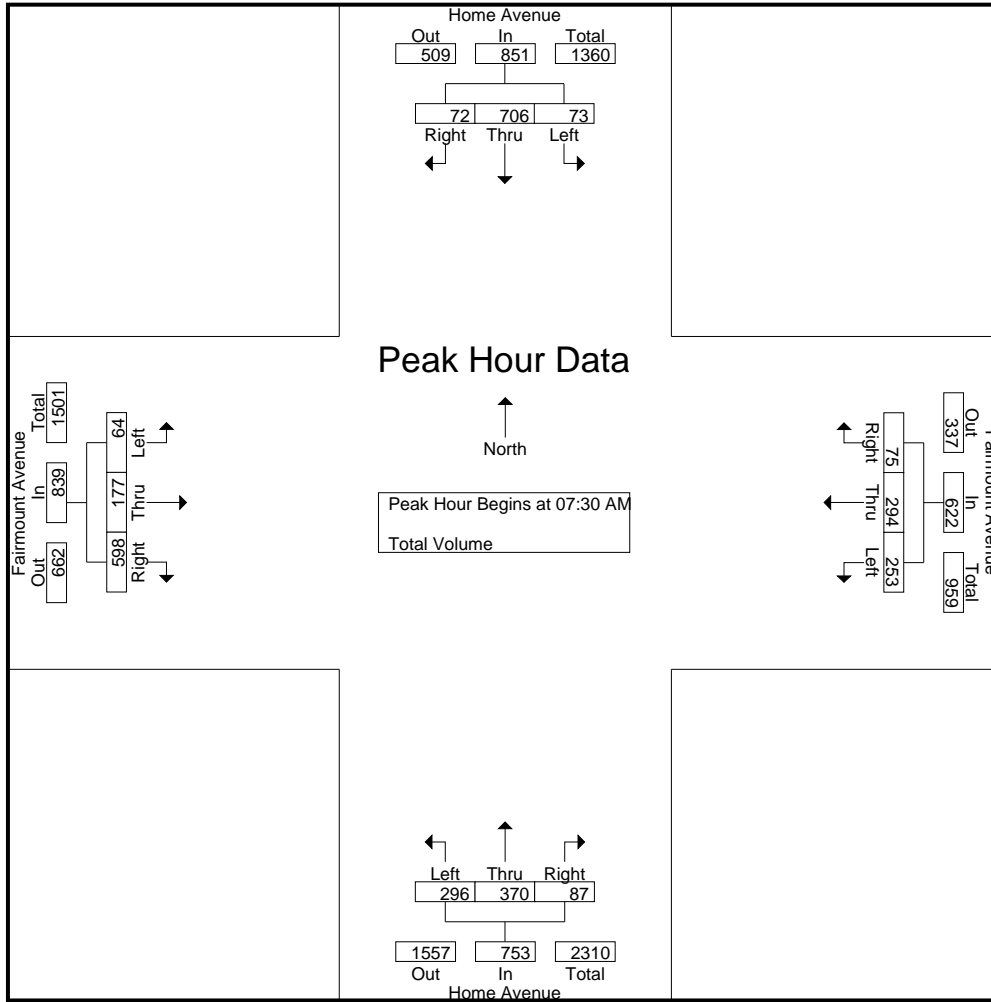
Groups Printed- Total Volume

Start Time	Home Avenue Southbound				Fairmount Avenue Westbound				Home Avenue Northbound				Fairmount Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	7	135	8	150	42	54	10	106	59	68	12	139	3	11	101	115	510
07:15 AM	9	171	26	206	38	90	13	141	65	45	9	119	5	23	137	165	631
07:30 AM	17	191	32	240	54	86	18	158	77	52	14	143	18	35	145	198	739
07:45 AM	21	176	12	209	60	72	24	156	84	114	27	225	21	55	185	261	851
Total	54	673	78	805	194	302	65	561	285	279	62	626	47	124	568	739	2731
08:00 AM	18	174	14	206	68	70	13	151	66	116	26	208	20	42	136	198	763
08:15 AM	17	165	14	196	71	66	20	157	69	88	20	177	5	45	132	182	712
08:30 AM	13	148	6	167	54	85	18	157	74	75	18	167	6	32	101	139	630
08:45 AM	22	159	4	185	35	62	13	110	71	93	23	187	8	33	125	166	648
Total	70	646	38	754	228	283	64	575	280	372	87	739	39	152	494	685	2753
Grand Total	124	1319	116	1559	422	585	129	1136	565	651	149	1365	86	276	1062	1424	5484
Apprch %	8	84.6	7.4		37.1	51.5	11.4		41.4	47.7	10.9		6	19.4	74.6		
Total %	2.3	24.1	2.1	28.4	7.7	10.7	2.4	20.7	10.3	11.9	2.7	24.9	1.6	5	19.4	26	

Start Time	Home Avenue Southbound				Fairmount Avenue Westbound				Home Avenue Northbound				Fairmount Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	17	<b>191</b>	<b>32</b>	<b>240</b>	54	<b>86</b>	18	<b>158</b>	77	52	14	143	18	35	145	198	739
07:45 AM	<b>21</b>	176	12	209	60	72	<b>24</b>	156	<b>84</b>	114	<b>27</b>	<b>225</b>	<b>21</b>	<b>55</b>	<b>185</b>	<b>261</b>	<b>851</b>
08:00 AM	18	174	14	206	68	70	13	151	66	<b>116</b>	26	208	20	42	136	198	763
08:15 AM	17	165	14	196	<b>71</b>	66	20	157	69	88	20	177	5	45	132	182	712
Total Volume	73	706	72	851	253	294	75	622	296	370	87	753	64	177	598	839	3065
% App. Total	8.6	83	8.5		40.7	47.3	12.1		39.3	49.1	11.6		7.6	21.1	71.3		
PHF	.869	.924	.563	.886	.891	.855	.781	.984	.881	.797	.806	.837	.762	.805	.808	.804	.900

City of San Diego  
 N/S: Home Avenue  
 E/W: Fairmount Avenue  
 Weather: Clear

File Name : 23\_SDG\_Home\_Fair AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:45 AM				07:30 AM			
+0 mins.	9	171	26	206	54	<b>86</b>	18	<b>158</b>	<b>84</b>	114	<b>27</b>	<b>225</b>	18	35	145	198
+15 mins.	17	<b>191</b>	<b>32</b>	<b>240</b>	60	72	<b>24</b>	156	66	<b>116</b>	26	208	<b>21</b>	<b>55</b>	<b>185</b>	<b>261</b>
+30 mins.	<b>21</b>	176	12	209	68	70	13	151	69	88	20	177	20	42	136	198
+45 mins.	18	174	14	206	<b>71</b>	66	20	157	74	75	18	167	5	45	132	182
Total Volume	65	712	84	861	253	294	75	622	293	393	91	777	64	177	598	839
% App. Total	7.5	82.7	9.8		40.7	47.3	12.1		37.7	50.6	11.7		7.6	21.1	71.3	
PHF	.774	.932	.656	.897	.891	.855	.781	.984	.872	.847	.843	.863	.762	.805	.808	.804



City of San Diego  
 N/S: Home Avenue  
 E/W: Fairmount Avenue  
 Weather: Clear

File Name : 23\_SDG\_Home\_Fair MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

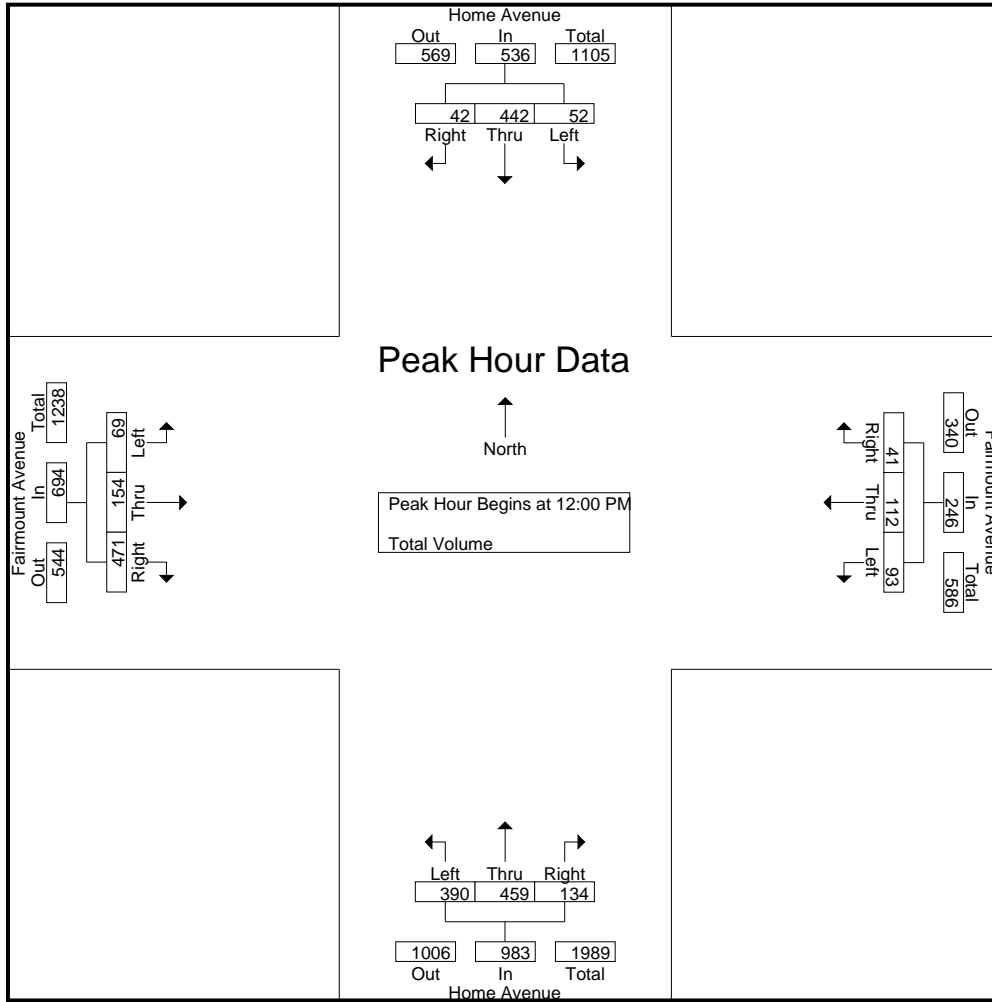
Groups Printed- Total Volume

Start Time	Home Avenue Southbound				Fairmount Avenue Westbound				Home Avenue Northbound				Fairmount Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	9	119	10	138	21	41	15	77	103	101	38	242	10	20	96	126	583
11:45 AM	9	88	16	113	28	32	14	74	87	83	31	201	13	26	85	124	512
Total	18	207	26	251	49	73	29	151	190	184	69	443	23	46	181	250	1095
12:00 PM	10	97	13	120	25	35	11	71	99	99	27	225	31	44	123	198	614
12:15 PM	16	105	11	132	25	30	16	71	97	120	38	255	14	40	125	179	637
12:30 PM	9	126	7	142	17	20	7	44	108	133	43	284	15	29	112	156	626
12:45 PM	17	114	11	142	26	27	7	60	86	107	26	219	9	41	111	161	582
Total	52	442	42	536	93	112	41	246	390	459	134	983	69	154	471	694	2459
01:00 PM	16	110	9	135	18	19	10	47	99	133	40	272	9	31	100	140	594
01:15 PM	11	105	14	130	31	28	12	71	99	129	38	266	8	39	92	139	606
Grand Total	97	864	91	1052	191	232	92	515	778	905	281	1964	109	270	844	1223	4754
Apprch %	9.2	82.1	8.7		37.1	45	17.9		39.6	46.1	14.3		8.9	22.1	69		
Total %	2	18.2	1.9	22.1	4	4.9	1.9	10.8	16.4	19	5.9	41.3	2.3	5.7	17.8	25.7	

Start Time	Home Avenue Southbound				Fairmount Avenue Westbound				Home Avenue Northbound				Fairmount Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	10	97	<b>13</b>	120	25	<b>35</b>	11	<b>71</b>	99	99	27	225	<b>31</b>	<b>44</b>	123	<b>198</b>	614
12:15 PM	16	105	11	132	25	30	<b>16</b>	71	97	120	38	255	14	40	<b>125</b>	179	<b>637</b>
12:30 PM	9	<b>126</b>	7	<b>142</b>	17	20	7	44	<b>108</b>	<b>133</b>	<b>43</b>	<b>284</b>	15	29	112	156	626
12:45 PM	<b>17</b>	114	11	142	<b>26</b>	27	7	60	86	107	26	219	9	41	111	161	582
Total Volume	52	442	42	536	93	112	41	246	390	459	134	983	69	154	471	694	2459
% App. Total	9.7	82.5	7.8		37.8	45.5	16.7		39.7	46.7	13.6		9.9	22.2	67.9		
PHF	.765	.877	.808	.944	.894	.800	.641	.866	.903	.863	.779	.865	.556	.875	.942	.876	.965

City of San Diego  
 N/S: Home Avenue  
 E/W: Fairmount Avenue  
 Weather: Clear

File Name : 23\_SDG\_Home\_Fair MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:15 PM				11:30 AM				12:30 PM				12:00 PM			
+0 mins.	16	105	11	132	21	41	15	77	108	133	43	284	31	44	123	198
+15 mins.	9	126	7	142	28	32	14	74	86	107	26	219	14	40	125	179
+30 mins.	17	114	11	142	25	35	11	71	99	133	40	272	15	29	112	156
+45 mins.	16	110	9	135	25	30	16	71	99	129	38	266	9	41	111	161
Total Volume	58	455	38	551	99	138	56	293	392	502	147	1041	69	154	471	694
% App. Total	10.5	82.6	6.9		33.8	47.1	19.1		37.7	48.2	14.1		9.9	22.2	67.9	
PHF	.853	.903	.864	.970	.884	.841	.875	.951	.907	.944	.855	.916	.556	.875	.942	.876

City of San Diego  
 N/S: Home Avenue  
 E/W: Fairmount Avenue  
 Weather: Clear

File Name : 23\_SDG\_Home\_Fair PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

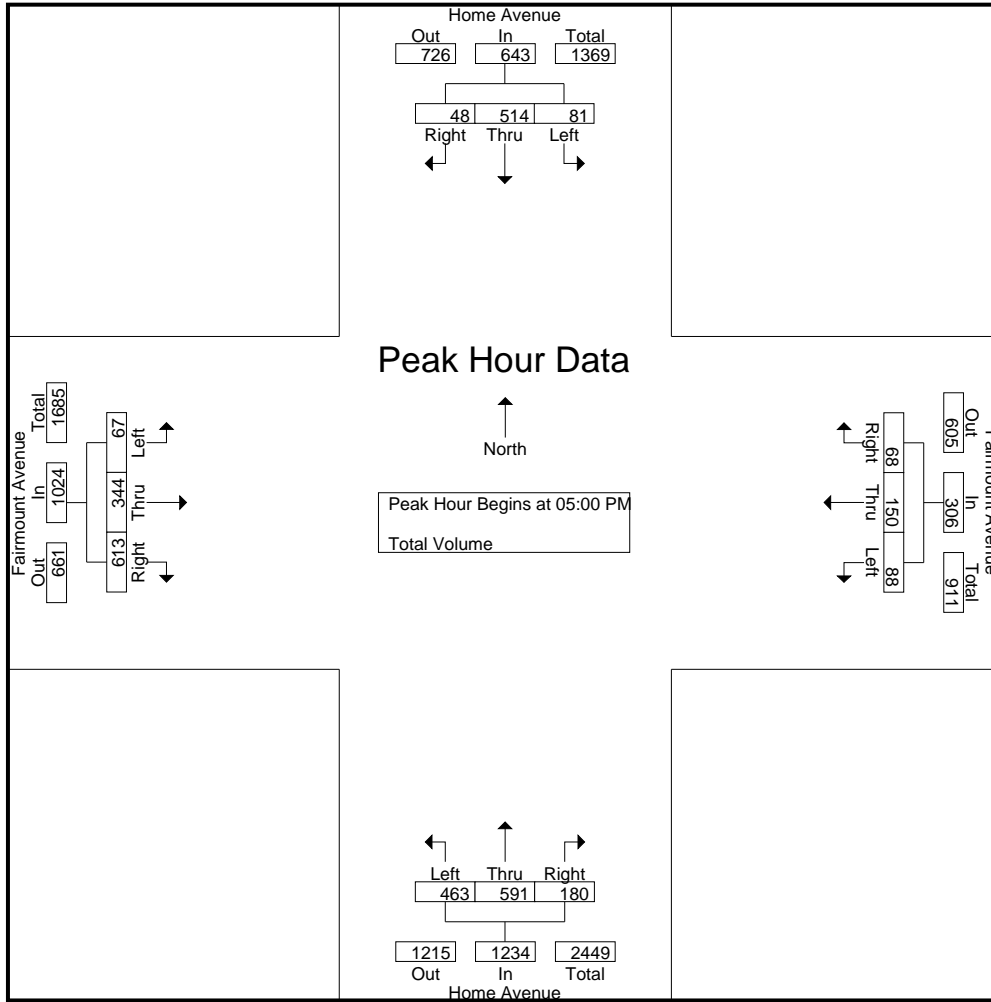
Groups Printed- Total Volume

Start Time	Home Avenue Southbound				Fairmount Avenue Westbound				Home Avenue Northbound				Fairmount Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	27	138	8	173	24	58	14	96	104	148	39	291	20	92	161	273	833
04:15 PM	24	150	11	185	30	42	22	94	107	146	36	289	18	75	143	236	804
04:30 PM	16	147	7	170	18	41	13	72	104	140	40	284	12	84	145	241	767
04:45 PM	21	112	8	141	18	28	9	55	111	144	40	295	18	89	151	258	749
Total	88	547	34	669	90	169	58	317	426	578	155	1159	68	340	600	1008	3153
05:00 PM	24	155	13	192	26	43	22	91	99	135	45	279	18	74	141	233	795
05:15 PM	14	121	12	147	23	39	21	83	121	154	48	323	17	108	152	277	830
05:30 PM	23	116	12	151	18	36	14	68	123	168	53	344	16	74	174	264	827
05:45 PM	20	122	11	153	21	32	11	64	120	134	34	288	16	88	146	250	755
Total	81	514	48	643	88	150	68	306	463	591	180	1234	67	344	613	1024	3207
Grand Total	169	1061	82	1312	178	319	126	623	889	1169	335	2393	135	684	1213	2032	6360
Apprch %	12.9	80.9	6.2		28.6	51.2	20.2		37.2	48.9	14		6.6	33.7	59.7		
Total %	2.7	16.7	1.3	20.6	2.8	5	2	9.8	14	18.4	5.3	37.6	2.1	10.8	19.1	31.9	

Start Time	Home Avenue Southbound				Fairmount Avenue Westbound				Home Avenue Northbound				Fairmount Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	<b>24</b>	<b>155</b>	<b>13</b>	<b>192</b>	<b>26</b>	<b>43</b>	<b>22</b>	<b>91</b>	99	135	45	279	<b>18</b>	<b>74</b>	<b>141</b>	<b>233</b>	<b>795</b>
05:15 PM	14	121	12	147	23	39	21	83	121	154	48	323	17	<b>108</b>	152	<b>277</b>	<b>830</b>
05:30 PM	23	116	12	151	18	36	14	68	<b>123</b>	<b>168</b>	<b>53</b>	<b>344</b>	16	74	<b>174</b>	264	827
05:45 PM	20	122	11	153	21	32	11	64	120	134	34	288	16	88	146	250	755
Total Volume	81	514	48	643	88	150	68	306	463	591	180	1234	67	344	613	1024	3207
% App. Total	12.6	79.9	7.5		28.8	49	22.2		37.5	47.9	14.6		6.5	33.6	59.9		
PHF	.844	.829	.923	.837	.846	.872	.773	.841	.941	.879	.849	.897	.931	.796	.881	.924	.966

City of San Diego  
 N/S: Home Avenue  
 E/W: Fairmount Avenue  
 Weather: Clear

File Name : 23\_SDG\_Home\_Fair PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:45 PM				04:45 PM			
+0 mins.	<b>24</b>	150	11	185	24	<b>58</b>	14	<b>96</b>	111	144	40	295	<b>18</b>	89	151	258
+15 mins.	16	147	7	170	<b>30</b>	42	<b>22</b>	94	99	135	45	279	18	74	141	233
+30 mins.	21	112	8	141	18	41	13	72	121	154	48	323	17	<b>108</b>	152	<b>277</b>
+45 mins.	24	<b>155</b>	<b>13</b>	<b>192</b>	18	28	9	55	<b>123</b>	<b>168</b>	<b>53</b>	<b>344</b>	16	74	<b>174</b>	264
Total Volume	85	564	39	688	90	169	58	317	454	601	186	1241	69	345	618	1032
% App. Total	12.4	82	5.7		28.4	53.3	18.3		36.6	48.4	15		6.7	33.4	59.9	
PHF	.885	.910	.750	.896	.750	.728	.659	.826	.923	.894	.877	.902	.958	.799	.888	.931

Location: San Diego  
 N/S: Home Avenue  
 E/W: Fairmount Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Home Avenue	East Leg Fairmount Avenue	South Leg Home Avenue	West Leg Fairmount Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	1	3	5	0	9
7:15 AM	0	1	0	1	2
7:30 AM	0	2	0	0	2
7:45 AM	0	2	0	0	2
8:00 AM	2	2	1	0	5
8:15 AM	1	2	1	0	4
8:30 AM	1	3	0	1	5
8:45 AM	3	1	1	1	6
TOTAL VOLUMES:	8	16	8	3	35

	North Leg Home Avenue	East Leg Fairmount Avenue	South Leg Home Avenue	West Leg Fairmount Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	1	2	2	1	6
11:45 AM	1	3	2	0	6
12:00 PM	1	3	0	0	4
12:15 PM	1	3	1	0	5
12:30 PM	0	5	0	0	5
12:45 PM	0	4	0	0	4
1:00 PM	0	6	1	0	7
1:15 PM	0	3	1	0	4
TOTAL VOLUMES:	4	29	7	1	41

	North Leg Home Avenue	East Leg Fairmount Avenue	South Leg Home Avenue	West Leg Fairmount Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	1	0	1	1	3
4:30 PM	2	3	1	2	8
4:45 PM	0	1	3	0	4
5:00 PM	0	4	1	0	5
5:15 PM	2	5	2	0	9
5:30 PM	2	6	1	0	9
5:45 PM	1	1	2	1	5
TOTAL VOLUMES:	8	21	11	4	44

Location: San Diego  
 N/S: Home Avenue  
 E/W: Fairmount Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Home Avenue			Westbound Fairmount Avenue			Northbound Home Avenue			Eastbound Fairmount Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	2	0	3

	Southbound Home Avenue			Westbound Fairmount Avenue			Northbound Home Avenue			Eastbound Fairmount Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

	Southbound Home Avenue			Westbound Fairmount Avenue			Northbound Home Avenue			Eastbound Fairmount Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	1	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	1	2	0	0	0	0	0	0	1	0	2	6

70) Home Ave & Euclid Ave

City of San Diego  
 N/S: Euclid Avenue/Home Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 24\_SDG\_Home\_Euc AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				Euclid Avenue Westbound				Home Avenue Northbound				Collision Repair Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	13	61	0	74	54	0	61	115	0	46	23	69	0	0	0	0	258
07:15 AM	21	71	0	92	65	0	77	142	0	40	19	59	0	0	0	0	293
07:30 AM	24	109	0	133	65	0	117	182	0	45	27	72	0	0	0	0	387
07:45 AM	47	103	0	150	72	0	94	166	0	60	51	111	0	0	0	0	427
Total	105	344	0	449	256	0	349	605	0	191	120	311	0	0	0	0	1365
08:00 AM	27	80	0	107	66	0	85	151	0	84	88	172	0	0	0	0	430
08:15 AM	28	84	0	112	79	0	121	200	0	57	50	107	0	0	0	0	419
08:30 AM	35	85	0	120	69	0	76	145	0	52	30	82	0	0	0	0	347
08:45 AM	38	79	0	117	60	0	65	125	1	55	38	94	0	0	0	0	336
Total	128	328	0	456	274	0	347	621	1	248	206	455	0	0	0	0	1532
Grand Total	233	672	0	905	530	0	696	1226	1	439	326	766	0	0	0	0	2897
Apprch %	25.7	74.3	0		43.2	0	56.8		0.1	57.3	42.6		0	0	0		
Total %	8	23.2	0	31.2	18.3	0	24	42.3	0	15.2	11.3	26.4	0	0	0	0	

Start Time	Euclid Avenue Southbound				Euclid Avenue Westbound				Home Avenue Northbound				Collision Repair Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	24	<b>109</b>	0	133	65	0	117	182	0	45	27	72	0	0	0	0	387
07:45 AM	<b>47</b>	103	0	<b>150</b>	72	0	94	166	0	60	51	111	0	0	0	0	427
08:00 AM	27	80	0	107	66	0	85	151	0	<b>84</b>	<b>88</b>	<b>172</b>	0	0	0	0	<b>430</b>
08:15 AM	28	84	0	112	<b>79</b>	0	<b>121</b>	<b>200</b>	0	57	50	107	0	0	0	0	419
Total Volume	126	376	0	502	282	0	417	699	0	246	216	462	0	0	0	0	1663
% App. Total	25.1	74.9	0		40.3	0	59.7		0	53.2	46.8		0	0	0		
PHF	.670	.862	.000	.837	.892	.000	.862	.874	.000	.732	.614	.672	.000	.000	.000	.000	.967

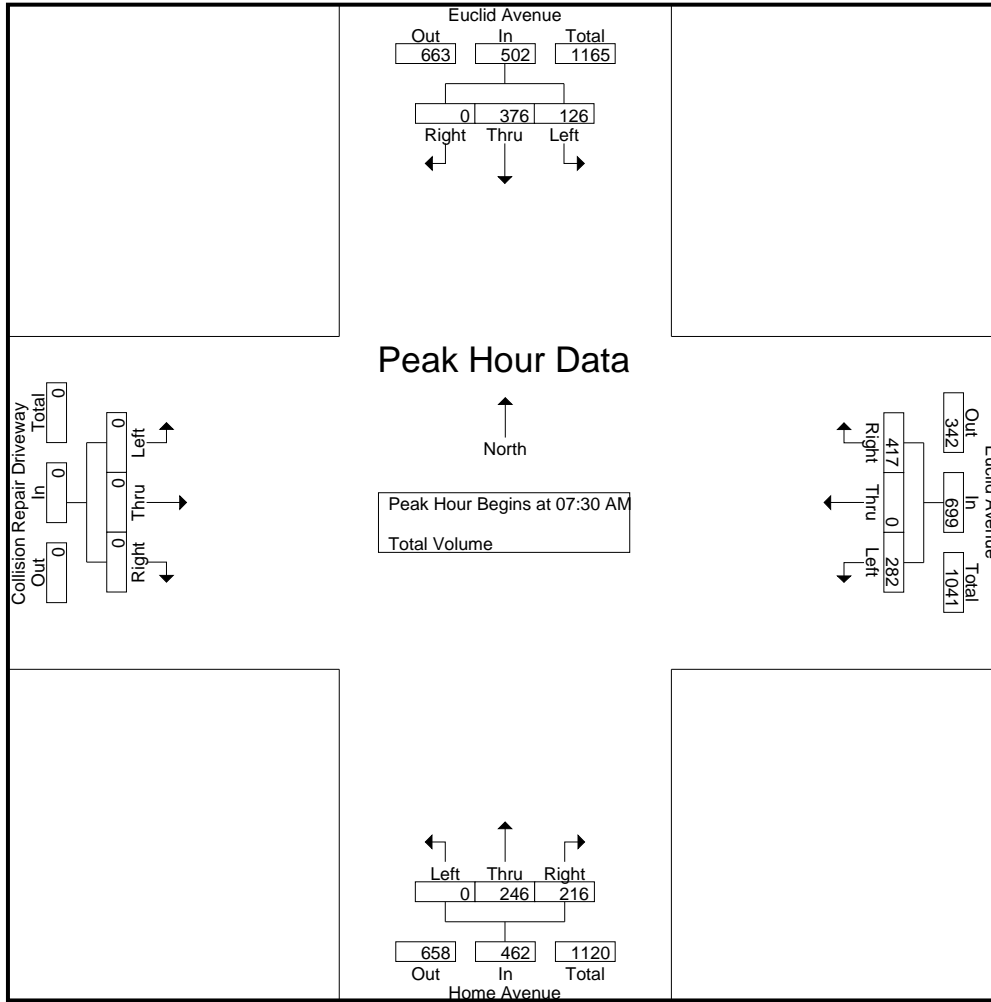
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM



City of San Diego  
 N/S: Euclid Avenue/Home Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 24\_SDG\_Home\_Euc AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:45 AM				07:00 AM			
+0 mins.	24	<b>109</b>	0	133	65	0	117	182	0	60	51	111	0	0	0	0
+15 mins.	<b>47</b>	103	0	<b>150</b>	72	0	94	166	0	<b>84</b>	<b>88</b>	<b>172</b>	0	0	0	0
+30 mins.	27	80	0	107	66	0	85	151	0	57	50	107	0	0	0	0
+45 mins.	28	84	0	112	<b>79</b>	0	<b>121</b>	<b>200</b>	0	52	30	82	0	0	0	0
Total Volume	126	376	0	502	282	0	417	699	0	253	219	472	0	0	0	0
% App. Total	25.1	74.9	0		40.3	0	59.7		0	53.6	46.4		0	0	0	
PHF	.670	.862	.000	.837	.892	.000	.862	.874	.000	.753	.622	.686	.000	.000	.000	.000

City of San Diego  
 N/S: Euclid Avenue/Home Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 24\_SDG\_Home\_Euc MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

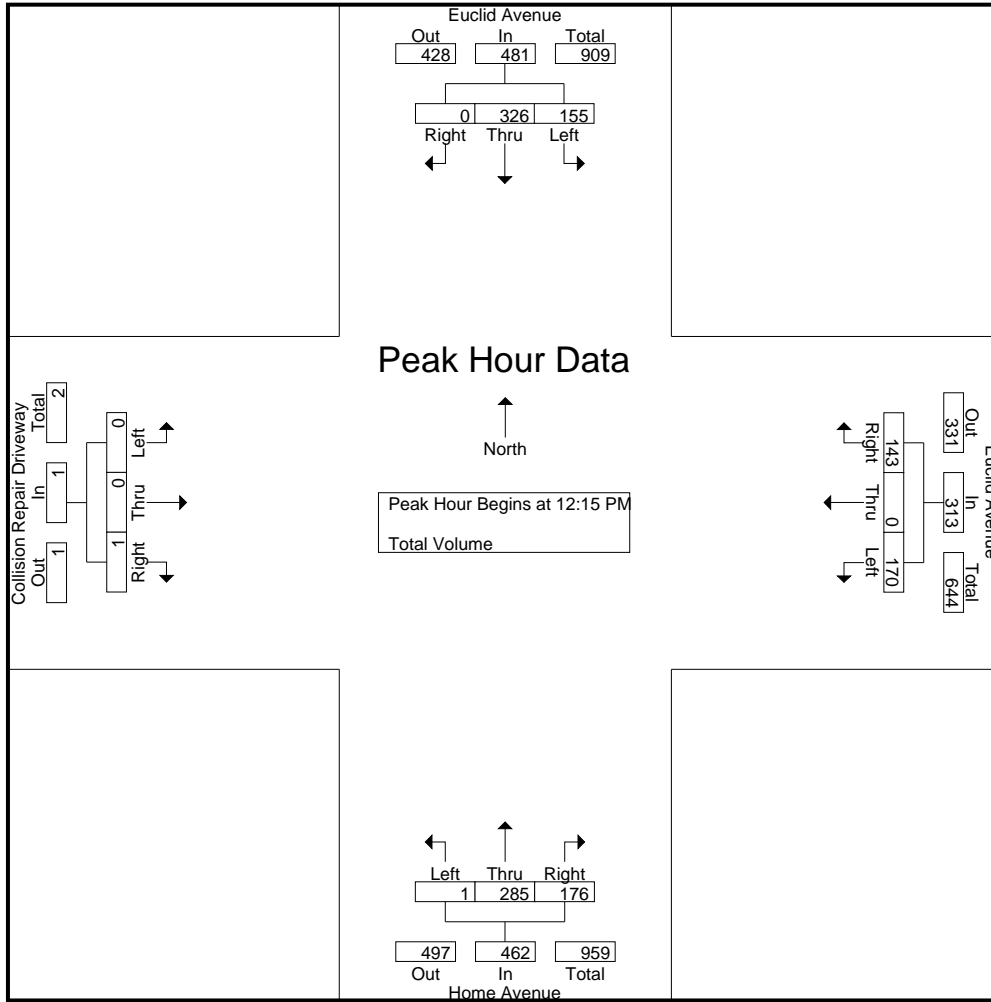
Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				Euclid Avenue Westbound				Home Avenue Northbound				Collision Repair Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	31	73	0	104	38	0	43	81	0	81	33	114	0	0	1	1	300
11:45 AM	23	59	1	83	27	0	45	72	0	77	35	112	0	0	1	1	268
Total	54	132	1	187	65	0	88	153	0	158	68	226	0	0	2	2	568
12:00 PM	45	72	0	117	31	0	40	71	0	57	42	99	0	0	1	1	288
12:15 PM	37	68	0	105	45	0	33	78	0	76	54	130	0	0	1	1	314
12:30 PM	42	86	0	128	45	0	42	87	0	58	49	107	0	0	0	0	322
12:45 PM	41	91	0	132	48	0	31	79	1	79	34	114	0	0	0	0	325
Total	165	317	0	482	169	0	146	315	1	270	179	450	0	0	2	2	1249
01:00 PM	35	81	0	116	32	0	37	69	0	72	39	111	0	0	0	0	296
01:15 PM	29	72	1	102	37	0	41	78	0	86	46	132	0	0	0	0	312
Grand Total	283	602	2	887	303	0	312	615	1	586	332	919	0	0	4	4	2425
Apprch %	31.9	67.9	0.2		49.3	0	50.7		0.1	63.8	36.1		0	0	100		
Total %	11.7	24.8	0.1	36.6	12.5	0	12.9	25.4	0	24.2	13.7	37.9	0	0	0.2	0.2	

Start Time	Euclid Avenue Southbound				Euclid Avenue Westbound				Home Avenue Northbound				Collision Repair Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:15 PM	37	68	0	105	45	0	33	78	0	76	<b>54</b>	<b>130</b>	0	0	<b>1</b>	<b>1</b>	314
12:30 PM	<b>42</b>	86	0	128	45	0	<b>42</b>	<b>87</b>	0	58	49	107	0	0	0	0	322
12:45 PM	41	<b>91</b>	0	<b>132</b>	<b>48</b>	0	31	79	<b>1</b>	<b>79</b>	34	114	0	0	0	0	<b>325</b>
01:00 PM	35	81	0	116	32	0	37	69	0	72	39	111	0	0	0	0	296
Total Volume	155	326	0	481	170	0	143	313	1	285	176	462	0	0	1	1	1257
% App. Total	32.2	67.8	0		54.3	0	45.7		0.2	61.7	38.1		0	0	100		
PHF	.923	.896	.000	.911	.885	.000	.851	.899	.250	.902	.815	.888	.000	.000	.250	.250	.967

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 12:15 PM



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:00 PM				12:30 PM				11:30 AM							
+0 mins.	45	72	0	117	31	0	40	71	0	58	49	107	0	0	1	1
+15 mins.	37	68	0	105	45	0	33	78	1	79	34	114	0	0	1	1
+30 mins.	42	86	0	128	45	0	42	87	0	72	39	111	0	0	1	1
+45 mins.	41	91	0	132	48	0	31	79	0	86	46	132	0	0	1	1
Total Volume	165	317	0	482	169	0	146	315	1	295	168	464	0	0	4	4
% App. Total	34.2	65.8	0		53.7	0	46.3		0.2	63.6	36.2		0	0	100	
PHF	.917	.871	.000	.913	.880	.000	.869	.905	.250	.858	.857	.879	.000	.000	1.000	1.000

City of San Diego  
 N/S: Euclid Avenue/Home Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 24\_SDG\_Home\_Euc PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				Euclid Avenue Westbound				Home Avenue Northbound				Collision Repair Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	71	125	0	196	52	0	40	92	0	90	48	138	0	0	0	0	426
04:15 PM	52	92	0	144	65	0	46	111	0	101	67	168	0	0	0	0	423
04:30 PM	55	112	0	167	50	0	43	93	0	88	55	143	0	0	0	0	403
04:45 PM	70	79	0	149	33	0	41	74	0	81	70	151	0	0	0	0	374
Total	248	408	0	656	200	0	170	370	0	360	240	600	0	0	0	0	1626
05:00 PM	72	112	0	184	58	0	50	108	0	72	61	133	0	0	0	0	425
05:15 PM	80	106	0	186	31	0	44	75	0	103	67	170	0	0	0	0	431
05:30 PM	50	84	0	134	48	0	48	96	0	94	47	141	0	0	0	0	371
05:45 PM	52	78	0	130	42	0	32	74	0	75	53	128	0	0	0	0	332
Total	254	380	0	634	179	0	174	353	0	344	228	572	0	0	0	0	1559
Grand Total	502	788	0	1290	379	0	344	723	0	704	468	1172	0	0	0	0	3185
Apprch %	38.9	61.1	0		52.4	0	47.6		0	60.1	39.9		0	0	0		
Total %	15.8	24.7	0	40.5	11.9	0	10.8	22.7	0	22.1	14.7	36.8	0	0	0	0	

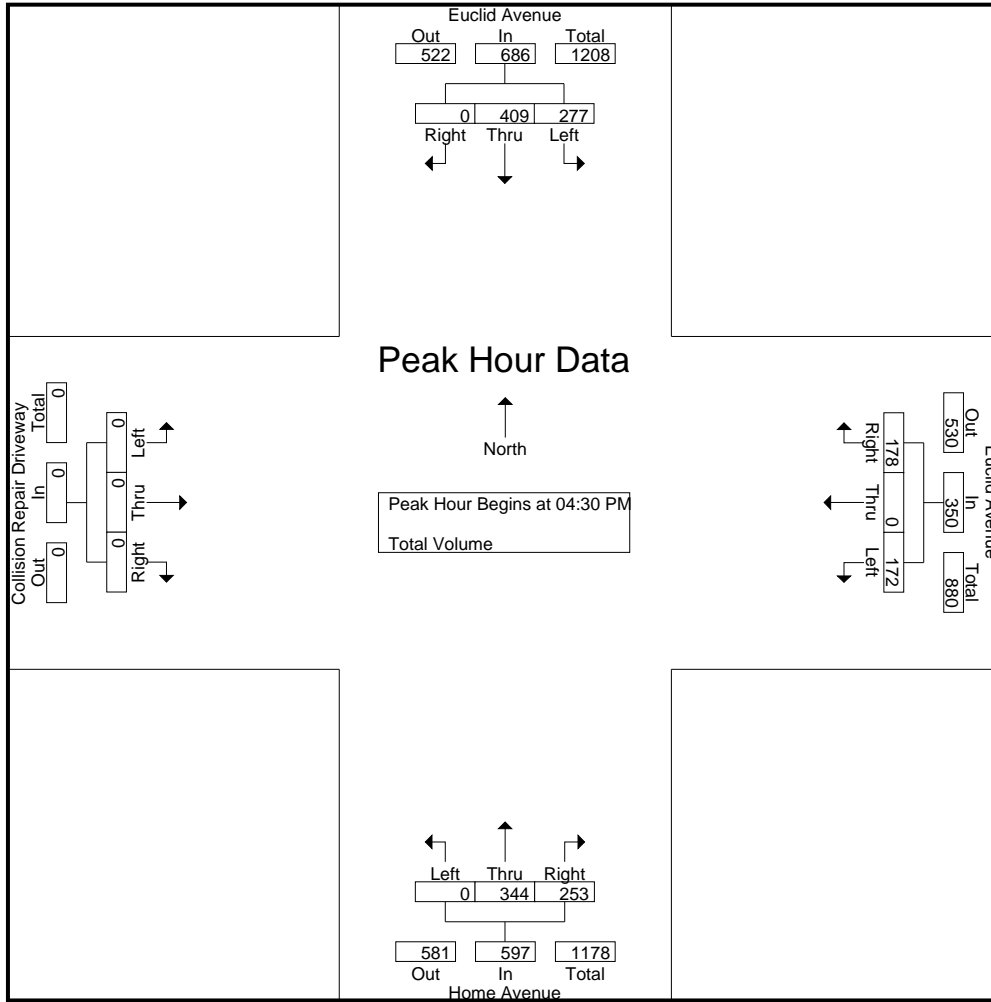
Start Time	Euclid Avenue Southbound				Euclid Avenue Westbound				Home Avenue Northbound				Collision Repair Driveway Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	55	<b>112</b>	0	167	50	0	43	93	0	88	55	143	0	0	0	0	403
04:45 PM	70	79	0	149	33	0	41	74	0	81	<b>70</b>	151	0	0	0	0	374
05:00 PM	72	112	0	184	<b>58</b>	0	<b>50</b>	<b>108</b>	0	72	61	133	0	0	0	0	425
05:15 PM	<b>80</b>	106	0	<b>186</b>	31	0	44	75	0	<b>103</b>	67	<b>170</b>	0	0	0	0	<b>431</b>
Total Volume	277	409	0	686	172	0	178	350	0	344	253	597	0	0	0	0	1633
% App. Total	40.4	59.6	0		49.1	0	50.9		0	57.6	42.4		0	0	0		
PHF	.866	.913	.000	.922	.741	.000	.890	.810	.000	.835	.904	.878	.000	.000	.000	.000	.947

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of San Diego  
 N/S: Euclid Avenue/Home Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 24\_SDG\_Home\_Euc PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				04:00 PM				04:00 PM			
+0 mins.	55	<b>112</b>	0	167	<b>65</b>	0	46	<b>111</b>	0	90	48	138	0	0	0	0
+15 mins.	70	79	0	149	50	0	43	93	0	<b>101</b>	67	<b>168</b>	0	0	0	0
+30 mins.	72	112	0	184	33	0	41	74	0	88	55	143	0	0	0	0
+45 mins.	<b>80</b>	106	0	<b>186</b>	58	0	<b>50</b>	108	0	81	<b>70</b>	151	0	0	0	0
Total Volume	277	409	0	686	206	0	180	386	0	360	240	600	0	0	0	0
% App. Total	40.4	59.6	0		53.4	0	46.6		0	60	40		0	0	0	
PHF	.866	.913	.000	.922	.792	.000	.900	.869	.000	.891	.857	.893	.000	.000	.000	.000

Location: San Diego  
 N/S: Euclid Ave/Home Ave  
 E/W: Euclid Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Euclid Avenue	East Leg Euclid Avenue	South Leg Home Avenue	West Leg Collision Repair DW	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	2	1	0	3
7:15 AM	0	0	2	2	4
7:30 AM	1	0	0	2	3
7:45 AM	0	0	0	4	4
8:00 AM	0	1	0	1	2
8:15 AM	1	0	0	1	2
8:30 AM	1	0	0	0	1
8:45 AM	1	0	0	1	2
TOTAL VOLUMES:	4	3	3	11	21

	North Leg Euclid Avenue	East Leg Euclid Avenue	South Leg Home Avenue	West Leg Collision Repair DW	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	0	1	0	1	2
11:45 AM	2	0	0	0	2
12:00 PM	0	1	2	2	5
12:15 PM	1	1	0	1	3
12:30 PM	1	0	0	1	2
12:45 PM	0	0	0	0	0
1:00 PM	0	1	0	0	1
1:15 PM	2	0	0	2	4
TOTAL VOLUMES:	6	4	2	7	19

	North Leg Euclid Avenue	East Leg Euclid Avenue	South Leg Home Avenue	West Leg Collision Repair DW	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	1	1	4	5	11
4:30 PM	0	0	1	1	2
4:45 PM	1	0	0	0	1
5:00 PM	3	2	0	0	5
5:15 PM	1	2	1	1	5
5:30 PM	1	4	0	1	6
5:45 PM	0	2	1	0	3
TOTAL VOLUMES:	7	11	7	9	34

Location: San Diego  
 N/S: Euclid Ave/Home Ave  
 E/W: Euclid Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Euclid Avenue			Westbound Euclid Avenue			Northbound Home Avenue			Eastbound Collision Repair DW			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Euclid Avenue			Westbound Euclid Avenue			Northbound Home Avenue			Eastbound Collision Repair DW			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	1	0	0	0	0	0	0	0	0	3

	Southbound Euclid Avenue			Westbound Euclid Avenue			Northbound Home Avenue			Eastbound Collision Repair DW			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	0	0	0	0	0	2

71) Euclid Ave & Chollas Rd



City of San Diego  
 N/S: Chollas Road/Euclid Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 29\_SDG\_Cho\_Euc AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

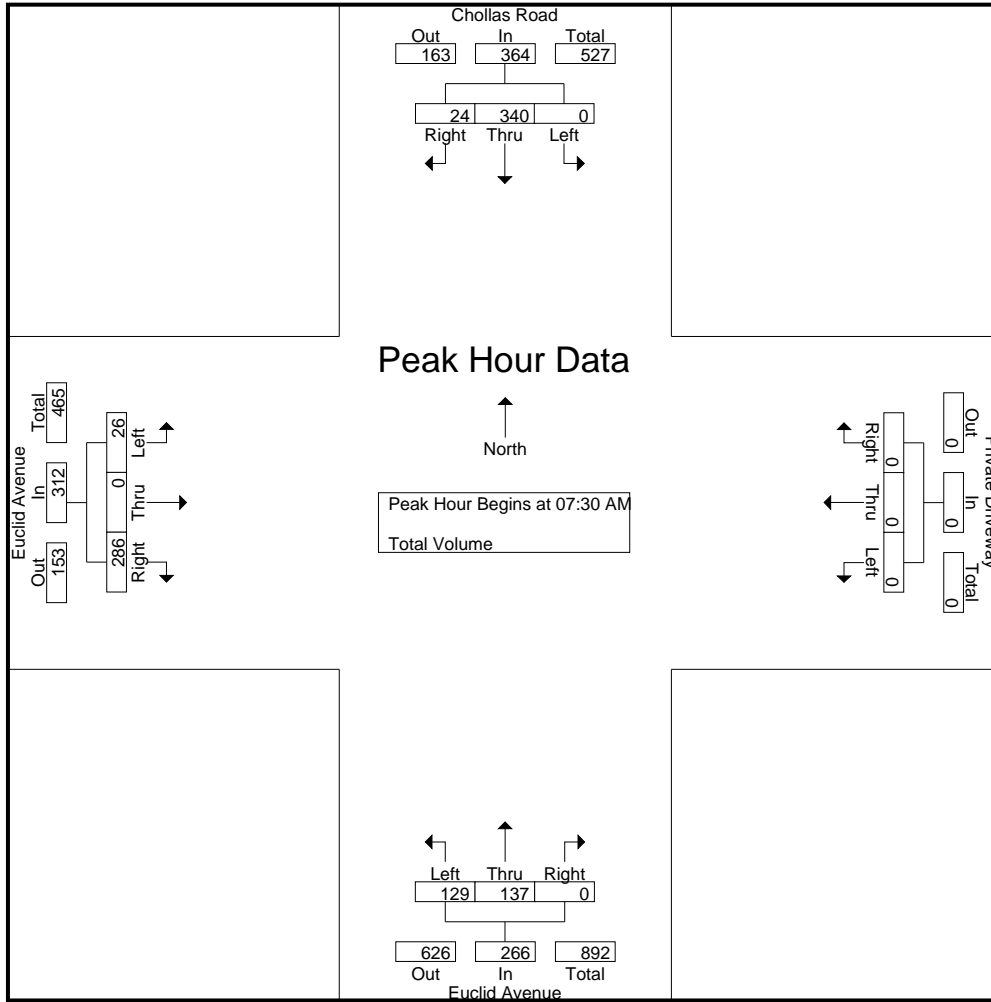
Groups Printed- Total Volume

Start Time	Chollas Road Southbound				Private Driveway Westbound				Euclid Avenue Northbound				Euclid Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	56	4	60	0	0	0	0	14	15	0	29	7	0	36	43	132
07:15 AM	0	59	2	61	0	0	0	0	16	30	0	46	4	0	54	58	165
07:30 AM	0	86	5	91	0	0	0	0	26	26	0	52	7	0	72	79	222
07:45 AM	0	69	4	73	0	0	0	0	37	37	0	74	5	0	69	74	221
Total	0	270	15	285	0	0	0	0	93	108	0	201	23	0	231	254	740
08:00 AM	0	76	8	84	0	0	0	0	41	38	0	79	6	0	76	82	245
08:15 AM	0	109	7	116	0	0	0	0	25	36	0	61	8	0	69	77	254
08:30 AM	0	63	9	72	0	0	0	0	26	40	0	66	3	0	74	77	215
08:45 AM	0	53	5	58	0	0	0	0	41	39	0	80	5	0	48	53	191
Total	0	301	29	330	0	0	0	0	133	153	0	286	22	0	267	289	905
Grand Total	0	571	44	615	0	0	0	0	226	261	0	487	45	0	498	543	1645
Apprch %	0	92.8	7.2		0	0	0		46.4	53.6	0		8.3	0	91.7		
Total %	0	34.7	2.7	37.4	0	0	0	0	13.7	15.9	0	29.6	2.7	0	30.3	33	

Start Time	Chollas Road Southbound				Private Driveway Westbound				Euclid Avenue Northbound				Euclid Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	86	5	91	0	0	0	0	26	26	0	52	7	0	72	79	222
07:45 AM	0	69	4	73	0	0	0	0	37	37	0	74	5	0	69	74	221
08:00 AM	0	76	<b>8</b>	84	0	0	0	0	<b>41</b>	<b>38</b>	0	<b>79</b>	6	0	<b>76</b>	<b>82</b>	245
08:15 AM	0	<b>109</b>	7	<b>116</b>	0	0	0	0	25	36	0	61	<b>8</b>	0	69	77	<b>254</b>
Total Volume	0	340	24	364	0	0	0	0	129	137	0	266	26	0	286	312	942
% App. Total	0	93.4	6.6		0	0	0		48.5	51.5	0		8.3	0	91.7		
PHF	.000	.780	.750	.784	.000	.000	.000	.000	.787	.901	.000	.842	.813	.000	.941	.951	.927

City of San Diego  
 N/S: Chollas Road/Euclid Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 29\_SDG\_Cho\_Euc AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				08:00 AM				07:30 AM			
+0 mins.	0	86	5	91	0	0	0	0	41	38	0	79	7	0	72	79
+15 mins.	0	69	4	73	0	0	0	0	25	36	0	61	5	0	69	74
+30 mins.	0	76	8	84	0	0	0	0	26	40	0	66	6	0	76	82
+45 mins.	0	109	7	116	0	0	0	0	41	39	0	80	8	0	69	77
Total Volume	0	340	24	364	0	0	0	0	133	153	0	286	26	0	286	312
% App. Total	0	93.4	6.6		0	0	0		46.5	53.5	0		8.3	0	91.7	
PHF	.000	.780	.750	.784	.000	.000	.000	.000	.811	.956	.000	.894	.813	.000	.941	.951

City of San Diego  
 N/S: Chollas Road/Euclid Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 29\_SDG\_Cho\_Euc MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

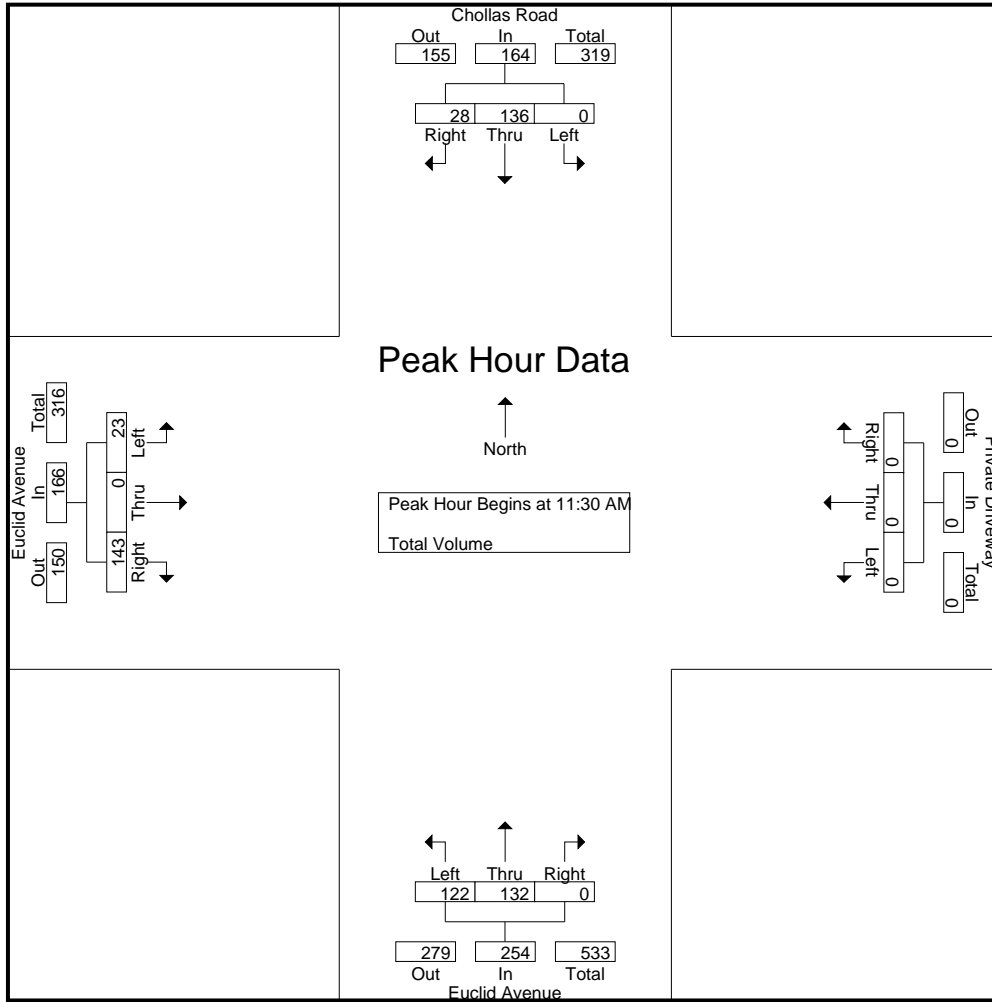
Start Time	Chollas Road Southbound				Private Driveway Westbound				Euclid Avenue Northbound				Euclid Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	0	40	12	52	0	0	0	0	25	35	0	60	5	0	32	37	149
11:45 AM	0	35	3	38	0	0	0	0	33	23	0	56	3	0	38	41	135
Total	0	75	15	90	0	0	0	0	58	58	0	116	8	0	70	78	284
12:00 PM	0	27	8	35	0	0	0	0	28	39	0	67	10	0	35	45	147
12:15 PM	0	34	5	39	0	0	0	0	36	35	0	71	5	0	38	43	153
12:30 PM	0	43	2	45	0	0	0	0	27	41	0	68	3	0	26	29	142
12:45 PM	0	37	4	41	0	0	0	0	32	36	0	68	5	0	23	28	137
Total	0	141	19	160	0	0	0	0	123	151	0	274	23	0	122	145	579
01:00 PM	0	30	6	36	0	0	0	0	26	37	0	63	5	0	25	30	129
01:15 PM	0	32	4	36	0	0	0	0	33	42	0	75	7	0	32	39	150
Grand Total	0	278	44	322	0	0	0	0	240	288	0	528	43	0	249	292	1142
Apprch %	0	86.3	13.7		0	0	0		45.5	54.5	0		14.7	0	85.3		
Total %	0	24.3	3.9	28.2	0	0	0	0	21	25.2	0	46.2	3.8	0	21.8	25.6	

Start Time	Chollas Road Southbound				Private Driveway Westbound				Euclid Avenue Northbound				Euclid Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	0	<b>40</b>	<b>12</b>	<b>52</b>	0	0	0	0	25	35	0	60	5	0	32	37	149
11:45 AM	0	35	3	38	0	0	0	0	33	23	0	56	3	0	<b>38</b>	41	135
12:00 PM	0	27	8	35	0	0	0	0	28	<b>39</b>	0	67	<b>10</b>	0	35	<b>45</b>	147
12:15 PM	0	34	5	39	0	0	0	0	<b>36</b>	35	0	<b>71</b>	5	0	38	43	<b>153</b>
Total Volume	0	136	28	164	0	0	0	0	122	132	0	254	23	0	143	166	584
% App. Total	0	82.9	17.1		0	0	0		48	52	0		13.9	0	86.1		
PHF	.000	.850	.583	.788	.000	.000	.000	.000	.847	.846	.000	.894	.575	.000	.941	.922	.954

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 11:30 AM

City of San Diego  
 N/S: Chollas Road/Euclid Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 29\_SDG\_Cho\_Euc MD  
 Site Code : 22924058  
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	11:30 AM				11:30 AM				12:00 PM				11:30 AM			
+0 mins.	0	<b>40</b>	<b>12</b>	<b>52</b>	0	0	0	0	28	39	0	67	5	0	32	37
+15 mins.	0	35	3	38	0	0	0	0	<b>36</b>	35	0	<b>71</b>	3	0	<b>38</b>	41
+30 mins.	0	27	8	35	0	0	0	0	27	<b>41</b>	0	68	<b>10</b>	0	35	<b>45</b>
+45 mins.	0	34	5	39	0	0	0	0	32	36	0	68	5	0	38	43
Total Volume	0	136	28	164	0	0	0	0	123	151	0	274	23	0	143	166
% App. Total	0	82.9	17.1		0	0	0	0	44.9	55.1	0		13.9	0	86.1	
PHF	.000	.850	.583	.788	.000	.000	.000	.000	.854	.921	.000	.965	.575	.000	.941	.922

City of San Diego  
 N/S: Chollas Road/Euclid Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 29\_SDG\_Cho\_Euc PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Chollas Road Southbound				Private Driveway Westbound				Euclid Avenue Northbound				Euclid Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	35	6	41	0	0	0	0	54	55	0	109	6	0	40	46	196
04:15 PM	0	45	3	48	0	0	0	0	56	55	0	111	8	0	35	43	202
04:30 PM	0	45	7	52	0	0	0	0	50	54	0	104	5	0	34	39	195
04:45 PM	0	36	5	41	0	0	0	0	51	65	0	116	6	0	43	49	206
Total	0	161	21	182	0	0	0	0	211	229	0	440	25	0	152	177	799
05:00 PM	0	44	7	51	0	0	0	0	54	68	0	122	7	0	49	56	229
05:15 PM	0	45	9	54	0	0	0	0	49	72	0	121	6	0	38	44	219
05:30 PM	0	38	10	48	0	0	0	0	33	45	0	78	8	0	40	48	174
05:45 PM	0	29	5	34	0	0	0	0	35	56	0	91	5	0	38	43	168
Total	0	156	31	187	0	0	0	0	171	241	0	412	26	0	165	191	790
Grand Total	0	317	52	369	0	0	0	0	382	470	0	852	51	0	317	368	1589
Apprch %	0	85.9	14.1		0	0	0		44.8	55.2	0		13.9	0	86.1		
Total %	0	19.9	3.3	23.2	0	0	0	0	24	29.6	0	53.6	3.2	0	19.9	23.2	

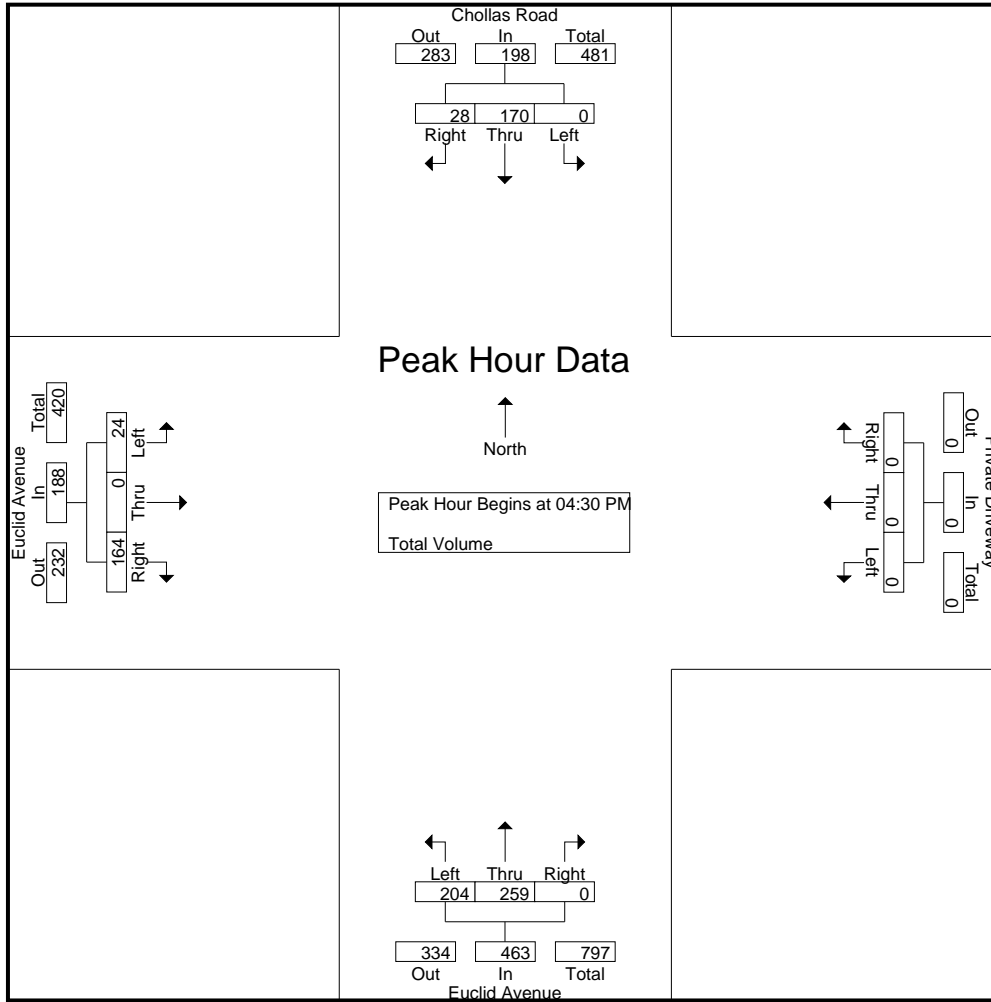
Start Time	Chollas Road Southbound				Private Driveway Westbound				Euclid Avenue Northbound				Euclid Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	<b>45</b>	7	52	0	0	0	0	50	54	0	104	5	0	34	39	195
04:45 PM	0	36	5	41	0	0	0	0	51	65	0	116	6	0	43	49	206
05:00 PM	0	44	7	51	0	0	0	0	<b>54</b>	68	0	<b>122</b>	<b>7</b>	0	<b>49</b>	<b>56</b>	<b>229</b>
05:15 PM	0	45	<b>9</b>	<b>54</b>	0	0	0	0	49	<b>72</b>	0	121	6	0	38	44	219
Total Volume	0	170	28	198	0	0	0	0	204	259	0	463	24	0	164	188	849
% App. Total	0	85.9	14.1		0	0	0		44.1	55.9	0		12.8	0	87.2		
PHF	.000	.944	.778	.917	.000	.000	.000	.000	.944	.899	.000	.949	.857	.000	.837	.839	.927

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of San Diego  
 N/S: Chollas Road/Euclid Avenue  
 E/W: Euclid Avenue  
 Weather: Clear

File Name : 29\_SDG\_Cho\_Euc PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:30 PM				04:45 PM			
+0 mins.	0	<b>45</b>	7	52	0	0	0	0	50	54	0	104	6	0	43	49
+15 mins.	0	36	5	41	0	0	0	0	51	65	0	116	7	0	<b>49</b>	<b>56</b>
+30 mins.	0	44	7	51	0	0	0	0	<b>54</b>	68	0	<b>122</b>	6	0	38	44
+45 mins.	0	45	<b>9</b>	<b>54</b>	0	0	0	0	49	<b>72</b>	0	121	<b>8</b>	0	40	48
Total Volume	0	170	28	198	0	0	0	0	204	259	0	463	27	0	170	197
% App. Total	0	85.9	14.1		0	0	0		44.1	55.9	0		13.7	0	86.3	
PHF	.000	.944	.778	.917	.000	.000	.000	.000	.944	.899	.000	.949	.844	.000	.867	.879

Location: San Diego  
 N/S: Chollas Road/Euclid Ave  
 E/W: Euclid Avenue



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Chollas Road	East Leg Private Driveway	South Leg Euclid Avenue	West Leg Euclid Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	2	2
7:15 AM	0	0	0	0	0
7:30 AM	2	0	0	0	2
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	1	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	2	0	0	4	6

	North Leg Chollas Road	East Leg Private Driveway	South Leg Euclid Avenue	West Leg Euclid Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	0	0	0	1	1
11:45 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0
12:15 PM	0	0	0	0	0
12:30 PM	0	0	0	0	0
12:45 PM	0	0	0	1	1
1:00 PM	0	0	0	0	0
1:15 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	2	2

	North Leg Chollas Road	East Leg Private Driveway	South Leg Euclid Avenue	West Leg Euclid Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	2	0	0	0	2
4:30 PM	0	0	0	2	2
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	2	0	0	4	6

Location: San Diego  
 N/S: Chollas Road/Euclid Ave  
 E/W: Euclid Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Chollas Road			Westbound Private Driveway			Northbound Euclid Avenue			Eastbound Euclid Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	0	0	0	0	1	0	1	3

	Southbound Chollas Road			Westbound Private Driveway			Northbound Euclid Avenue			Eastbound Euclid Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	1	0	0	0	2	3
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	1	0	0	0	0	2	0	0	0	2	6

	Southbound Chollas Road			Westbound Private Driveway			Northbound Euclid Avenue			Eastbound Euclid Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	1	0	0	1	0	0	3



72) Federal Blvd & Home Ave

# National Data & Surveying Services Intersection Turning Movement Count

Location: Home Ave/SR 94 WB On-Ramp & Ash St/Federal Blvd  
City: San Diego  
Control: Signalized

Project ID: 24-040164-003  
Date: 9/5/2024

### Data - Totals

NS/EW Streets	Home Ave/SR 94 WB On-Ramp					Home Ave/SR 94 WB On-Ramp					Ash St/Federal Blvd					Ash St/Federal Blvd					TOTAL					
	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND										
AM	1	2	0	0	0	1	2	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	TOTAL
7:00 AM	4	58	19	0	2	12	1	3	0	105	14	2	0	0	13	0	1	21	0	29	284					
7:15 AM	7	69	27	0	1	8	0	7	1	145	8	1	0	0	22	1	4	19	0	39	359					
7:30 AM	3	61	18	0	3	14	1	5	0	157	14	4	0	0	11	0	6	25	0	49	371					
7:45 AM	1	65	44	0	1	17	0	0	0	176	12	4	0	0	17	0	12	19	0	59	427					
8:00 AM	5	78	29	0	0	16	2	8	1	162	12	10	0	0	17	2	3	18	0	64	427					
8:15 AM	7	81	35	0	4	6	1	6	0	101	10	1	0	0	15	1	4	25	0	63	360					
8:30 AM	4	85	25	0	1	18	0	3	0	109	8	2	0	0	9	2	8	19	0	40	333					
8:45 AM	11	74	27	0	2	13	2	1	1	121	7	6	0	0	16	0	6	19	0	43	349					
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	TOTAL					
<b>APPROACH %s :</b>	4.94%	67.10%	26.32%	0.00%	1.65%	8.50%	0.57%	2.70%	0.25%	87.98%	36.17%	12.77%	0.00%	0.00%	51.06%	1.00%	7.32%	27.45%	0.00%	64.23%						
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																									
<b>PEAK HR VOL :</b>	16	285	126	0	8	53	4	19	1	596	48	19	0	0	60	3	25	87	0	235	1585					
<b>PEAK HR FACTOR :</b>	0.571	0.880	0.716	0.000	0.500	0.779	0.500	0.594	0.250	0.847	0.857	0.475	0.000	0.000	0.882	0.375	0.521	0.870	0.000	0.918	0.928					

PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					TOTAL
	1	2	0	0	0	1	2	0	0	0	1	1	0	0	0	1	1	0	0	0	
4:00 PM	2	188	66	0	1	15	0	10	0	97	6	1	0	0	5	0	3	20	0	11	425
4:15 PM	7	177	79	0	4	18	0	4	0	121	12	5	0	0	15	0	6	16	0	16	480
4:30 PM	5	133	66	0	1	15	0	4	0	128	7	6	1	0	9	0	1	22	0	15	413
4:45 PM	8	155	66	0	3	17	1	6	0	120	4	3	0	0	8	1	2	15	0	6	415
5:00 PM	13	150	70	0	1	14	2	9	0	112	6	3	0	0	10	1	3	10	0	8	412
5:15 PM	11	147	60	0	0	15	1	5	0	131	1	3	0	0	6	1	5	15	0	6	407
5:30 PM	3	138	56	0	0	14	1	9	0	127	8	1	0	0	9	2	2	8	0	16	394
5:45 PM	6	122	51	0	7	19	0	8	0	119	5	1	0	0	8	0	0	9	0	6	361
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	TOTAL
<b>APPROACH %s :</b>	3.06%	67.37%	28.62%	0.00%	0.95%	11.12%	0.44%	4.82%	0.00%	83.63%	34.27%	16.08%	0.70%	0.00%	48.95%	2.21%	9.73%	50.88%	0.00%	37.17%	
<b>PEAK HR :</b>	04:00 PM - 05:00 PM																				
<b>PEAK HR VOL :</b>	22	653	277	0	9	65	1	24	0	466	29	15	1	0	37	1	12	73	0	48	1733
<b>PEAK HR FACTOR :</b>	0.688	0.868	0.877	0.000	0.563	0.903	0.250	0.600	0.000	0.910	0.604	0.625	0.250	0.000	0.617	0.250	0.500	0.830	0.000	0.750	0.903

**Explanation for extra leg movements**

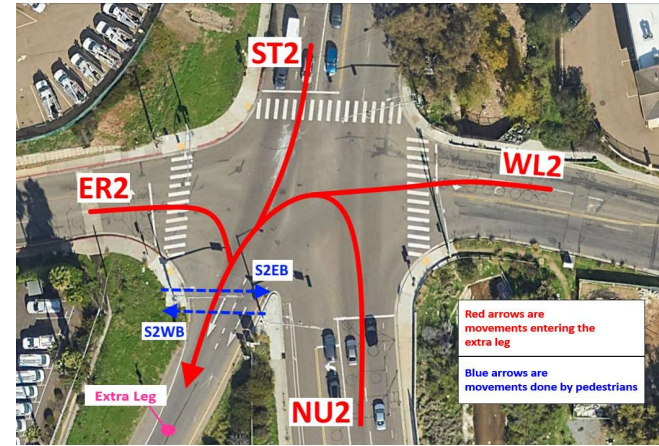
**Movements entering the extra leg**

ST2 Movements coming from SB on Home Ave entering into the Extra Leg (SR 94 WB On-Ramp).

ER2 Movements coming from EB on Ash St entering into the Extra Leg (SR 94 WB On-Ramp).

WL2 Movements coming from WB on Federal Blvd entering into the Extra Leg (SR 94 WB On-Ramp).

NU2 Movements coming from NB on Home Ave entering into the Extra Leg (SR 94 WB On-Ramp).



Red arrows are movements entering the extra leg

Blue arrows are movements done by pedestrians

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Home Ave/SR 94 WB On-Ramp & Ash St/Federal Blvd  
**City:** San Diego  
**Control:** Signalized

**Project ID:** 24-040164-003  
**Date:** 9/5/2024

### Data - Bikes

NS/EW Streets:	Home Ave/SR 94 WB On-Ramp					Home Ave/SR 94 WB On-Ramp					Ash St/Federal Blvd					Ash St/Federal Blvd					
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					
	1	2	0	0	0	1	2	0	0	0	1	1	0	0	0	1	1	0	0	0	TOTAL
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	
7:00 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	<b>TOTAL</b>
<b>APPROACH %'s :</b>	0	1	1	0	0	1	1	3	0	0	0	3	0	0	0	0	0	1	0	0	11
	0.00%	50.00%	50.00%	0.00%	0.00%	20.00%	20.00%	60.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
<b>PEAK HR :</b>	<b>07:30 AM - 08:30 AM</b>																				<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	0	0	0	0	1	0	3	0	0	0	3	0	0	0	0	0	1	0	0	8
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.667
								0.333					0.250					0.250			
PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					
	1	2	0	0	0	1	2	0	0	0	1	1	0	0	0	1	1	0	0	0	TOTAL
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	<b>TOTAL</b>
<b>APPROACH %'s :</b>	1	1	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	1	0	0	7
	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
<b>PEAK HR :</b>	<b>04:00 PM - 05:00 PM</b>																				<b>TOTAL</b>
<b>PEAK HR VOL :</b>	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	5
<b>PEAK HR FACTOR :</b>	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.417
								0.250					0.250					0.250			

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Home Ave/SR 94 WB On-Ramp & Ash St/Federal Blvd  
**City:** San Diego

**Project ID:** 24-040164-003  
**Date:** 9/5/2024

### Data - Pedestrians (Crosswalks)

NS/EW Streets:	Home Ave/SR 94 WB On-Ramp		Home Ave/SR 94 WB On-Ramp		Ash St/Federal Blvd		Ash St/Federal Blvd				
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		SOUTH LEG 2		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	1	1	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB 1	WB 1	EB 0	WB 0	NB 0	SB 0	NB 0	SB 1	EB 1	WB 0	TOTAL 4
<b>APPROACH %'s :</b>	50.00%	50.00%					0.00%	100.00%	100.00%	0.00%	
<b>PEAK HR :</b>	07:30 AM - 08:30 AM										TOTAL
<b>PEAK HR VOL :</b>	0	1	0	0	0	0	0	0	0	0	1
<b>PEAK HR FACTOR :</b>	0.250										0.250

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		SOUTH LEG 2		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB 0	WB 0	EB 0	WB 0	NB 0	SB 0	NB 0	SB 0	EB 0	WB 0	TOTAL 0
<b>APPROACH %'s :</b>											
<b>PEAK HR :</b>	04:00 PM - 05:00 PM										TOTAL
<b>PEAK HR VOL :</b>	0	0	0	0	0	0	0	0	0	0	0
<b>PEAK HR FACTOR :</b>											

# National Data & Surveying Services

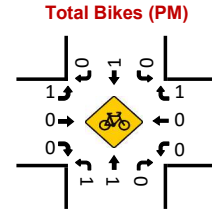
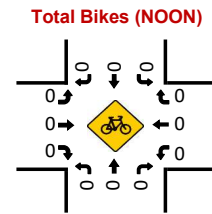
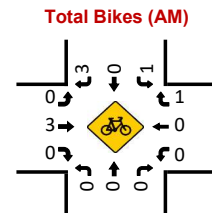
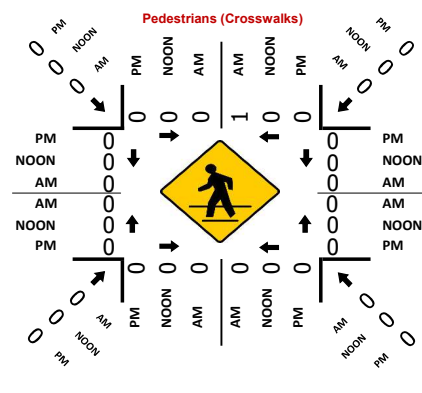
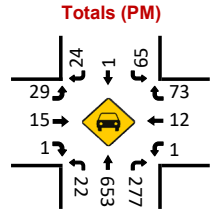
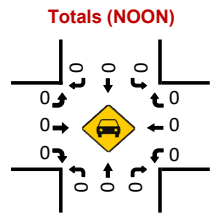
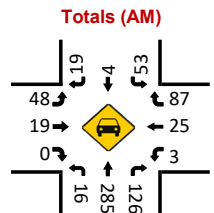
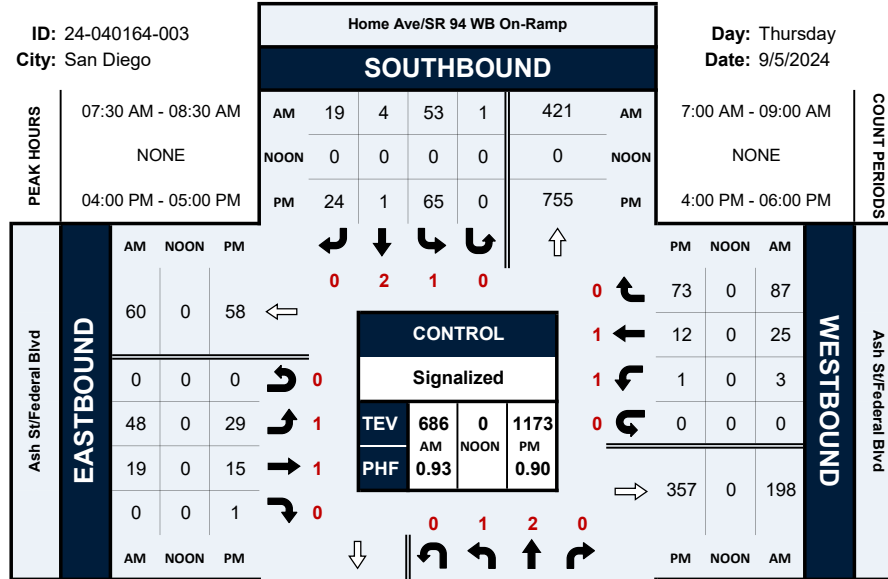
## Intersection Turning Movement Count

Home Ave/SR 94 WB On-Ramp & Ash St/Federal Blvd

### Peak Hour Turning Movement Count

ID: 24-040164-003  
City: San Diego

Day: Thursday  
Date: 9/5/2024



73) Federal Blvd & 47th St

City of San Diego  
 N/S: 47th Street  
 E/W: Federal Boulevard  
 Weather: Clear

File Name : 25\_SDG\_47th\_Fed AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

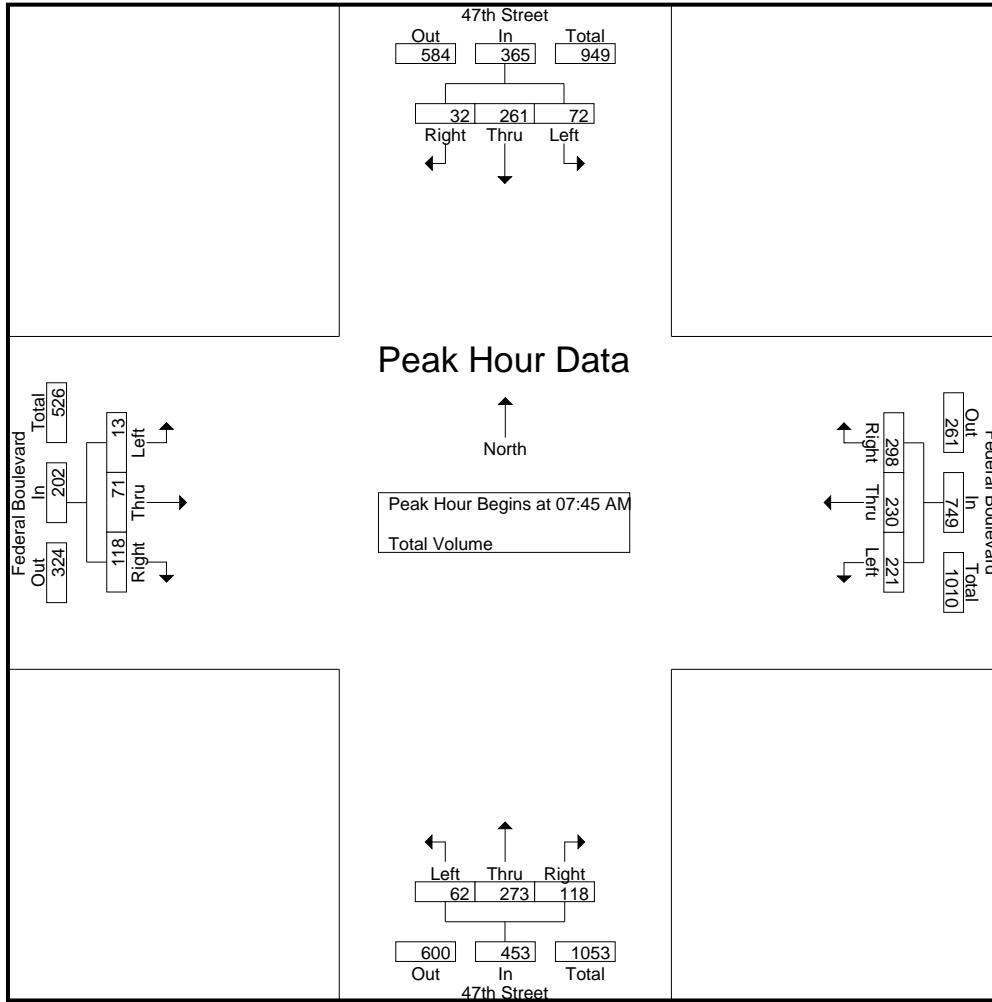
Groups Printed- Total Volume

Start Time	47th Street Southbound				Federal Boulevard Westbound				47th Street Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	5	22	5	32	21	29	35	85	12	50	16	78	0	16	17	33	228
07:15 AM	18	33	6	57	37	36	79	152	13	59	18	90	1	13	13	27	326
07:30 AM	8	58	8	74	49	36	70	155	11	84	18	113	4	7	24	35	377
07:45 AM	19	82	12	113	65	58	79	202	20	58	19	97	1	14	25	40	452
Total	50	195	31	276	172	159	263	594	56	251	71	378	6	50	79	135	1383
08:00 AM	18	74	9	101	50	68	92	210	18	68	22	108	3	12	33	48	467
08:15 AM	21	59	7	87	66	67	70	203	12	63	37	112	6	24	36	66	468
08:30 AM	14	46	4	64	40	37	57	134	12	84	40	136	3	21	24	48	382
08:45 AM	20	69	10	99	41	46	58	145	12	50	48	110	5	17	42	64	418
Total	73	248	30	351	197	218	277	692	54	265	147	466	17	74	135	226	1735
Grand Total	123	443	61	627	369	377	540	1286	110	516	218	844	23	124	214	361	3118
Apprch %	19.6	70.7	9.7		28.7	29.3	42		13	61.1	25.8		6.4	34.3	59.3		
Total %	3.9	14.2	2	20.1	11.8	12.1	17.3	41.2	3.5	16.5	7	27.1	0.7	4	6.9	11.6	

Start Time	47th Street Southbound				Federal Boulevard Westbound				47th Street Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	19	<b>82</b>	<b>12</b>	<b>113</b>	65	58	79	202	<b>20</b>	58	19	97	1	14	25	40	452
08:00 AM	18	74	9	101	50	<b>68</b>	<b>92</b>	<b>210</b>	18	68	22	108	3	12	33	48	467
08:15 AM	<b>21</b>	59	7	87	<b>66</b>	67	70	203	12	63	37	112	<b>6</b>	<b>24</b>	<b>36</b>	<b>66</b>	<b>468</b>
08:30 AM	14	46	4	64	40	37	57	134	12	<b>84</b>	<b>40</b>	<b>136</b>	3	21	24	48	382
Total Volume	72	261	32	365	221	230	298	749	62	273	118	453	13	71	118	202	1769
% App. Total	19.7	71.5	8.8		29.5	30.7	39.8		13.7	60.3	26		6.4	35.1	58.4		
PHF	.857	.796	.667	.808	.837	.846	.810	.892	.775	.813	.738	.833	.542	.740	.819	.765	.945

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				08:00 AM				08:00 AM			
+0 mins.	8	58	8	74	49	36	70	155	<b>18</b>	68	22	108	3	12	33	48
+15 mins.	19	<b>82</b>	<b>12</b>	<b>113</b>	65	58	79	202	12	63	37	112	<b>6</b>	<b>24</b>	36	<b>66</b>
+30 mins.	18	74	9	101	50	<b>68</b>	<b>92</b>	<b>210</b>	12	<b>84</b>	40	<b>136</b>	3	21	24	48
+45 mins.	<b>21</b>	59	7	87	<b>66</b>	67	70	203	12	50	<b>48</b>	110	5	17	<b>42</b>	64
Total Volume	66	273	36	375	230	229	311	770	54	265	147	466	17	74	135	226
% App. Total	17.6	72.8	9.6		29.9	29.7	40.4		11.6	56.9	31.5		7.5	32.7	59.7	
PHF	.786	.832	.750	.830	.871	.842	.845	.917	.750	.789	.766	.857	.708	.771	.804	.856



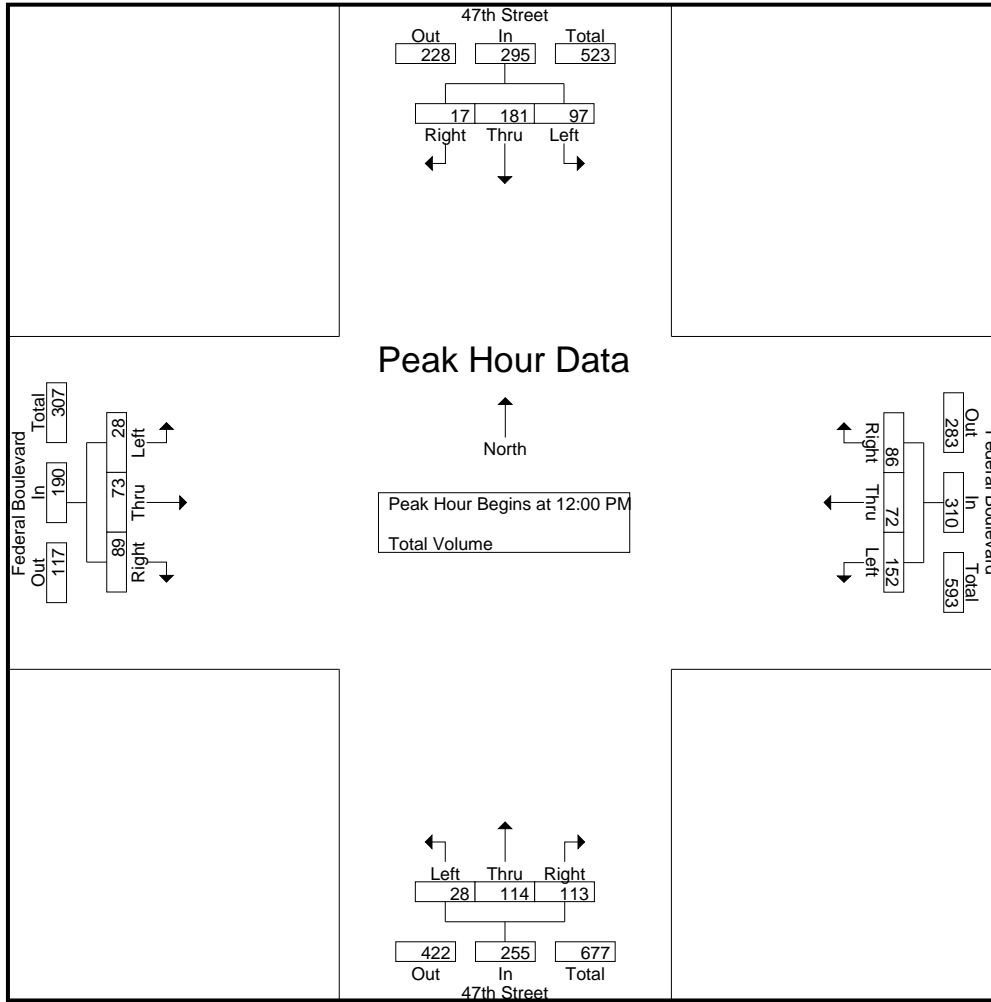
City of San Diego  
 N/S: 47th Street  
 E/W: Federal Boulevard  
 Weather: Clear

File Name : 25\_SDG\_47th\_Fed MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	47th Street Southbound				Federal Boulevard Westbound				47th Street Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	19	31	5	55	28	13	31	72	3	41	24	68	3	18	23	44	239
11:45 AM	22	35	5	62	30	17	22	69	4	22	25	51	9	14	18	41	223
Total	41	66	10	117	58	30	53	141	7	63	49	119	12	32	41	85	462
12:00 PM	18	45	5	68	45	16	23	84	8	38	24	70	5	20	22	47	269
12:15 PM	29	46	5	80	32	20	26	78	6	23	30	59	7	24	23	54	271
12:30 PM	29	39	4	72	42	14	17	73	4	28	28	60	9	17	23	49	254
12:45 PM	21	51	3	75	33	22	20	75	10	25	31	66	7	12	21	40	256
Total	97	181	17	295	152	72	86	310	28	114	113	255	28	73	89	190	1050
01:00 PM	38	51	4	93	36	13	21	70	5	21	20	46	4	14	25	43	252
01:15 PM	34	52	4	90	40	14	18	72	6	27	23	56	7	20	21	48	266
Grand Total	210	350	35	595	286	129	178	593	46	225	205	476	51	139	176	366	2030
Apprch %	35.3	58.8	5.9		48.2	21.8	30		9.7	47.3	43.1		13.9	38	48.1		
Total %	10.3	17.2	1.7	29.3	14.1	6.4	8.8	29.2	2.3	11.1	10.1	23.4	2.5	6.8	8.7	18	

Start Time	47th Street Southbound				Federal Boulevard Westbound				47th Street Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	18	45	<b>5</b>	68	<b>45</b>	16	23	<b>84</b>	8	<b>38</b>	24	<b>70</b>	5	20	22	47	269
12:15 PM	<b>29</b>	46	5	<b>80</b>	32	20	<b>26</b>	78	6	23	30	59	7	<b>24</b>	<b>23</b>	<b>54</b>	<b>271</b>
12:30 PM	29	39	4	72	42	14	17	73	4	28	28	60	<b>9</b>	17	23	49	254
12:45 PM	21	<b>51</b>	3	75	33	<b>22</b>	20	75	<b>10</b>	25	<b>31</b>	66	7	12	21	40	256
Total Volume	97	181	17	295	152	72	86	310	28	114	113	255	28	73	89	190	1050
% App. Total	32.9	61.4	5.8		49	23.2	27.7		11	44.7	44.3		14.7	38.4	46.8		
PHF	.836	.887	.850	.922	.844	.818	.827	.923	.700	.750	.911	.911	.778	.760	.967	.880	.969



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:30 PM				12:00 PM				12:00 PM				11:45 AM			
+0 mins.	29	39	4	72	<b>45</b>	16	23	<b>84</b>	8	<b>38</b>	24	<b>70</b>	<b>9</b>	14	18	41
+15 mins.	21	51	3	75	32	20	<b>26</b>	78	6	23	30	59	5	20	22	47
+30 mins.	<b>38</b>	51	4	<b>93</b>	42	14	17	73	4	28	28	60	7	<b>24</b>	<b>23</b>	<b>54</b>
+45 mins.	34	<b>52</b>	4	90	33	<b>22</b>	20	75	<b>10</b>	25	<b>31</b>	66	9	17	23	49
Total Volume	122	193	15	330	152	72	86	310	28	114	113	255	30	75	86	191
% App. Total	37	58.5	4.5		49	23.2	27.7		11	44.7	44.3		15.7	39.3	45	
PHF	.803	.928	.938	.887	.844	.818	.827	.923	.700	.750	.911	.911	.833	.781	.935	.884

City of San Diego  
 N/S: 47th Street  
 E/W: Federal Boulevard  
 Weather: Clear

File Name : 25\_SDG\_47th\_Fed PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	47th Street Southbound				Federal Boulevard Westbound				47th Street Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	42	82	5	129	40	16	33	89	8	42	45	95	10	37	59	106	419
04:15 PM	34	80	8	122	47	18	32	97	8	57	38	103	10	28	42	80	402
04:30 PM	34	96	11	141	54	18	25	97	9	38	40	87	9	38	36	83	408
04:45 PM	31	98	14	143	52	18	31	101	5	22	28	55	7	34	52	93	392
Total	141	356	38	535	193	70	121	384	30	159	151	340	36	137	189	362	1621
05:00 PM	28	86	5	119	45	24	39	108	8	50	44	102	8	53	47	108	437
05:15 PM	35	91	7	133	51	20	32	103	7	34	33	74	8	41	43	92	402
05:30 PM	32	93	4	129	50	11	26	87	6	33	36	75	10	26	39	75	366
05:45 PM	34	107	7	148	43	11	25	79	5	32	23	60	5	37	47	89	376
Total	129	377	23	529	189	66	122	377	26	149	136	311	31	157	176	364	1581
Grand Total	270	733	61	1064	382	136	243	761	56	308	287	651	67	294	365	726	3202
Apprch %	25.4	68.9	5.7		50.2	17.9	31.9		8.6	47.3	44.1		9.2	40.5	50.3		
Total %	8.4	22.9	1.9	33.2	11.9	4.2	7.6	23.8	1.7	9.6	9	20.3	2.1	9.2	11.4	22.7	

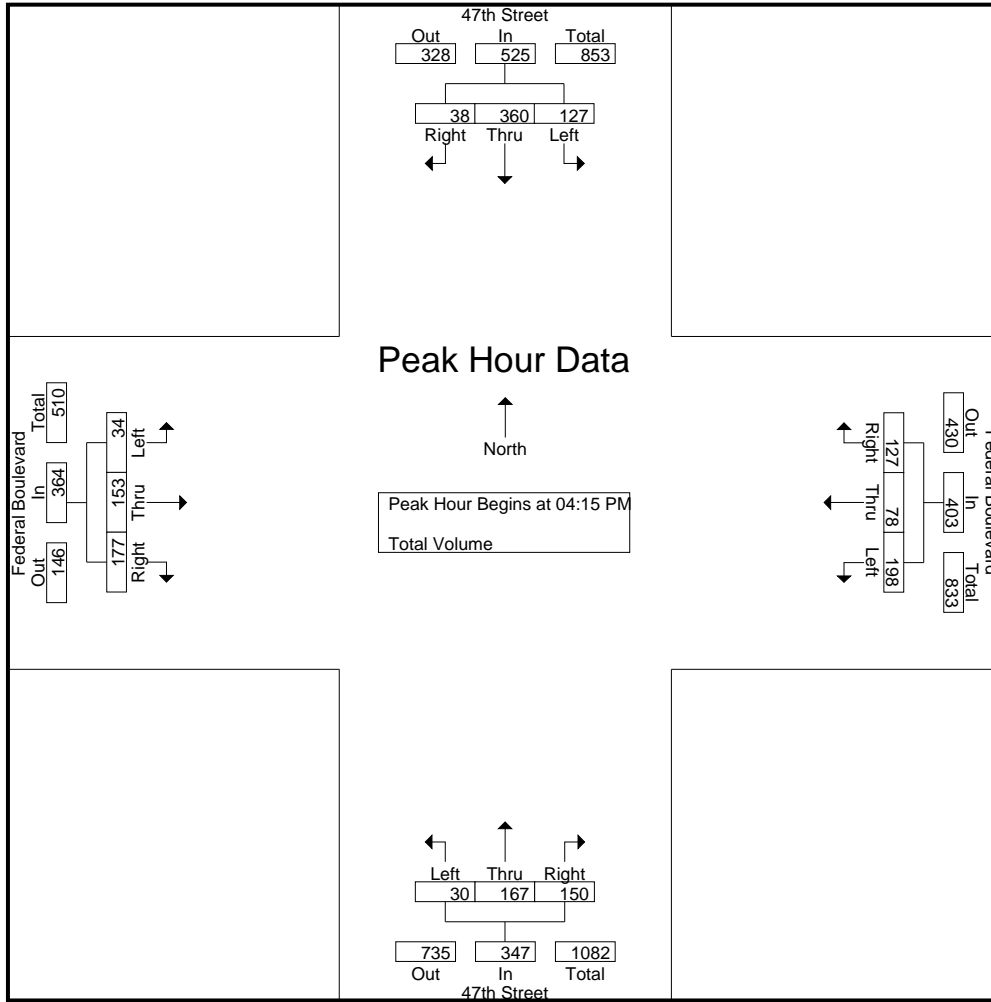
Start Time	47th Street Southbound				Federal Boulevard Westbound				47th Street Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	<b>34</b>	80	8	122	47	18	32	97	8	<b>57</b>	38	<b>103</b>	<b>10</b>	28	42	80	402
04:30 PM	34	96	11	141	<b>54</b>	18	25	97	<b>9</b>	38	40	87	9	38	36	83	408
04:45 PM	31	<b>98</b>	<b>14</b>	<b>143</b>	52	18	31	101	5	22	28	55	7	34	<b>52</b>	93	392
05:00 PM	28	86	5	119	45	<b>24</b>	<b>39</b>	<b>108</b>	8	50	<b>44</b>	102	8	<b>53</b>	47	<b>108</b>	<b>437</b>
Total Volume	127	360	38	525	198	78	127	403	30	167	150	347	34	153	177	364	1639
% App. Total	24.2	68.6	7.2		49.1	19.4	31.5		8.6	48.1	43.2		9.3	42	48.6		
PHF	.934	.918	.679	.918	.917	.813	.814	.933	.833	.732	.852	.842	.850	.722	.851	.843	.938

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

City of San Diego  
 N/S: 47th Street  
 E/W: Federal Boulevard  
 Weather: Clear

File Name : 25\_SDG\_47th\_Fed PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:15 PM				04:30 PM			
+0 mins.	34	96	11	141	<b>54</b>	18	25	97	8	<b>57</b>	38	<b>103</b>	<b>9</b>	38	36	83
+15 mins.	31	<b>98</b>	<b>14</b>	<b>143</b>	52	18	31	101	<b>9</b>	38	40	87	7	34	<b>52</b>	93
+30 mins.	28	86	5	119	45	<b>24</b>	<b>39</b>	<b>108</b>	5	22	28	55	8	<b>53</b>	47	<b>108</b>
+45 mins.	<b>35</b>	91	7	133	51	20	32	103	8	50	<b>44</b>	102	8	41	43	92
Total Volume	128	371	37	536	202	80	127	409	30	167	150	347	32	166	178	376
% App. Total	23.9	69.2	6.9		49.4	19.6	31.1		8.6	48.1	43.2		8.5	44.1	47.3	
PHF	.914	.946	.661	.937	.935	.833	.814	.947	.833	.732	.852	.842	.889	.783	.856	.870

Location: San Diego  
 N/S: 47th Street  
 E/W: Federal Boulevard



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg 47th Street	East Leg Federal Boulevard	South Leg 47th Street	West Leg Federal Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	2	0	0	2	4
7:15 AM	0	0	1	0	1
7:30 AM	1	0	2	3	6
7:45 AM	0	0	2	0	2
8:00 AM	1	0	4	0	5
8:15 AM	0	0	0	0	0
8:30 AM	3	3	3	3	12
8:45 AM	0	1	1	0	2
TOTAL VOLUMES:	7	4	13	8	32

	North Leg 47th Street	East Leg Federal Boulevard	South Leg 47th Street	West Leg Federal Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	1	0	1	1	3
11:45 AM	2	2	2	1	7
12:00 PM	1	0	0	0	1
12:15 PM	0	0	2	1	3
12:30 PM	0	0	0	0	0
12:45 PM	1	4	1	1	7
1:00 PM	0	7	0	0	7
1:15 PM	0	0	0	1	1
TOTAL VOLUMES:	5	13	6	5	29

	North Leg 47th Street	East Leg Federal Boulevard	South Leg 47th Street	West Leg Federal Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	1	0	1
4:15 PM	2	1	0	2	5
4:30 PM	1	5	5	1	12
4:45 PM	0	2	3	0	5
5:00 PM	0	1	4	1	6
5:15 PM	0	3	0	0	3
5:30 PM	8	0	1	8	17
5:45 PM	0	2	5	1	8
TOTAL VOLUMES:	11	14	19	13	57

Location: San Diego  
 N/S: 47th Street  
 E/W: Federal Boulevard



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound 47th Street			Westbound Federal Boulevard			Northbound 47th Street			Eastbound Federal Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	1	1	1	0	0	0	0	0	0	5

	Southbound 47th Street			Westbound Federal Boulevard			Northbound 47th Street			Eastbound Federal Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	0	0	0	1	0	0	0	0	2

	Southbound 47th Street			Westbound Federal Boulevard			Northbound 47th Street			Eastbound Federal Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	1	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	1	0	2	0	4

74) Federal Blvd & Euclid Ave

City of San Diego  
 N/S: Euclid Avenue  
 E/W: Federal Boulevard  
 Weather: Clear

File Name : 26\_SDG\_Euc\_Fed AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

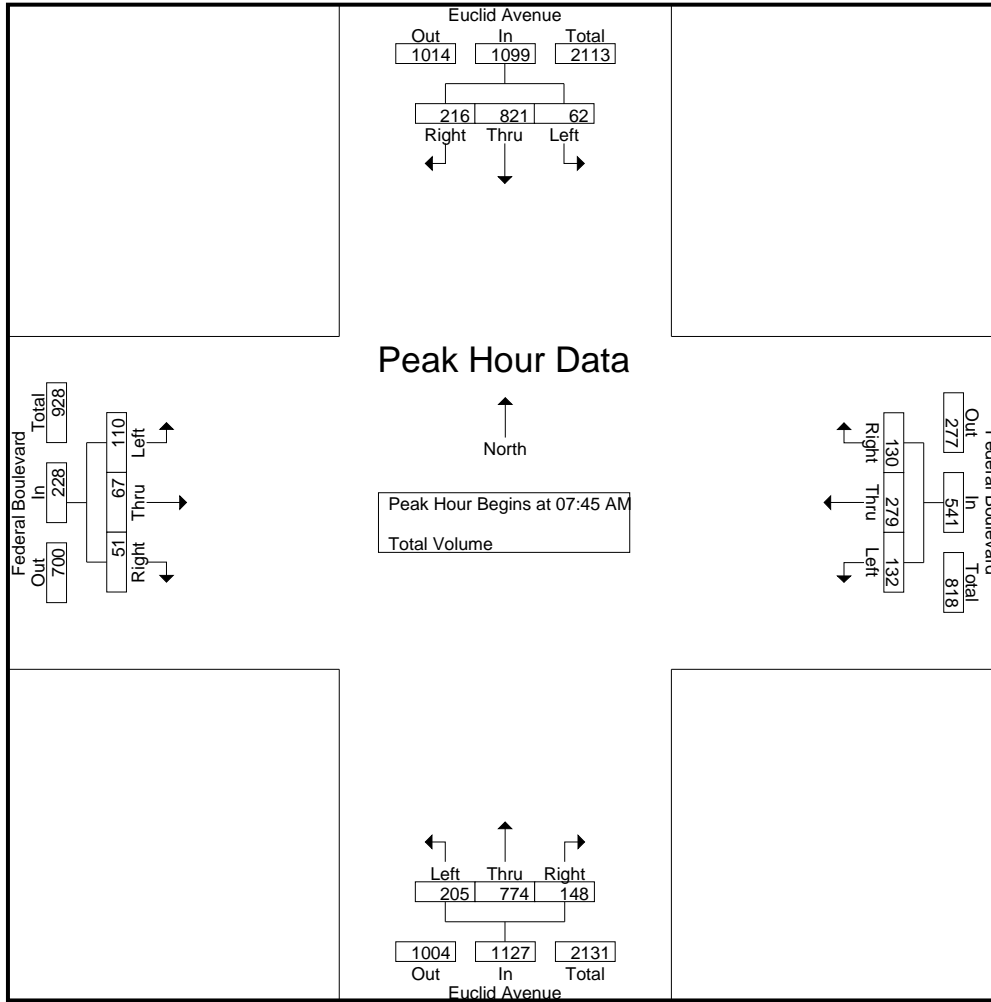
Start Time	Euclid Avenue Southbound				Federal Boulevard Westbound				Euclid Avenue Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	9	151	31	191	24	26	18	68	30	120	17	167	22	9	11	42	468
07:15 AM	13	169	42	224	31	64	18	113	46	123	18	187	21	9	19	49	573
07:30 AM	14	208	50	272	23	79	23	125	42	137	35	214	15	14	11	40	651
07:45 AM	17	229	66	312	39	79	27	145	48	189	31	268	20	16	13	49	774
Total	53	757	189	999	117	248	86	451	166	569	101	836	78	48	54	180	2466
08:00 AM	15	199	52	266	32	89	33	154	34	217	40	291	27	17	8	52	763
08:15 AM	15	173	60	248	36	69	42	147	56	205	43	304	31	22	16	69	768
08:30 AM	15	220	38	273	25	42	28	95	67	163	34	264	32	12	14	58	690
08:45 AM	16	178	38	232	22	53	28	103	42	159	33	234	40	18	17	75	644
Total	61	770	188	1019	115	253	131	499	199	744	150	1093	130	69	55	254	2865
Grand Total	114	1527	377	2018	232	501	217	950	365	1313	251	1929	208	117	109	434	5331
Apprch %	5.6	75.7	18.7		24.4	52.7	22.8		18.9	68.1	13		47.9	27	25.1		
Total %	2.1	28.6	7.1	37.9	4.4	9.4	4.1	17.8	6.8	24.6	4.7	36.2	3.9	2.2	2	8.1	

Start Time	Euclid Avenue Southbound				Federal Boulevard Westbound				Euclid Avenue Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	<b>17</b>	<b>229</b>	<b>66</b>	<b>312</b>	<b>39</b>	79	27	145	48	189	31	268	20	16	13	49	<b>774</b>
08:00 AM	15	199	52	266	32	<b>89</b>	33	<b>154</b>	34	<b>217</b>	40	291	27	17	8	52	763
08:15 AM	15	173	60	248	36	69	<b>42</b>	147	56	205	<b>43</b>	<b>304</b>	31	<b>22</b>	<b>16</b>	<b>69</b>	768
08:30 AM	15	220	38	273	25	42	28	95	<b>67</b>	163	34	264	<b>32</b>	12	14	58	690
Total Volume	62	821	216	1099	132	279	130	541	205	774	148	1127	110	67	51	228	2995
% App. Total	5.6	74.7	19.7		24.4	51.6	24		18.2	68.7	13.1		48.2	29.4	22.4		
PHF	.912	.896	.818	.881	.846	.784	.774	.878	.765	.892	.860	.927	.859	.761	.797	.826	.967



City of San Diego  
 N/S: Euclid Avenue  
 E/W: Federal Boulevard  
 Weather: Clear

File Name : 26\_SDG\_Euc\_Fed AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:30 AM				07:45 AM				08:00 AM			
+0 mins.	17	229	66	312	23	79	23	125	48	189	31	268	27	17	8	52
+15 mins.	15	199	52	266	39	79	27	145	34	217	40	291	31	22	16	69
+30 mins.	15	173	60	248	32	89	33	154	56	205	43	304	32	12	14	58
+45 mins.	15	220	38	273	36	69	42	147	67	163	34	264	40	18	17	75
Total Volume	62	821	216	1099	130	316	125	571	205	774	148	1127	130	69	55	254
% App. Total	5.6	74.7	19.7		22.8	55.3	21.9		18.2	68.7	13.1		51.2	27.2	21.7	
PHF	.912	.896	.818	.881	.833	.888	.744	.927	.765	.892	.860	.927	.813	.784	.809	.847

City of San Diego  
 N/S: Euclid Avenue  
 E/W: Federal Boulevard  
 Weather: Clear

File Name : 26\_SDG\_Euc\_Fed MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

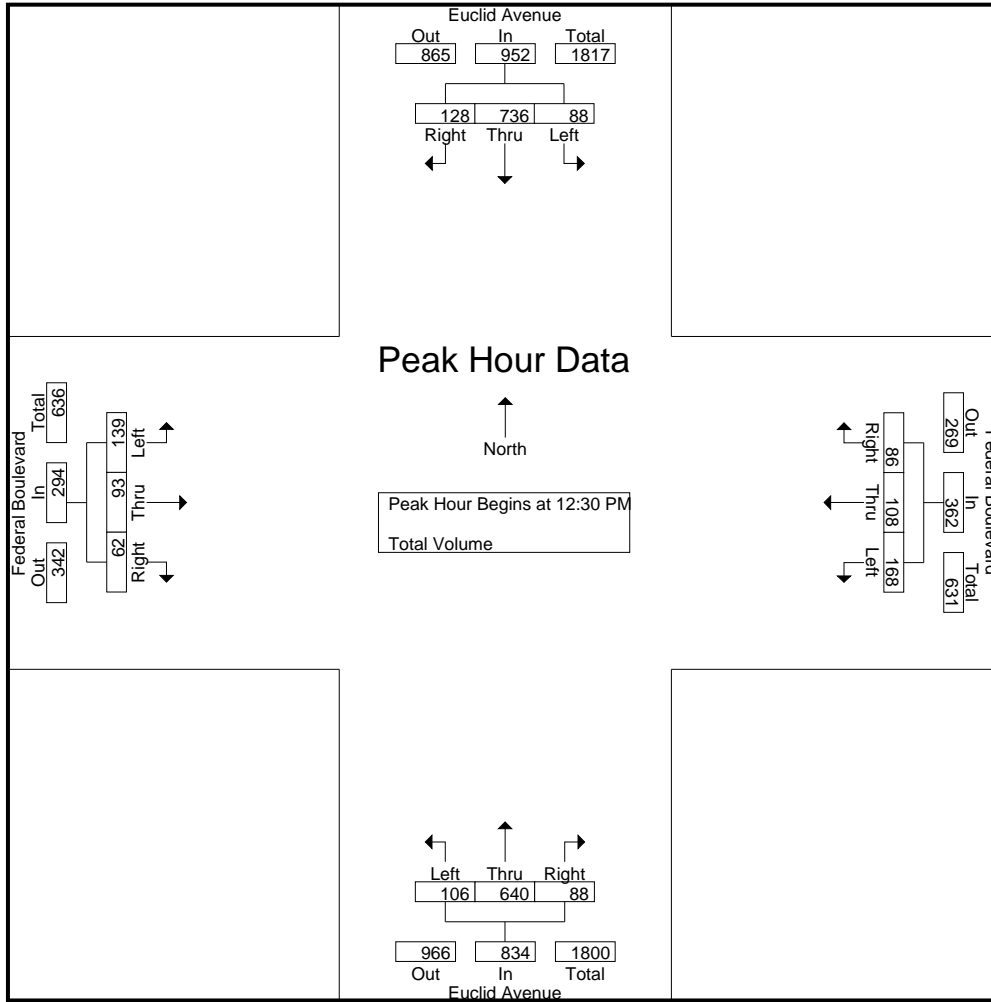
Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				Federal Boulevard Westbound				Euclid Avenue Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	25	173	21	219	32	15	21	68	24	160	23	207	28	11	9	48	542
11:45 AM	13	140	25	178	35	38	20	93	33	131	25	189	27	14	17	58	518
Total	38	313	46	397	67	53	41	161	57	291	48	396	55	25	26	106	1060
12:00 PM	21	186	32	239	37	38	19	94	26	153	19	198	18	16	16	50	581
12:15 PM	9	138	29	176	35	26	26	87	37	154	21	212	41	19	14	74	549
12:30 PM	21	156	28	205	39	28	21	88	25	164	22	211	43	11	23	77	581
12:45 PM	18	183	29	230	34	32	17	83	20	166	30	216	37	27	13	77	606
Total	69	663	118	850	145	124	83	352	108	637	92	837	139	73	66	278	2317
01:00 PM	20	178	35	233	52	25	22	99	32	145	19	196	26	29	16	71	599
01:15 PM	29	219	36	284	43	23	26	92	29	165	17	211	33	26	10	69	656
Grand Total	156	1373	235	1764	307	225	172	704	226	1238	176	1640	253	153	118	524	4632
Apprch %	8.8	77.8	13.3		43.6	32	24.4		13.8	75.5	10.7		48.3	29.2	22.5		
Total %	3.4	29.6	5.1	38.1	6.6	4.9	3.7	15.2	4.9	26.7	3.8	35.4	5.5	3.3	2.5	11.3	

Start Time	Euclid Avenue Southbound				Federal Boulevard Westbound				Euclid Avenue Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:30 PM																	
12:30 PM	21	156	28	205	39	28	21	88	25	164	22	211	<b>43</b>	11	<b>23</b>	<b>77</b>	581
12:45 PM	18	183	29	230	34	<b>32</b>	17	83	20	<b>166</b>	<b>30</b>	<b>216</b>	37	27	13	77	606
01:00 PM	20	178	35	233	<b>52</b>	25	22	<b>99</b>	<b>32</b>	145	19	196	26	<b>29</b>	16	71	599
01:15 PM	<b>29</b>	<b>219</b>	<b>36</b>	<b>284</b>	43	23	<b>26</b>	92	29	165	17	211	33	26	10	69	<b>656</b>
Total Volume	88	736	128	952	168	108	86	362	106	640	88	834	139	93	62	294	2442
% App. Total	9.2	77.3	13.4		46.4	29.8	23.8		12.7	76.7	10.6		47.3	31.6	21.1		
PHF	.759	.840	.889	.838	.808	.844	.827	.914	.828	.964	.733	.965	.808	.802	.674	.955	.931

City of San Diego  
 N/S: Euclid Avenue  
 E/W: Federal Boulevard  
 Weather: Clear

File Name : 26\_SDG\_Euc\_Fed MD  
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:30 PM				11:45 AM				12:00 PM				12:15 PM			
+0 mins.	21	156	28	205	35	<b>38</b>	20	93	26	153	19	198	41	19	14	74
+15 mins.	18	183	29	230	37	38	19	<b>94</b>	<b>37</b>	154	21	212	<b>43</b>	11	<b>23</b>	<b>77</b>
+30 mins.	20	178	35	233	35	26	<b>26</b>	87	25	164	22	211	37	27	13	77
+45 mins.	<b>29</b>	<b>219</b>	<b>36</b>	<b>284</b>	<b>39</b>	28	21	88	20	<b>166</b>	<b>30</b>	<b>216</b>	26	<b>29</b>	16	71
Total Volume	88	736	128	952	146	130	86	362	108	637	92	837	147	86	66	299
% App. Total	9.2	77.3	13.4		40.3	35.9	23.8		12.9	76.1	11		49.2	28.8	22.1	
PHF	.759	.840	.889	.838	.936	.855	.827	.963	.730	.959	.767	.969	.855	.741	.717	.971

City of San Diego  
 N/S: Euclid Avenue  
 E/W: Federal Boulevard  
 Weather: Clear

File Name : 26\_SDG\_Euc\_Fed PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

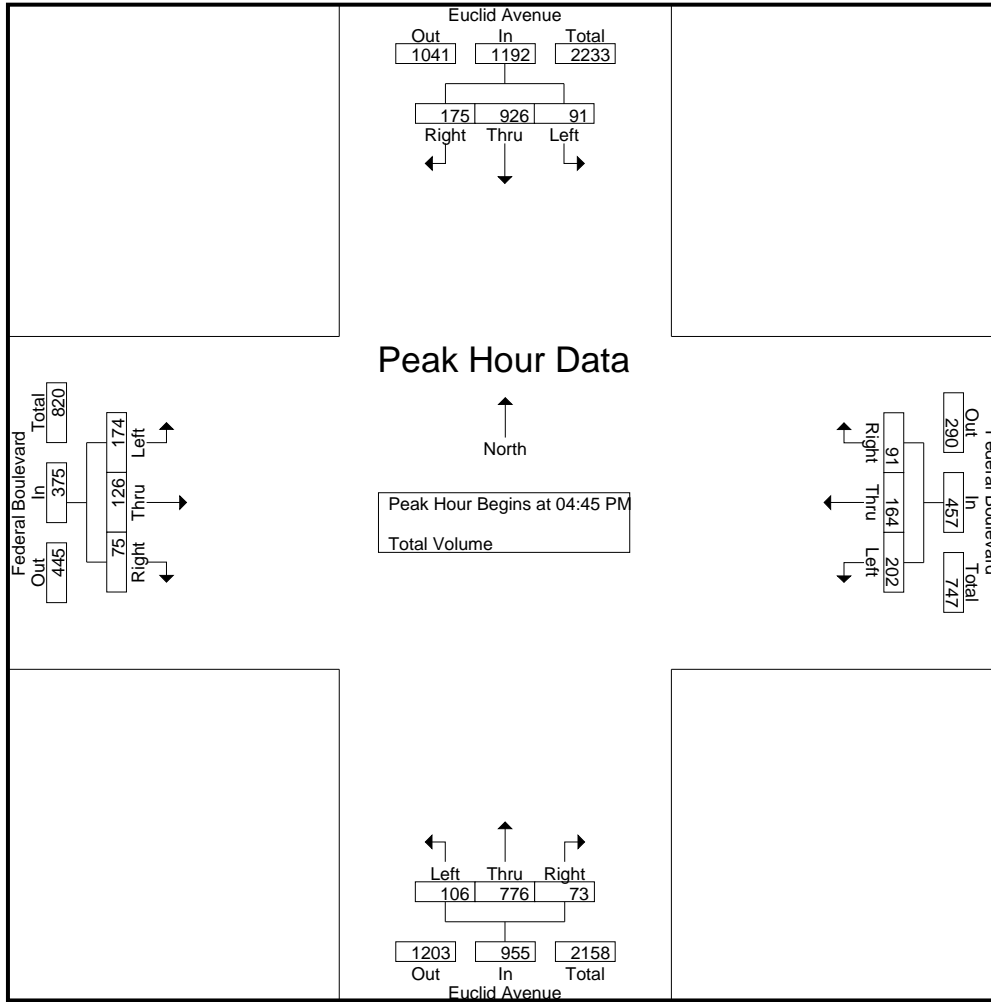
Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				Federal Boulevard Westbound				Euclid Avenue Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	23	244	43	310	45	29	23	97	32	195	20	247	49	34	19	102	756
04:15 PM	18	208	49	275	60	46	15	121	24	180	20	224	57	55	18	130	750
04:30 PM	19	196	43	258	58	40	23	121	24	174	29	227	42	34	18	94	700
04:45 PM	19	233	47	299	42	37	26	105	22	193	14	229	44	34	20	98	731
Total	79	881	182	1142	205	152	87	444	102	742	83	927	192	157	75	424	2937
05:00 PM	20	247	33	300	54	52	29	135	32	202	17	251	41	25	17	83	769
05:15 PM	32	243	52	327	49	38	17	104	28	195	22	245	47	32	20	99	775
05:30 PM	20	203	43	266	57	37	19	113	24	186	20	230	42	35	18	95	704
05:45 PM	15	249	38	302	54	26	20	100	32	195	24	251	31	23	15	69	722
Total	87	942	166	1195	214	153	85	452	116	778	83	977	161	115	70	346	2970
Grand Total	166	1823	348	2337	419	305	172	896	218	1520	166	1904	353	272	145	770	5907
Apprch %	7.1	78	14.9		46.8	34	19.2		11.4	79.8	8.7		45.8	35.3	18.8		
Total %	2.8	30.9	5.9	39.6	7.1	5.2	2.9	15.2	3.7	25.7	2.8	32.2	6	4.6	2.5	13	

Start Time	Euclid Avenue Southbound				Federal Boulevard Westbound				Euclid Avenue Northbound				Federal Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	19	233	47	299	42	37	26	105	22	193	14	229	44	34	<b>20</b>	98	731
05:00 PM	20	<b>247</b>	33	300	54	<b>52</b>	<b>29</b>	<b>135</b>	<b>32</b>	<b>202</b>	17	<b>251</b>	41	25	17	83	769
05:15 PM	<b>32</b>	243	<b>52</b>	<b>327</b>	49	38	17	104	28	195	<b>22</b>	245	<b>47</b>	32	20	<b>99</b>	<b>775</b>
05:30 PM	20	203	43	266	<b>57</b>	37	19	113	24	186	20	230	42	<b>35</b>	18	95	704
Total Volume	91	926	175	1192	202	164	91	457	106	776	73	955	174	126	75	375	2979
% App. Total	7.6	77.7	14.7		44.2	35.9	19.9		11.1	81.3	7.6		46.4	33.6	20		
PHF	.711	.937	.841	.911	.886	.788	.784	.846	.828	.960	.830	.951	.926	.900	.938	.947	.961

City of San Diego  
 N/S: Euclid Avenue  
 E/W: Federal Boulevard  
 Weather: Clear

File Name : 26\_SDG\_Euc\_Fed PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				05:00 PM				04:00 PM			
+0 mins.	20	247	33	300	<b>60</b>	46	15	121	<b>32</b>	<b>202</b>	17	<b>251</b>	49	34	19	102
+15 mins.	<b>32</b>	243	<b>52</b>	<b>327</b>	58	40	23	121	28	195	22	245	<b>57</b>	<b>55</b>	18	<b>130</b>
+30 mins.	20	203	43	266	42	37	26	105	24	186	20	230	42	34	18	94
+45 mins.	15	<b>249</b>	38	302	54	<b>52</b>	<b>29</b>	<b>135</b>	32	195	<b>24</b>	251	44	34	<b>20</b>	98
Total Volume	87	942	166	1195	214	175	93	482	116	778	83	977	192	157	75	424
% App. Total	7.3	78.8	13.9		44.4	36.3	19.3		11.9	79.6	8.5		45.3	37	17.7	
PHF	.680	.946	.798	.914	.892	.841	.802	.893	.906	.963	.865	.973	.842	.714	.938	.815

Location: San Diego  
 N/S: Euclid Avenue  
 E/W: Federal Boulevard



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Euclid Avenue Pedestrians	East Leg Federal Boulevard Pedestrians	South Leg Euclid Avenue Pedestrians	West Leg Federal Boulevard Pedestrians	
7:00 AM	0	0	0	1	1
7:15 AM	2	3	1	1	7
7:30 AM	4	1	0	1	6
7:45 AM	4	2	0	0	6
8:00 AM	3	2	6	2	13
8:15 AM	4	3	2	1	10
8:30 AM	4	1	1	1	7
8:45 AM	6	2	5	1	14
TOTAL VOLUMES:	27	14	15	8	64

	North Leg Euclid Avenue Pedestrians	East Leg Federal Boulevard Pedestrians	South Leg Euclid Avenue Pedestrians	West Leg Federal Boulevard Pedestrians	
11:30 AM	3	4	2	2	11
11:45 AM	4	1	1	0	6
12:00 PM	2	5	3	2	12
12:15 PM	1	3	3	2	9
12:30 PM	2	1	2	2	7
12:45 PM	0	2	5	0	7
1:00 PM	3	4	3	2	12
1:15 PM	3	5	5	3	16
TOTAL VOLUMES:	18	25	24	13	80

	North Leg Euclid Avenue Pedestrians	East Leg Federal Boulevard Pedestrians	South Leg Euclid Avenue Pedestrians	West Leg Federal Boulevard Pedestrians	
4:00 PM	5	4	8	5	22
4:15 PM	3	6	9	4	22
4:30 PM	8	4	5	8	25
4:45 PM	4	2	6	7	19
5:00 PM	1	5	5	3	14
5:15 PM	5	2	2	4	13
5:30 PM	4	1	3	4	12
5:45 PM	3	1	3	4	11
TOTAL VOLUMES:	33	25	41	39	138

Location: San Diego  
 N/S: Euclid Avenue  
 E/W: Federal Boulevard



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Euclid Avenue			Westbound Federal Boulevard			Northbound Euclid Avenue			Eastbound Federal Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	1	0	2	0	0	3	0	0	0	0	7

	Southbound Euclid Avenue			Westbound Federal Boulevard			Northbound Euclid Avenue			Eastbound Federal Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	1	0	0	0	0	1	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	0	0	1	0	0	0	0	2

	Southbound Euclid Avenue			Westbound Federal Boulevard			Northbound Euclid Avenue			Eastbound Federal Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	1	0	0	0	2

75) Euclid Ave & 54th St



City of San Diego  
 N/S: Euclid Avenue  
 E/W: Elm Street/54th Street  
 Weather: Clear

File Name : 27\_SDG\_Euc\_54th AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				54th Street Westbound				Euclid Avenue Northbound				Elm Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	24	3	27	140	3	0	143	2	51	101	154	5	0	2	7	331
07:15 AM	0	41	0	41	183	2	0	185	1	46	105	152	4	0	1	5	383
07:30 AM	0	54	4	58	228	4	1	233	1	69	100	170	4	0	4	8	469
07:45 AM	0	57	4	61	207	2	0	209	0	76	151	227	9	0	1	10	507
Total	0	176	11	187	758	11	1	770	4	242	457	703	22	0	8	30	1690
08:00 AM	0	50	3	53	199	5	1	205	0	87	160	247	3	0	2	5	510
08:15 AM	0	47	3	50	208	3	1	212	3	96	166	265	9	0	2	11	538
08:30 AM	0	63	3	66	179	1	1	181	0	61	141	202	8	0	2	10	459
08:45 AM	0	40	5	45	197	5	0	202	3	48	166	217	4	0	3	7	471
Total	0	200	14	214	783	14	3	800	6	292	633	931	24	0	9	33	1978
Grand Total	0	376	25	401	1541	25	4	1570	10	534	1090	1634	46	0	17	63	3668
Apprch %	0	93.8	6.2		98.2	1.6	0.3		0.6	32.7	66.7		73	0	27		
Total %	0	10.3	0.7	10.9	42	0.7	0.1	42.8	0.3	14.6	29.7	44.5	1.3	0	0.5	1.7	

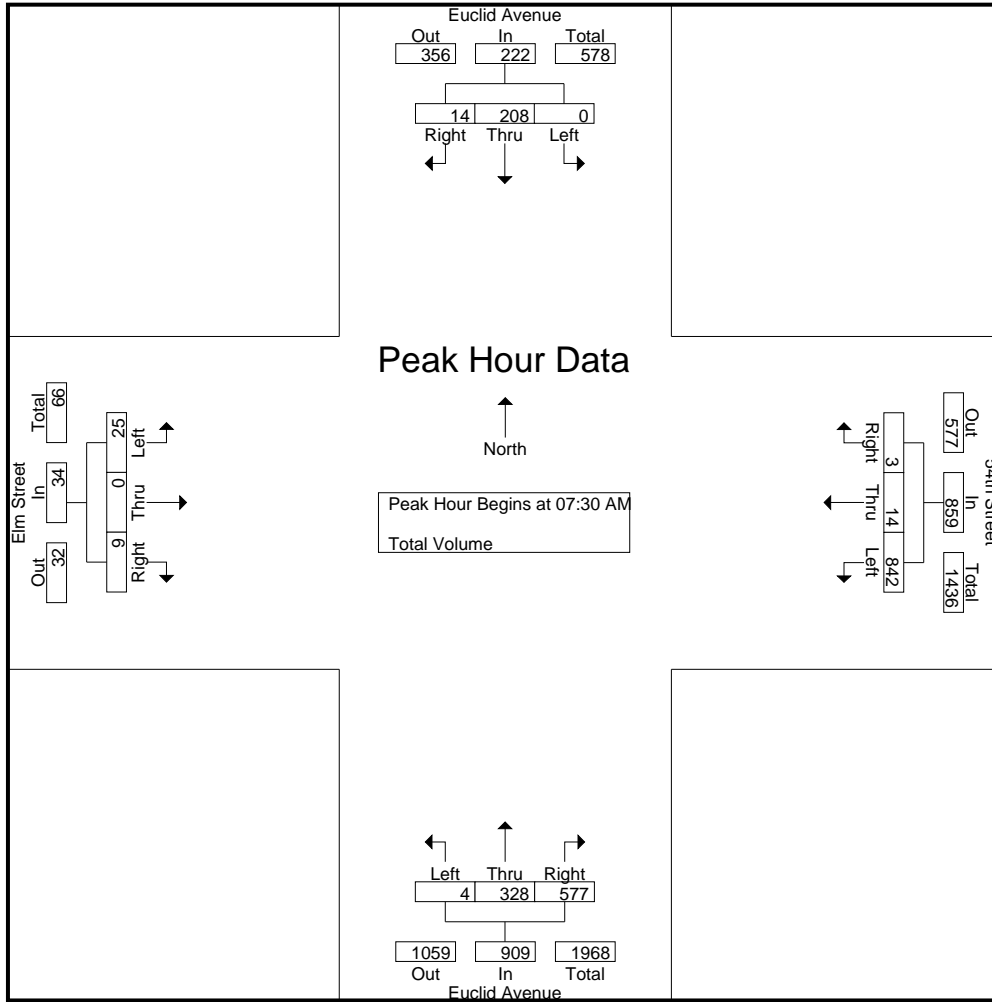
Start Time	Euclid Avenue Southbound				54th Street Westbound				Euclid Avenue Northbound				Elm Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	54	4	58	<b>228</b>	4	1	<b>233</b>	1	69	100	170	4	0	4	8	469
07:45 AM	0	<b>57</b>	4	<b>61</b>	207	2	0	209	0	76	151	227	9	0	1	10	507
08:00 AM	0	50	3	53	199	5	1	205	0	87	160	247	3	0	2	5	510
08:15 AM	0	47	3	50	208	3	1	212	<b>3</b>	<b>96</b>	<b>166</b>	<b>265</b>	9	0	2	<b>11</b>	<b>538</b>
Total Volume	0	208	14	222	842	14	3	859	4	328	577	909	25	0	9	34	2024
% App. Total	0	93.7	6.3		98	1.6	0.3		0.4	36.1	63.5		73.5	0	26.5		
PHF	.000	.912	.875	.910	.923	.700	.750	.922	.333	.854	.869	.858	.694	.000	.563	.773	.941

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM

City of San Diego  
 N/S: Euclid Avenue  
 E/W: Elm Street/54th Street  
 Weather: Clear

File Name : 27\_SDG\_Euc\_54th AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:30 AM				07:45 AM				07:45 AM			
+0 mins.	0	57	4	61	<b>228</b>	4	1	<b>233</b>	0	76	151	227	<b>9</b>	0	1	10
+15 mins.	0	50	3	53	207	2	0	209	0	87	160	247	3	0	2	5
+30 mins.	0	47	3	50	199	5	1	205	3	<b>96</b>	<b>166</b>	<b>265</b>	9	0	2	<b>11</b>
+45 mins.	0	<b>63</b>	3	<b>66</b>	208	3	1	212	0	61	141	202	8	0	2	10
Total Volume	0	217	13	230	842	14	3	859	3	320	618	941	29	0	7	36
% App. Total	0	94.3	5.7		98	1.6	0.3		0.3	34	65.7		80.6	0	19.4	
PHF	.000	.861	.813	.871	.923	.700	.750	.922	.250	.833	.931	.888	.806	.000	.875	.818

City of San Diego  
 N/S: Euclid Avenue  
 E/W: Elm Street/54th Street  
 Weather: Clear

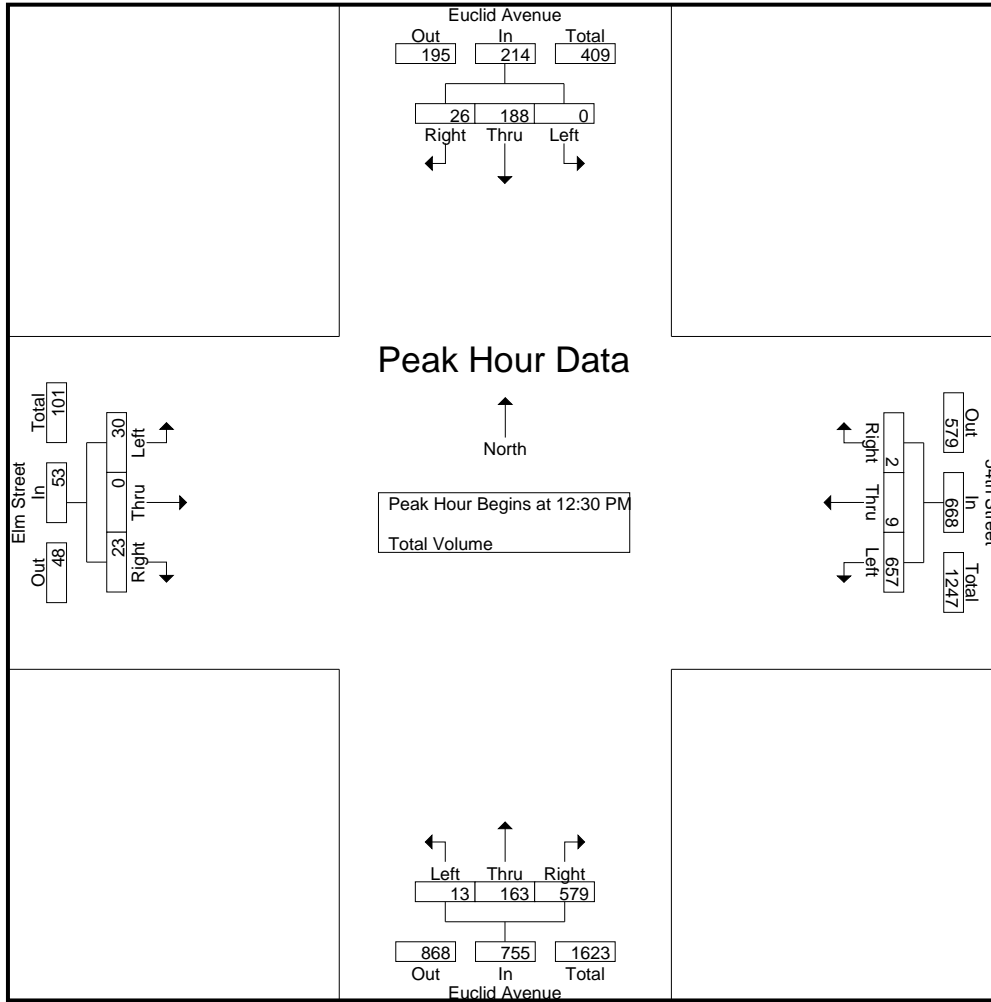
File Name : 27\_SDG\_Euc\_54th MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				54th Street Westbound				Euclid Avenue Northbound				Elm Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	1	41	4	46	151	3	1	155	4	39	120	163	6	0	4	10	374
11:45 AM	0	18	4	22	128	2	0	130	1	41	126	168	10	0	3	13	333
Total	1	59	8	68	279	5	1	285	5	80	246	331	16	0	7	23	707
12:00 PM	0	55	4	59	161	1	0	162	1	41	133	175	2	0	3	5	401
12:15 PM	0	34	6	40	129	1	0	130	3	51	132	186	7	0	0	7	363
12:30 PM	0	45	6	51	134	2	1	137	4	38	147	189	10	0	5	15	392
12:45 PM	0	44	7	51	173	3	0	176	1	55	132	188	6	0	7	13	428
Total	0	178	23	201	597	7	1	605	9	185	544	738	25	0	15	40	1584
01:00 PM	0	43	5	48	174	2	0	176	2	30	144	176	12	0	6	18	418
01:15 PM	0	56	8	64	176	2	1	179	6	40	156	202	2	0	5	7	452
Grand Total	1	336	44	381	1226	16	3	1245	22	335	1090	1447	55	0	33	88	3161
Apprch %	0.3	88.2	11.5		98.5	1.3	0.2		1.5	23.2	75.3		62.5	0	37.5		
Total %	0	10.6	1.4	12.1	38.8	0.5	0.1	39.4	0.7	10.6	34.5	45.8	1.7	0	1	2.8	

Start Time	Euclid Avenue Southbound				54th Street Westbound				Euclid Avenue Northbound				Elm Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:30 PM	0	45	6	51	134	2	1	137	4	38	147	189	10	0	5	15	392
12:45 PM	0	44	7	51	173	3	0	176	1	55	132	188	6	0	7	13	428
01:00 PM	0	43	5	48	174	2	0	176	2	30	144	176	12	0	6	18	418
01:15 PM	0	56	8	64	176	2	1	179	6	40	156	202	2	0	5	7	452
Total Volume	0	188	26	214	657	9	2	668	13	163	579	755	30	0	23	53	1690
% App. Total	0	87.9	12.1		98.4	1.3	0.3		1.7	21.6	76.7		56.6	0	43.4		
PHF	.000	.839	.813	.836	.933	.750	.500	.933	.542	.741	.928	.934	.625	.000	.821	.736	.935

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:30 PM



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:30 PM				12:30 PM				12:30 PM				12:15 PM			
+0 mins.	0	45	6	51	134	2	1	137	4	38	147	189	7	0	0	7
+15 mins.	0	44	7	51	173	3	0	176	1	55	132	188	10	0	5	15
+30 mins.	0	43	5	48	174	2	0	176	2	30	144	176	6	0	7	13
+45 mins.	0	56	8	64	176	2	1	179	6	40	156	202	12	0	6	18
Total Volume	0	188	26	214	657	9	2	668	13	163	579	755	35	0	18	53
% App. Total	0	87.9	12.1		98.4	1.3	0.3		1.7	21.6	76.7		66	0	34	
PHF	.000	.839	.813	.836	.933	.750	.500	.933	.542	.741	.928	.934	.729	.000	.643	.736

City of San Diego  
 N/S: Euclid Avenue  
 E/W: Elm Street/54th Street  
 Weather: Clear

File Name : 27\_SDG\_Euc\_54th PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

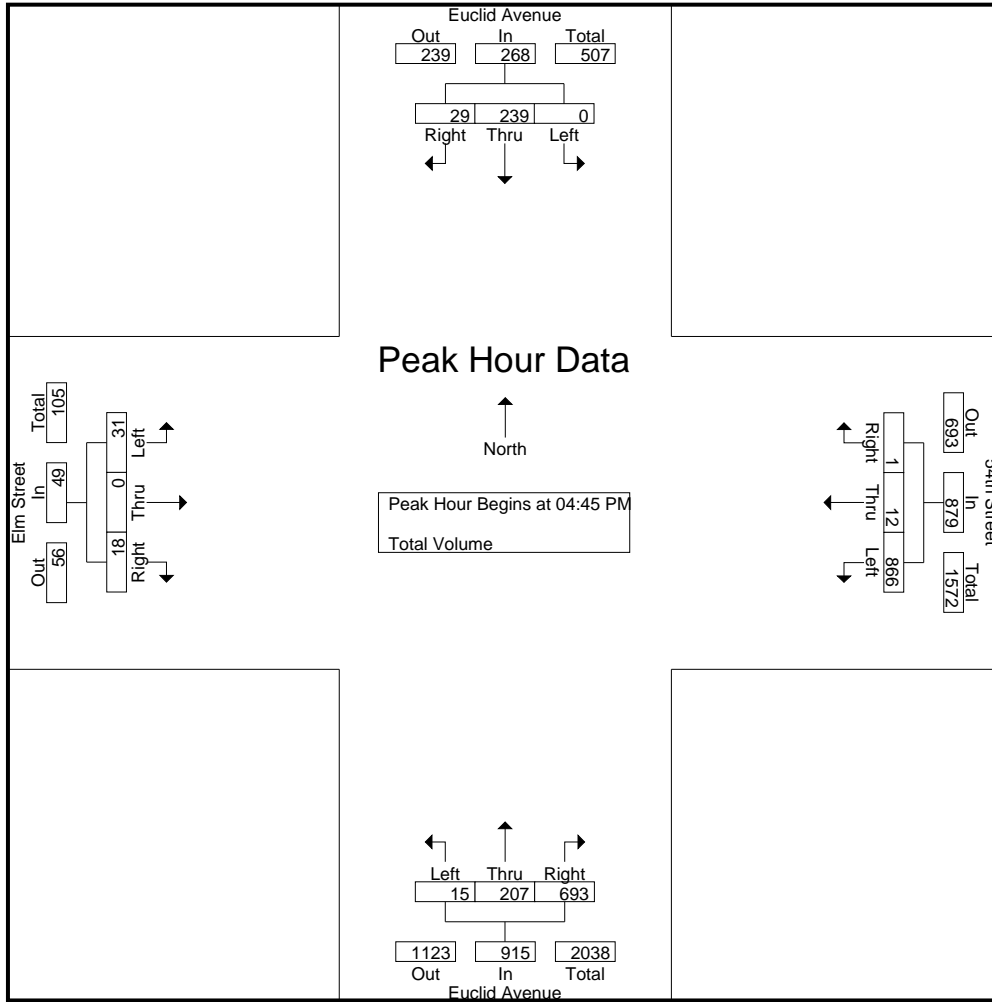
Groups Printed- Total Volume

Start Time	Euclid Avenue Southbound				54th Street Westbound				Euclid Avenue Northbound				Elm Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	64	13	77	230	1	0	231	7	54	177	238	9	0	4	13	559
04:15 PM	0	52	8	60	201	1	1	203	3	58	171	232	8	0	4	12	507
04:30 PM	0	57	8	65	196	3	0	199	2	60	169	231	4	0	4	8	503
04:45 PM	0	57	9	66	207	2	0	209	7	40	175	222	5	0	3	8	505
Total	0	230	38	268	834	7	1	842	19	212	692	923	26	0	15	41	2074
05:00 PM	0	61	5	66	206	5	0	211	4	58	184	246	10	0	7	17	540
05:15 PM	0	70	11	81	229	3	1	233	3	54	170	227	11	0	2	13	554
05:30 PM	0	51	4	55	224	2	0	226	1	55	164	220	5	0	6	11	512
05:45 PM	0	56	5	61	199	3	1	203	4	46	162	212	10	0	5	15	491
Total	0	238	25	263	858	13	2	873	12	213	680	905	36	0	20	56	2097
Grand Total	0	468	63	531	1692	20	3	1715	31	425	1372	1828	62	0	35	97	4171
Apprch %	0	88.1	11.9		98.7	1.2	0.2		1.7	23.2	75.1		63.9	0	36.1		
Total %	0	11.2	1.5	12.7	40.6	0.5	0.1	41.1	0.7	10.2	32.9	43.8	1.5	0	0.8	2.3	

Start Time	Euclid Avenue Southbound				54th Street Westbound				Euclid Avenue Northbound				Elm Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	0	57	9	66	207	2	0	209	7	40	175	222	5	0	3	8	505
05:00 PM	0	61	5	66	206	5	0	211	4	<b>58</b>	<b>184</b>	<b>246</b>	10	0	<b>7</b>	<b>17</b>	540
05:15 PM	0	<b>70</b>	<b>11</b>	<b>81</b>	<b>229</b>	3	<b>1</b>	<b>233</b>	3	54	170	227	<b>11</b>	0	2	13	<b>554</b>
05:30 PM	0	51	4	55	224	2	0	226	1	55	164	220	5	0	6	11	512
Total Volume	0	239	29	268	866	12	1	879	15	207	693	915	31	0	18	49	2111
% App. Total	0	89.2	10.8		98.5	1.4	0.1		1.6	22.6	75.7		63.3	0	36.7		
PHF	.000	.854	.659	.827	.945	.600	.250	.943	.536	.892	.942	.930	.705	.000	.643	.721	.953

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:45 PM				04:15 PM				05:00 PM			
+0 mins.	0	57	8	65	207	2	0	209	3	58	171	232	10	0	7	17
+15 mins.	0	57	9	66	206	5	0	211	2	60	169	231	11	0	2	13
+30 mins.	0	61	5	66	229	3	1	233	7	40	175	222	5	0	6	11
+45 mins.	0	70	11	81	224	2	0	226	4	58	184	246	10	0	5	15
Total Volume	0	245	33	278	866	12	1	879	16	216	699	931	36	0	20	56
% App. Total	0	88.1	11.9		98.5	1.4	0.1		1.7	23.2	75.1		64.3	0	35.7	
PHF	.000	.875	.750	.858	.945	.600	.250	.943	.571	.900	.950	.946	.818	.000	.714	.824

Location: San Diego  
 N/S: Euclid Avenue  
 E/W: Elm Street/54th Street



Date: 3/13/2024  
 Day: Wednesday

PEDESTRIANS

	North Leg Euclid Avenue	East Leg 54th Street	South Leg Euclid Avenue	West Leg Elm Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	1	0	1	2
7:15 AM	0	0	0	1	1
7:30 AM	0	0	0	0	0
7:45 AM	3	0	0	3	6
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	1	1
8:45 AM	1	0	0	1	2
TOTAL VOLUMES:	4	1	0	8	13

	North Leg Euclid Avenue	East Leg 54th Street	South Leg Euclid Avenue	West Leg Elm Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	0	0	0	0	0
11:45 AM	0	0	0	0	0
12:00 PM	1	0	0	0	1
12:15 PM	0	0	0	0	0
12:30 PM	0	0	0	2	2
12:45 PM	0	0	0	0	0
1:00 PM	0	0	0	0	0
1:15 PM	2	0	0	1	3
TOTAL VOLUMES:	3	0	0	3	6

	North Leg Euclid Avenue	East Leg 54th Street	South Leg Euclid Avenue	West Leg Elm Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	1	0	2	4
4:15 PM	0	0	0	1	1
4:30 PM	0	0	0	2	2
4:45 PM	0	0	0	3	3
5:00 PM	0	0	0	2	2
5:15 PM	3	2	0	1	6
5:30 PM	0	0	0	1	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	4	3	0	12	19

Location: San Diego  
 N/S: Euclid Avenue  
 E/W: Elm Street/54th Street



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound Euclid Avenue			Westbound 54th Street			Northbound Euclid Avenue			Eastbound Elm Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	2	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	1	1	2	0	0	0	2	2	0	0	0	8

	Southbound Euclid Avenue			Westbound 54th Street			Northbound Euclid Avenue			Eastbound Elm Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	1	0	2	0	0	0	3

	Southbound Euclid Avenue			Westbound 54th Street			Northbound Euclid Avenue			Eastbound Elm Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	2	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	2	0	0	0	2



76) College Grove Dr & 54th St

City of San Diego  
 N/S: 54th Street  
 E/W: Krenning Street/College Grove Drive  
 Weather: Clear

Groups Printed- Total Volume

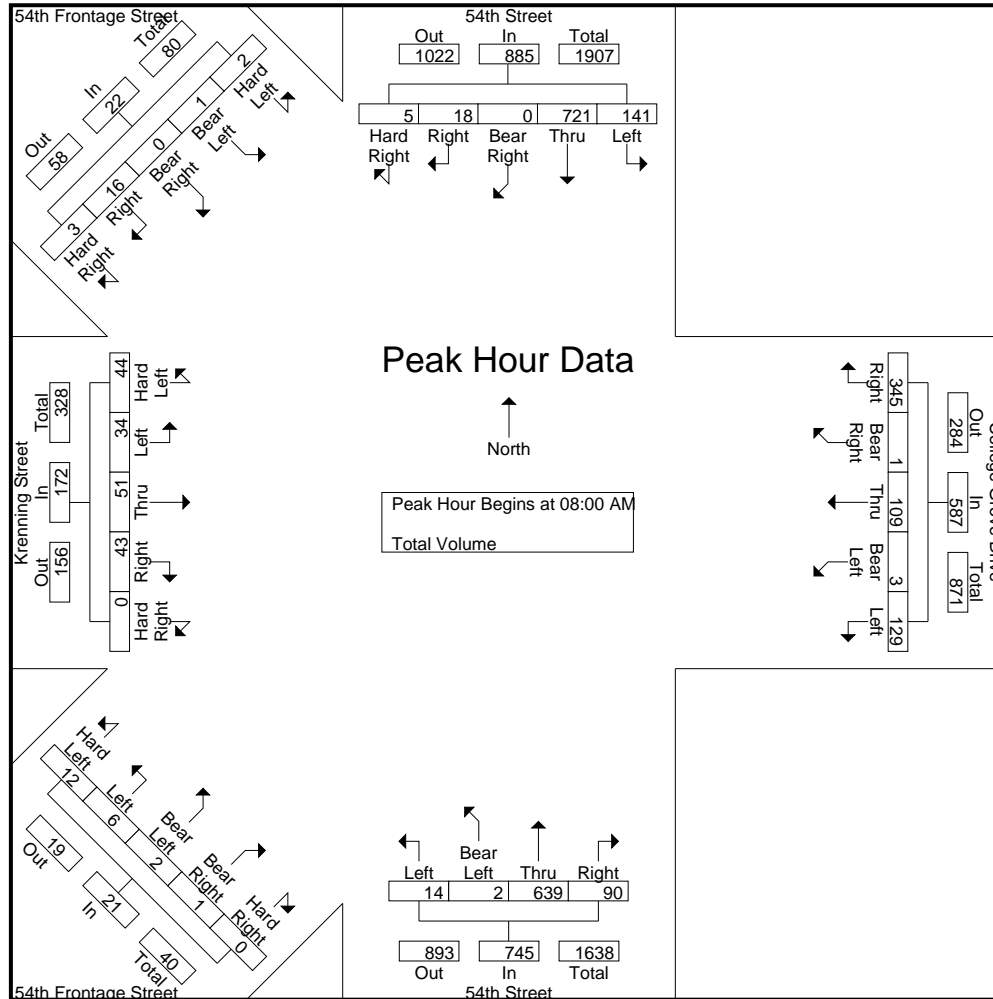
Start Time	54th Street Southbound						College Grove Drive Westbound						54th Street Northbound						54th Frontage Street Northeastbound						Krenning Street Eastbound						54th Frontage Street Southeastbound						Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Bear Right	Right	Hard Right	App. Total	Left	Bear Left	Thru	Bear Right	Right	App. Total	Hard Left	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Bear Left	Bear Right	Hard Right	App. Total	Hard Left	Left	Thru	Right	Hard Right	App. Total	Hard Left	Bear Left	Bear Right	Right	Hard Right	App. Total				
07:00 AM	24	97	0	0	2	123	19	0	12	0	54	85	1	3	0	113	22	138	4	1	0	0	0	5	1	4	9	8	0	22	0	0	0	0	0	0	1	373	374	
07:15 AM	32	127	0	0	3	162	27	0	23	0	72	122	0	3	0	113	24	140	0	0	0	0	0	0	1	6	6	5	0	18	0	0	0	2	1	3	0	445	445	
07:30 AM	21	186	0	1	2	210	49	0	35	0	67	151	0	1	1	108	15	125	1	0	1	0	0	2	8	9	8	8	0	33	0	0	0	0	0	0	0	521	521	
07:45 AM	26	140	0	4	0	170	34	0	35	0	112	181	0	4	1	133	22	160	4	1	1	0	0	6	3	6	12	4	1	26	0	0	0	2	0	2	0	545	545	
<b>Total</b>	103	550	0	5	7	665	129	0	105	0	305	539	1	11	2	467	83	563	9	2	2	0	0	13	13	25	35	25	1	99	0	0	0	4	1	5	1	1884	1885	
08:00 AM	21	175	0	3	1	200	32	1	43	0	114	190	0	2	1	183	16	202	2	0	1	0	0	3	1	6	17	6	0	30	1	0	0	1	0	2	0	627	627	
08:15 AM	36	183	0	2	2	223	36	0	22	0	87	145	0	3	0	192	24	219	3	1	1	0	0	5	3	12	10	9	0	34	0	0	0	2	1	3	0	629	629	
08:30 AM	40	194	0	5	1	240	21	2	21	0	79	123	0	4	0	130	16	150	2	2	0	0	0	4	10	12	6	20	0	48	1	0	0	4	2	7	0	572	572	
08:45 AM	44	169	0	8	1	222	40	0	23	1	65	129	0	5	1	134	34	174	5	3	0	1	0	9	30	4	18	8	0	60	0	1	0	9	0	10	0	604	604	
<b>Total</b>	141	721	0	18	5	885	129	3	109	1	345	587	0	14	2	639	90	745	12	6	2	1	0	21	44	34	51	43	0	172	2	1	0	16	3	22	0	2432	2432	
Grand Total	244	1271	0	23	12	1550	258	3	214	1	650	1126	1	25	4	1106	173	1308	21	8	4	1	0	34	57	59	86	68	1	271	2	1	0	20	4	27	1	4316	4317	
Apprch %	15.7	82	0	1.5	0.8	22.9	0.3	19	0.1	57.7			1.9	0.3	84.6	13.2	61.8	23.5	11.8	2.9	0	21	21.8	31.7	25.1	0.4	7.4	3.7	0	74.1	14.8									
Total %	5.7	29.4	0	0.5	0.3	35.9	6	0.1	5	0	15.1	26.1	0.6	0.1	25.6	4	30.3	0.5	0.2	0.1	0	0	0.8	1.3	1.4	2	1.6	0	6.3	0	0	0	0.5	0.1	0.6	0	100			

Start Time	54th Street Southbound						College Grove Drive Westbound						54th Street Northbound						54th Frontage Street Northeastbound						Krenning Street Eastbound						54th Frontage Street Southeastbound						Int. Total
	Left	Thru	Bear Right	Right	Hard Right	App. Total	Left	Bear Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Bear Left	Bear Right	Hard Right	App. Total	Hard Left	Left	Thru	Right	Hard Right	App. Total	Hard Left	Bear Left	Bear Right	Right	Hard Right	App. Total		
08:00 AM	21	175	0	3	1	200	32	1	43	0	114	190	2	1	183	16	202	2	0	1	0	0	3	1	6	17	6	0	30	1	0	0	1	0	2	627	
08:15 AM	36	183	0	2	2	223	36	0	22	0	87	145	3	0	192	24	219	3	1	1	0	0	5	3	12	10	9	0	34	0	0	0	2	1	3	629	
08:30 AM	40	194	0	5	1	240	21	2	21	0	79	123	4	0	130	16	150	2	2	0	0	0	4	10	12	6	20	0	48	1	0	0	4	2	7	572	
08:45 AM	44	169	0	8	1	222	40	0	23	1	65	129	5	1	134	34	174	5	3	0	1	0	9	30	4	18	8	0	60	0	1	0	9	0	10	604	
Total Volume	141	721	0	18	5	885	129	3	109	1	345	587	14	2	639	90	745	12	6	2	1	0	21	44	34	51	43	0	172	2	1	0	16	3	22	2432	
% App. Total	15.9	81.5	0	2	0.6	22	0.5	18.6	0.2	58.8	1.9	0.3	85.8	12.1	57.1	28.6	9.5	4.8	0	25.6	19.8	29.7	25	0	7.4	3.7	0	74.1	14.8								
PHF	.801	.929	.000	.563	.625	.922	.806	.375	.634	.250	.757	.772	.700	.500	.832	.662	.850	.600	.500	.500	.250	.000	.583	.367	.708	.708	.538	.000	.717	.500	.250	.000	.444	.375	.550	.967	

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 08:00 AM

City of San Diego  
 N/S: 54th Street  
 E/W: Krenning Street/College Grove Drive  
 Weather: Clear



City of San Diego  
 N/S: 54th Street  
 E/W: Krenning Street/College Grove Drive  
 Weather: Clear

Start Time	54th Street Southbound						College Grove Drive Westbound						54th Street Northbound						54th Frontage Street Northeastbound						Krenning Street Eastbound						54th Frontage Street Southeastbound						Int. Total
	Left	Thru	Bear Right	Right	Hard Right	App. Total	Left	Bear Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Bear Left	Bear Right	Hard Right	App. Total	Hard Left	Left	Thru	Right	Hard Right	App. Total	Hard Left	Bear Left	Bear Right	Right	Hard Right	App. Total		

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	08:00 AM						07:30 AM						08:00 AM						08:00 AM						08:00 AM										
+0 mins.	21	175	0	3	1	200	<b>49</b>	0	35	0	67	151	2	<b>1</b>	183	16	202	2	0	<b>1</b>	0	0	3	1	6	17	6	0	30	<b>1</b>	0	0	1	0	2
+15 mins.	36	183	0	2	<b>2</b>	223	34	0	35	0	112	181	3	0	<b>192</b>	24	<b>219</b>	3	1	1	0	0	5	3	<b>12</b>	10	9	0	34	0	0	0	2	1	3
+30 mins.	40	<b>194</b>	0	5	1	<b>240</b>	32	<b>1</b>	<b>43</b>	0	<b>114</b>	<b>190</b>	4	0	130	16	150	2	2	0	0	0	4	10	12	6	<b>20</b>	0	48	1	0	0	4	<b>2</b>	7
+45 mins.	<b>44</b>	169	0	<b>8</b>	1	222	36	0	22	0	87	145	<b>5</b>	1	134	<b>34</b>	174	<b>5</b>	<b>3</b>	0	<b>1</b>	0	<b>9</b>	<b>30</b>	4	<b>18</b>	8	0	<b>60</b>	0	<b>1</b>	0	<b>9</b>	0	<b>10</b>
Total Volume	141	721	0	18	5	885	151	1	135	0	380	667	14	2	639	90	745	12	6	2	1	0	21	44	34	51	43	0	172	2	1	0	16	3	22
% App. Total	15.9	81.5	0	2	0.6		22.6	0.1	20.2	0	57		1.9	0.3	85.8	12.1		57.1	28.6	9.5	4.8	0		25.6	19.8	29.7	25	0		9.1	4.5	0	72.7	13.6	
PHF	.801	.929	.000	.563	.625	.922	.770	.250	.785	.000	.833	.878	.700	.500	.832	.662	.850	.600	.500	.500	.250	.000	.583	.367	.708	.708	.538	.000	.717	.500	.250	.000	.444	.375	.550

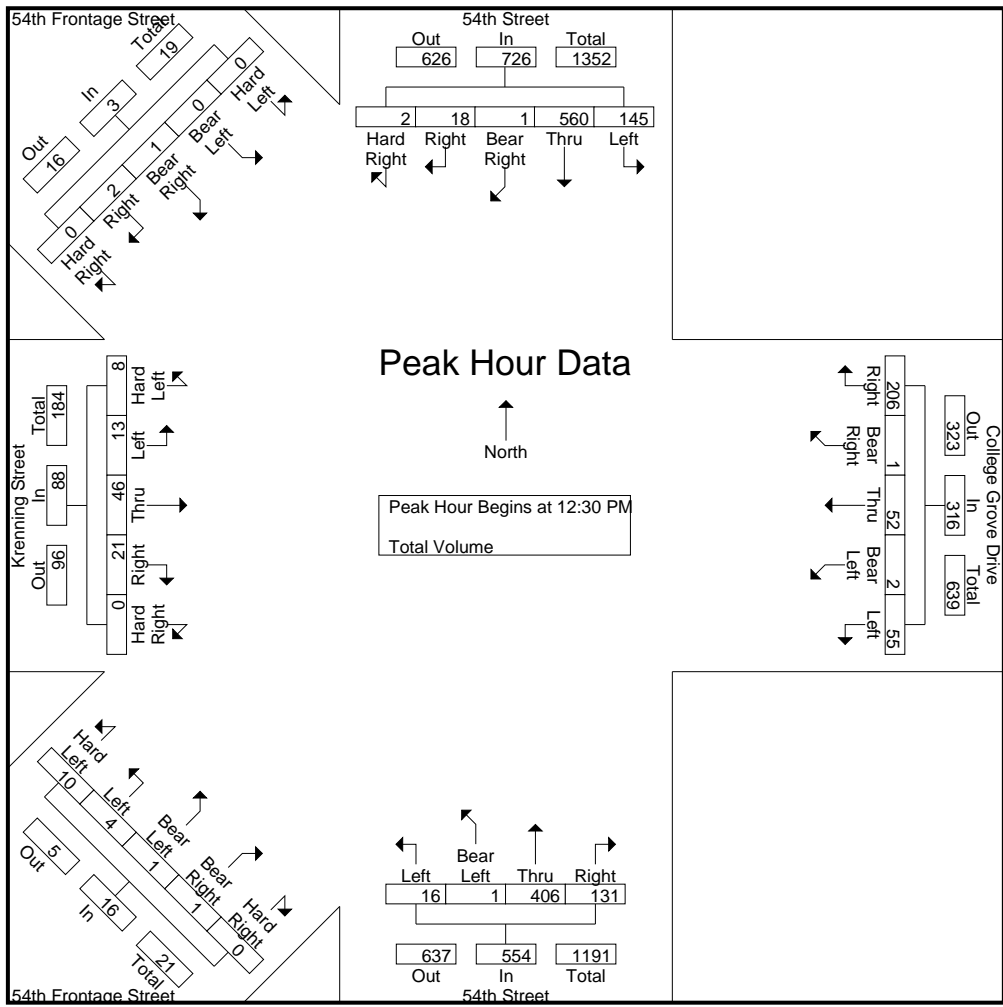
City of San Diego  
 N/S: 54th Street  
 E/W: Krenning Street/College Grove Drive  
 Weather: Clear

Groups Printed- Total Volume

Start Time	54th Street Southbound						College Grove Drive Westbound						54th Street Northbound						54th Frontage Street Northeastbound						Krenning Street Eastbound						54th Frontage Street Southeastbound						Exclu. Total	Inclu. Total	Int. Total								
	Left	Thru	Bear Right	Right	Hard Right	App. Total	Left	Bear Left	Thru	Bear Right	Right	App. Total	Hard Left	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Bear Left	Bear Right	Hard Right	App. Total	Hard Left	Left	Thru	Right	Hard Right	App. Total	Hard Left	Bear Left	Bear Right	Right	Hard Right	App. Total											
11:30 AM	41	139	0	5	0	185	23	0	20	0	54	97	0	0	0	93	29	122	0	2	0	1	0	3	4	0	7	6	0	17	0	0	0	2	0	2	0	0	0	2	0	2	0	426	426		
11:45 AM	34	99	0	5	1	139	21	0	15	1	45	82	0	0	1	97	27	125	2	0	0	0	0	2	1	4	12	10	0	27	0	0	0	2	0	2	0	0	0	2	0	2	0	377	377		
<b>Total</b>	<b>75</b>	<b>238</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>324</b>	<b>44</b>	<b>0</b>	<b>35</b>	<b>1</b>	<b>99</b>	<b>179</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>190</b>	<b>56</b>	<b>247</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>19</b>	<b>16</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>803</b>	<b>803</b>								
12:00 PM	30	141	0	7	1	179	13	0	18	0	42	73	0	2	0	119	29	150	4	0	0	0	0	4	2	4	15	4	0	25	0	1	0	4	0	5	0	436	436								
12:15 PM	34	107	0	1	1	143	13	1	12	1	49	76	0	4	1	110	35	150	1	1	0	0	0	2	1	3	16	2	0	22	0	0	0	3	0	3	0	396	396								
12:30 PM	31	127	1	9	0	168	23	1	12	0	54	90	0	1	0	102	34	137	0	2	0	0	0	2	3	3	11	3	0	20	0	0	0	0	0	0	0	417	417								
12:45 PM	29	142	0	3	0	174	9	0	10	1	48	68	0	6	0	96	18	120	2	1	1	0	0	4	1	2	9	5	0	17	0	0	1	2	0	3	0	386	386								
<b>Total</b>	<b>124</b>	<b>517</b>	<b>1</b>	<b>20</b>	<b>2</b>	<b>664</b>	<b>58</b>	<b>2</b>	<b>52</b>	<b>2</b>	<b>193</b>	<b>307</b>	<b>0</b>	<b>13</b>	<b>1</b>	<b>427</b>	<b>116</b>	<b>557</b>	<b>7</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>7</b>	<b>12</b>	<b>51</b>	<b>14</b>	<b>0</b>	<b>84</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>1635</b>	<b>1635</b>								
01:00 PM	41	144	0	4	2	191	12	1	17	0	46	76	1	5	1	118	42	166	3	0	0	0	0	3	3	4	10	4	0	21	0	0	0	0	0	0	1	457	458								
01:15 PM	44	147	0	2	0	193	11	0	13	0	58	82	0	4	0	90	37	131	5	1	0	1	0	7	1	4	16	9	0	30	0	0	0	0	0	0	0	443	443								
Grand Total	284	1046	1	36	5	1372	125	3	117	3	396	644	1	22	3	825	251	1101	17	7	1	2	0	27	16	24	96	43	0	179	0	1	1	13	0	15	1	3338	3339								
Apprch %	20.7	76.2	0.1	2.6	0.4		19.4	0.5	18.2	0.5	61.5		2	0.3	74.9	22.8		63	25.9	3.7	7.4	0		8.9	13.4	53.6	24	0		0	6.7	6.7	86.7	0													
Total %	8.5	31.3	0	1.1	0.1	41.1	3.7	0.1	3.5	0.1	11.9	19.3	0.7	0.1	24.7	7.5	33	0.5	0.2	0	0.1	0	0.8	0.5	0.7	2.9	1.3	0	5.4	0	0	0	0.4	0	0.4	0	100										

Start Time	54th Street Southbound						College Grove Drive Westbound						54th Street Northbound						54th Frontage Street Northeastbound						Krenning Street Eastbound						54th Frontage Street Southeastbound						Int. Total										
	Left	Thru	Bear Right	Right	Hard Right	App. Total	Left	Bear Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Bear Left	Bear Right	Hard Right	App. Total	Hard Left	Left	Thru	Right	Hard Right	App. Total	Hard Left	Bear Left	Bear Right	Right	Hard Right	App. Total												
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																																															
Peak Hour for Entire Intersection Begins at 12:30 PM																																															
12:30 PM	31	127	1	9	0	168	23	1	12	0	54	90	1	0	102	34	137	0	2	0	0	0	2	3	3	11	3	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	417				
12:45 PM	29	142	0	3	0	174	9	0	10	1	48	68	6	0	96	18	120	2	1	1	0	0	4	1	2	9	5	0	17	0	0	1	2	0	3	0	386										
01:00 PM	41	144	0	4	2	191	12	1	17	0	46	76	5	1	118	42	166	3	0	0	0	0	3	3	4	10	4	0	21	0	0	0	0	0	0	0	457										
01:15 PM	44	147	0	2	0	193	11	0	13	0	58	82	4	0	90	37	131	5	1	0	1	0	7	1	4	16	9	0	30	0	0	0	0	0	0	0	443										
Total Volume	145	560	1	18	2	726	55	2	52	1	206	316	16	1	406	131	554	10	4	1	1	0	16	8	13	46	21	0	88	0	0	1	2	0	3	0	1703										
% App. Total	20	77.1	0.1	2.5	0.3		17.4	0.6	16.5	0.3	65.2		2.9	0.2	73.3	23.6		62.5	25	6.2	6.2	0		9.1	14.8	52.3	23.9	0		0	0	33.3	66.7	0													
PHF	.824	.952	.250	.500	.250	.940	.598	.500	.765	.250	.888	.878	.667	.250	.860	.780	.834	.500	.500	.250	.250	.000	.571	.667	.813	.719	.583	.000	.733	.000	.000	.250	.250	.000	.250	.932											

City of San Diego  
 N/S: 54th Street  
 E/W: Krenning Street/College Grove Drive  
 Weather: Clear



City of San Diego  
 N/S: 54th Street  
 E/W: Krenning Street/College Grove Drive  
 Weather: Clear

Start Time	54th Street Southbound						College Grove Drive Westbound						54th Street Northbound					54th Frontage Street Northeastbound						Krenning Street Eastbound					54th Frontage Street Southeastbound						Int. Total
	Left	Thru	Bear Right	Right	Hard Right	App. Total	Left	Bear Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Bear Left	Bear Right	Hard Right	App. Total	Hard Left	Left	Thru	Right	Hard Right	App. Total	Hard Left	Bear Left	Bear Right	Right	Hard Right	

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:30 PM						11:30 AM						12:15 PM						12:30 PM						11:45 AM						11:30 AM					
+0 mins.	31	127	1	9	0	168	23	0	20	0	54	97	4	1	110	35	150	0	2	0	0	0	2	1	4	12	10	0	27	0	0	0	2	0	2	
+15 mins.	29	142	0	3	0	174	21	0	15	1	45	82	1	0	102	34	137	2	1	1	0	0	4	2	4	15	4	0	25	0	0	0	2	0	2	
+30 mins.	41	144	0	4	2	191	13	0	18	0	42	73	6	0	96	18	120	3	0	0	0	0	3	1	3	16	2	0	22	0	1	0	4	0	5	
+45 mins.	44	147	0	2	0	193	13	1	12	1	49	76	5	1	118	42	166	5	1	0	1	0	7	3	3	11	3	0	20	0	0	0	3	0	3	
Total Volume	145	560	1	18	2	726	70	1	65	2	190	328	16	2	426	129	573	10	4	1	1	0	16	7	14	54	19	0	94	0	1	0	11	0	12	
% App. Total	20	77.1	0.1	2.5	0.3		21.3	0.3	19.8	0.6	57.9		2.8	0.3	74.3	22.5		62.5	25	6.2	6.2	0		7.4	14.9	57.4	20.2	0		0	8.3	0	91.7	0		
PHF	.824	.952	.250	.500	.250	.940	.761	.250	.813	.500	.880	.845	.667	.500	.903	.768	.863	.500	.500	.250	.250	.000	.571	.583	.875	.844	.475	.000	.870	.000	.250	.000	.688	.000	.600	

City of San Diego  
 N/S: 54th Street  
 E/W: Krenning Street/College Grove Drive  
 Weather: Clear

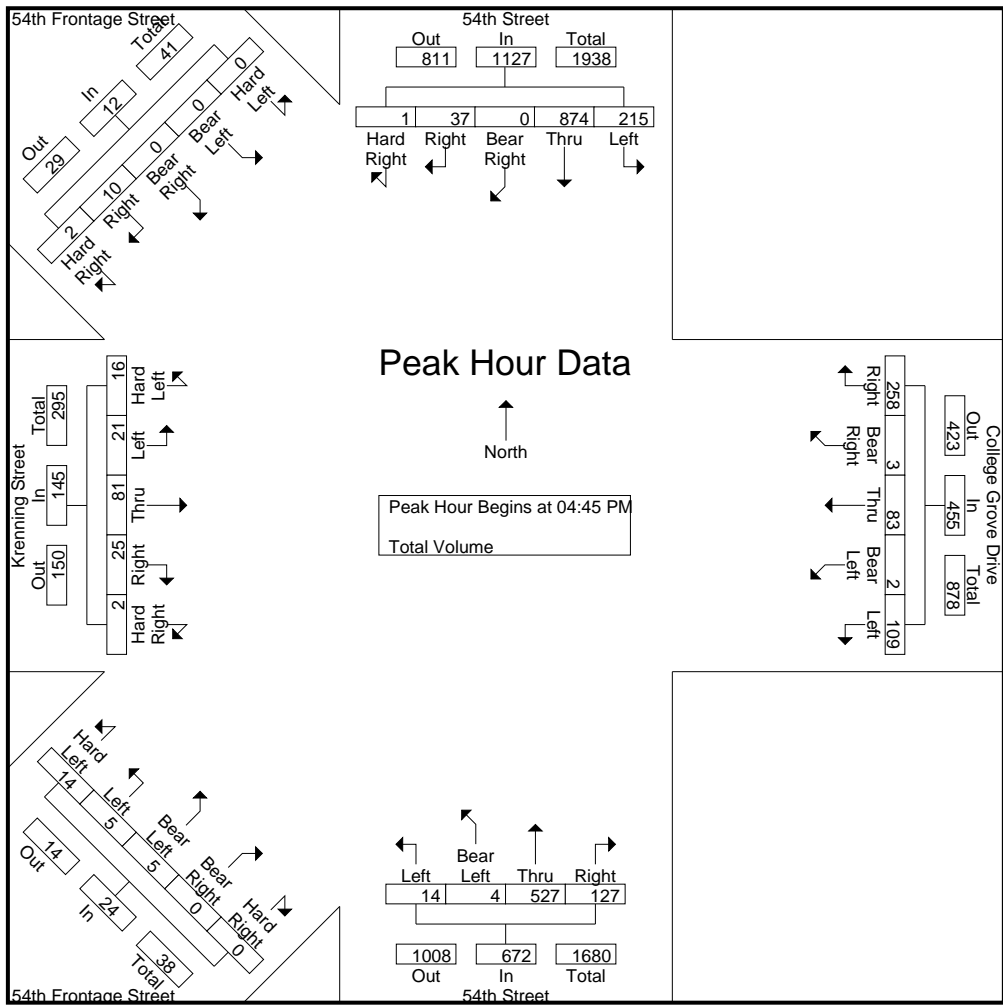
Groups Printed- Total Volume

Start Time	54th Street Southbound						College Grove Drive Westbound						54th Street Northbound						54th Frontage Street Northeastbound						Krenning Street Eastbound						54th Frontage Street Southeastbound						Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Bear Right	Right	Hard Right	App. Total	Left	Bear Left	Thru	Bear Right	Right	App. Total	Hard Left	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Bear Left	Bear Right	Hard Right	App. Total	Hard Left	Left	Thru	Right	Hard Right	App. Total	Hard Left	Bear Left	Bear Right	Right	Hard Right	App. Total			
04:00 PM	46	208	0	10	1	265	31	0	27	0	41	99	0	3	1	142	43	189	4	1	2	0	0	7	5	3	21	5	0	34	0	0	0	3	0	3	0	597	597
04:15 PM	76	196	0	7	0	279	19	0	17	0	55	91	0	3	1	139	21	164	11	1	0	0	0	12	8	5	15	5	0	33	0	1	0	2	0	3	0	582	582
04:30 PM	66	202	0	9	0	277	18	0	12	1	63	94	0	3	0	154	22	179	11	3	0	1	0	15	2	5	16	8	0	31	0	0	0	3	0	3	0	599	599
04:45 PM	46	217	0	2	0	265	15	0	15	1	60	91	0	2	0	133	37	172	4	2	0	0	0	6	6	5	21	3	2	37	0	0	0	4	2	6	0	577	577
<b>Total</b>	234	823	0	28	1	1086	83	0	71	2	219	375	0	11	2	568	123	704	30	7	2	1	0	40	21	18	73	21	2	135	0	1	0	12	2	15	0	2355	2355
05:00 PM	71	205	0	10	0	286	24	0	22	1	69	116	0	6	2	128	35	171	4	0	1	0	0	5	3	6	22	6	0	37	0	0	0	2	0	2	0	617	617
05:15 PM	45	230	0	15	0	290	27	1	24	1	58	111	0	4	1	139	35	179	3	2	0	0	0	5	2	8	19	12	0	41	0	0	0	1	0	1	0	627	627
05:30 PM	53	222	0	10	1	286	43	1	22	0	71	137	1	2	1	127	20	150	3	1	4	0	0	8	5	2	19	4	0	30	0	0	0	3	0	3	1	614	615
05:45 PM	56	172	0	10	0	238	23	1	26	2	62	114	0	3	1	122	19	145	7	4	0	0	0	11	4	3	13	3	0	23	0	0	0	1	0	1	0	532	532
<b>Total</b>	225	829	0	45	1	1100	117	3	94	4	260	478	1	15	5	516	109	645	17	7	5	0	0	29	14	19	73	25	0	131	0	0	0	7	0	7	1	2390	2391
Grand Total	459	1652	0	73	2	2186	200	3	165	6	479	853	1	26	7	1084	232	1349	47	14	7	1	0	69	35	37	146	46	2	266	0	1	0	19	2	22	1	4745	4746
Apprch %	21	75.6	0	3.3	0.1		23.4	0.4	19.3	0.7	56.2		1.9	0.5	80.4	17.2			68.1	20.3	10.1	1.4	0		13.2	13.9	54.9	17.3	0.8		0	4.5	0	86.4	9.1				
Total %	9.7	34.8	0	1.5	0	46.1	4.2	0.1	3.5	0.1	10.1	18	0.5	0.1	22.8	4.9	28.4	1	0.3	0.1	0	0	1.5	0.7	0.8	3.1	1	0	5.6	0	0	0	0.4	0	0.5	0	100		

Start Time	54th Street Southbound						College Grove Drive Westbound						54th Street Northbound						54th Frontage Street Northeastbound						Krenning Street Eastbound						54th Frontage Street Southeastbound						Int. Total
	Left	Thru	Bear Right	Right	Hard Right	App. Total	Left	Bear Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Bear Left	Bear Right	Hard Right	App. Total	Hard Left	Left	Thru	Right	Hard Right	App. Total	Hard Left	Bear Left	Bear Right	Right	Hard Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																																					
Peak Hour for Entire Intersection Begins at 04:45 PM																																					
04:45 PM	46	217	0	2	0	265	15	0	15	1	60	91	2	0	133	37	172	4	2	0	0	0	6	6	5	21	3	2	37	0	0	0	4	2	6	577	
05:00 PM	71	205	0	10	0	286	24	0	22	1	69	116	6	2	128	35	171	4	0	1	0	0	5	3	6	22	6	0	37	0	0	0	2	0	2	617	
05:15 PM	45	230	0	15	0	290	27	1	24	1	58	111	4	1	139	35	179	3	2	0	0	0	5	2	8	19	12	0	41	0	0	0	1	0	1	627	
05:30 PM	53	222	0	10	1	286	43	1	22	0	71	137	2	1	127	20	150	3	1	4	0	0	8	5	2	19	4	0	30	0	0	0	3	0	3	614	
Total Volume	215	874	0	37	1	1127	109	2	83	3	258	455	14	4	527	127	672	14	5	5	0	0	24	16	21	81	25	2	145	0	0	0	10	2	12	2435	
% App. Total	19.1	77.6	0	3.3	0.1		24	0.4	18.2	0.7	56.7		2.1	0.6	78.4	18.9			58.3	20.8	20.8	0	0		11	14.5	55.9	17.2	1.4		0	0	0	83.3	16.7		
PHF	.757	.950	.000	.617	.250	.972	.634	.500	.865	.750	.908	.830	.583	.500	.948	.858	.939	.875	.625	.313	.000	.000	.750	.667	.656	.920	.521	.250	.884	.000	.000	.000	.625	.250	.500	.971	



City of San Diego  
 N/S: 54th Street  
 E/W: Krenning Street/College Grove Drive  
 Weather: Clear



City of San Diego  
 N/S: 54th Street  
 E/W: Krenning Street/College Grove Drive  
 Weather: Clear

Start Time	54th Street Southbound						College Grove Drive Westbound						54th Street Northbound						54th Frontage Street Northeastbound						Krenning Street Eastbound						54th Frontage Street Southeastbound						Int. Total
	Left	Thru	Bear Right	Right	Hard Right	App. Total	Left	Bear Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Bear Left	Bear Right	Hard Right	App. Total	Hard Left	Left	Thru	Right	Hard Right	App. Total	Hard Left	Bear Left	Bear Right	Right	Hard Right	App. Total		

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM						05:00 PM						04:00 PM						04:30 PM						04:00 PM										
+0 mins.	46	217	0	2	0	265	24	0	22	1	69	116	<b>3</b>	<b>1</b>	142	<b>43</b>	<b>189</b>	4	1	<b>2</b>	0	0	7	2	5	16	8	0	31	0	0	0	3	0	3
+15 mins.	<b>71</b>	205	0	10	0	286	27	<b>1</b>	24	1	58	111	3	1	139	21	164	<b>11</b>	1	0	0	0	12	<b>6</b>	5	21	3	<b>2</b>	37	0	<b>1</b>	0	2	0	3
+30 mins.	45	<b>230</b>	0	<b>15</b>	0	<b>290</b>	<b>43</b>	1	22	0	<b>71</b>	<b>137</b>	3	0	<b>154</b>	22	179	11	<b>3</b>	0	<b>1</b>	0	<b>15</b>	3	6	<b>22</b>	6	0	37	0	0	0	3	0	3
+45 mins.	53	222	0	10	<b>1</b>	286	23	1	<b>26</b>	<b>2</b>	62	114	2	0	133	37	172	4	2	0	0	0	6	2	<b>8</b>	19	<b>12</b>	0	<b>41</b>	0	0	0	<b>4</b>	<b>2</b>	<b>6</b>
Total Volume	215	874	0	37	1	1127	117	3	94	4	260	478	11	2	568	123	704	30	7	2	1	0	40	13	24	78	29	2	146	0	1	0	12	2	15
% App. Total	19.1	77.6	0	3.3	0.1		24.5	0.6	19.7	0.8	54.4		1.6	0.3	80.7	17.5		75	17.5	5	2.5	0		8.9	16.4	53.4	19.9	1.4		0	6.7	0	80	13.3	
PHF	.757	.950	.000	.617	.250	.972	.680	.750	.904	.500	.915	.872	.917	.500	.922	.715	.931	.682	.583	.250	.250	.000	.667	.542	.750	.886	.604	.250	.890	.000	.250	.000	.750	.250	.625

Location: San Diego  
 N/S: 54th Street  
 E/W: Krenning St/College Grove Dr

Date: 3/13/2024  
 Day: Wednesday



PEDESTRIANS

	North Leg 54th Street	East Leg College Grove Drive	South Leg 54th Street	Southwest Leg 54th Frontage Road	West Leg Krenning Street	Northwest Leg 54th Frontage Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	3	3	0	0	1	0	7
7:15 AM	6	4	0	0	0	0	10
7:30 AM	5	0	0	0	2	0	7
7:45 AM	0	0	0	0	1	0	1
8:00 AM	8	3	0	0	2	5	18
8:15 AM	1	2	0	0	2	2	7
8:30 AM	1	1	0	0	0	1	3
8:45 AM	8	0	0	0	10	8	26
TOTAL VOLUMES:	32	13	0	0	18	16	79

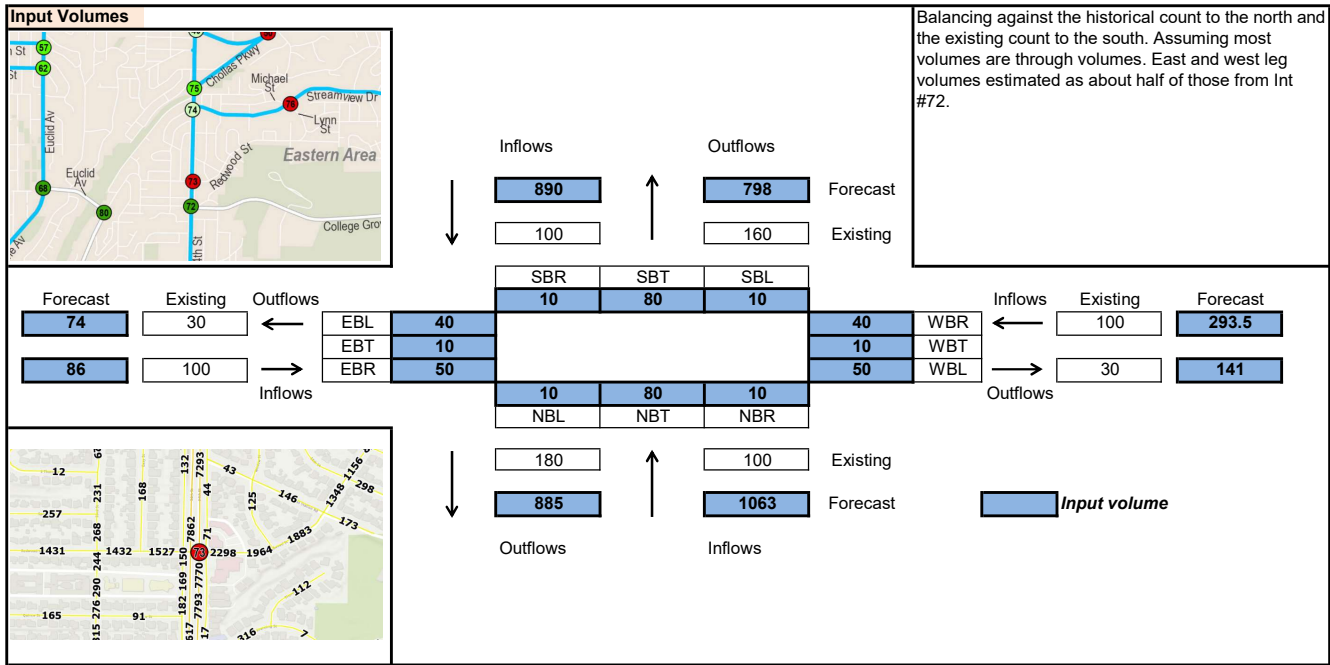
	North Leg 54th Street	East Leg College Grove Drive	South Leg 54th Street	Southwest Leg 54th Frontage Road	West Leg Krenning Street	Northwest Leg 54th Frontage Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	1	0	0	0	3	2	6
11:45 AM	4	1	0	0	5	7	17
12:00 PM	0	1	0	0	0	0	1
12:15 PM	0	1	0	0	3	0	4
12:30 PM	2	0	0	0	0	2	4
12:45 PM	2	1	0	0	0	3	6
1:00 PM	1	0	0	0	0	1	2
1:15 PM	0	0	0	0	0	0	0
TOTAL VOLUMES:	10	4	0	0	11	15	40

	North Leg 54th Street	East Leg College Grove Drive	South Leg 54th Street	Southwest Leg 54th Frontage Road	West Leg Krenning Street	Northwest Leg 54th Frontage Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	4	1	0	0	5	4	14
4:15 PM	2	1	0	0	3	1	7
4:30 PM	5	1	0	0	5	4	15
4:45 PM	3	1	0	0	7	3	14
5:00 PM	3	1	0	0	5	3	12
5:15 PM	5	2	0	0	1	6	14
5:30 PM	3	2	0	0	4	3	12
5:45 PM	5	5	0	0	3	6	19
TOTAL VOLUMES:	30	14	0	0	33	30	107

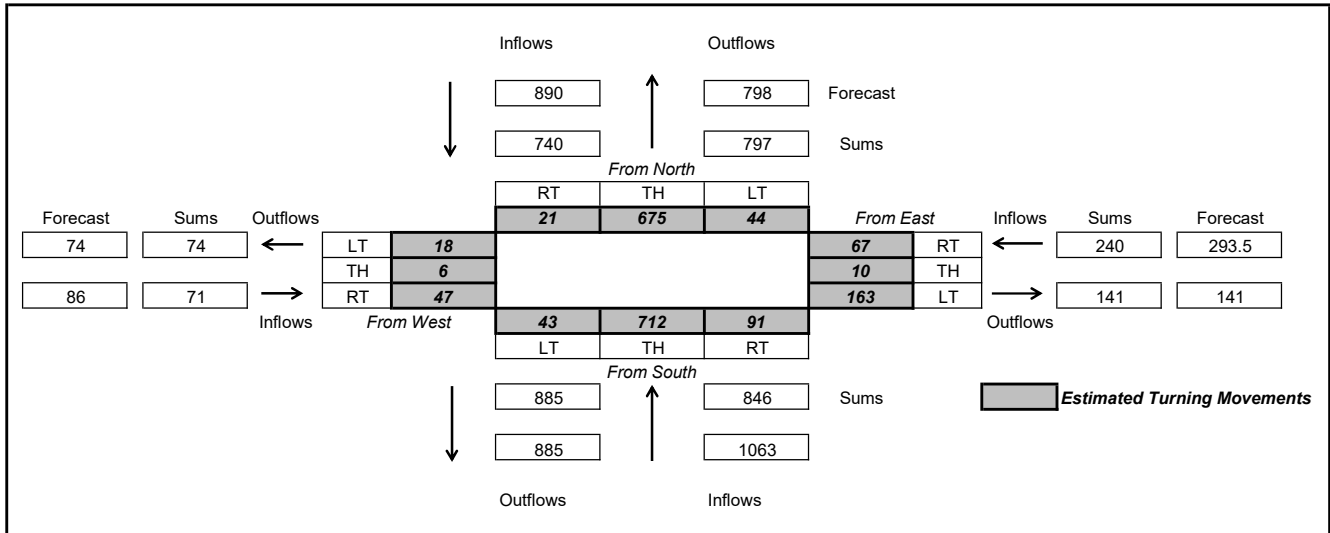


77) 54th St & Redwood St

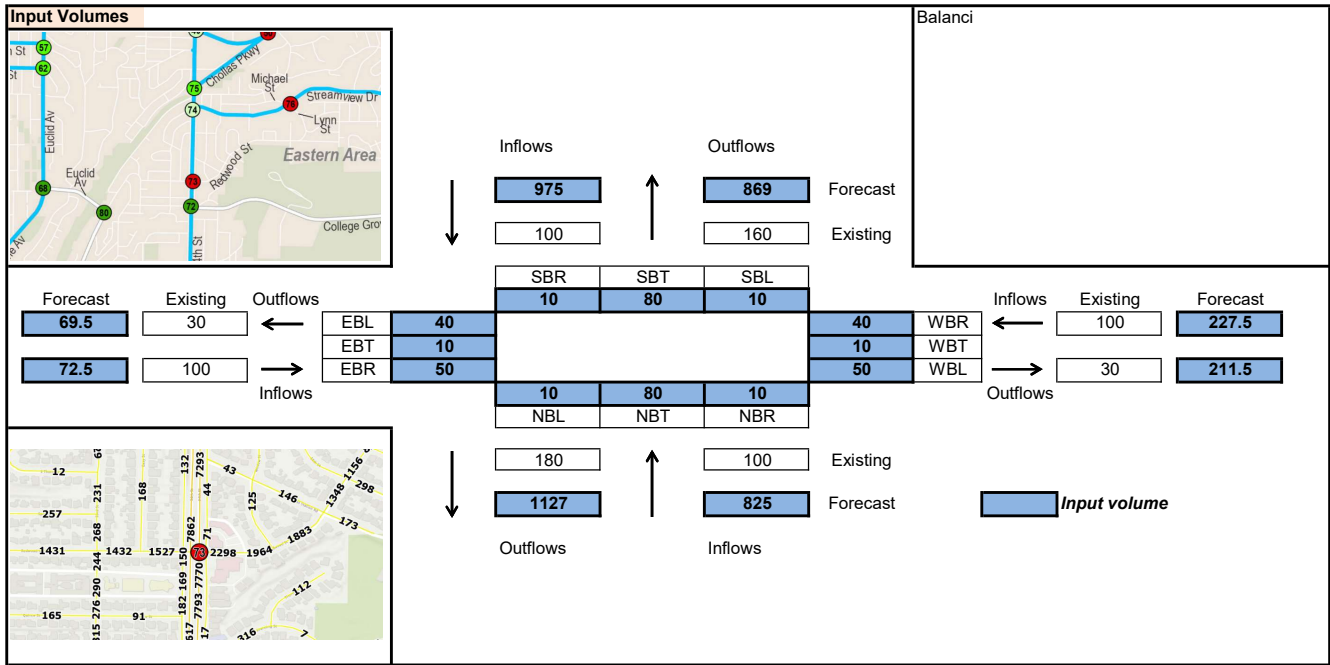
### Iterative Method Estimated Turning Movements



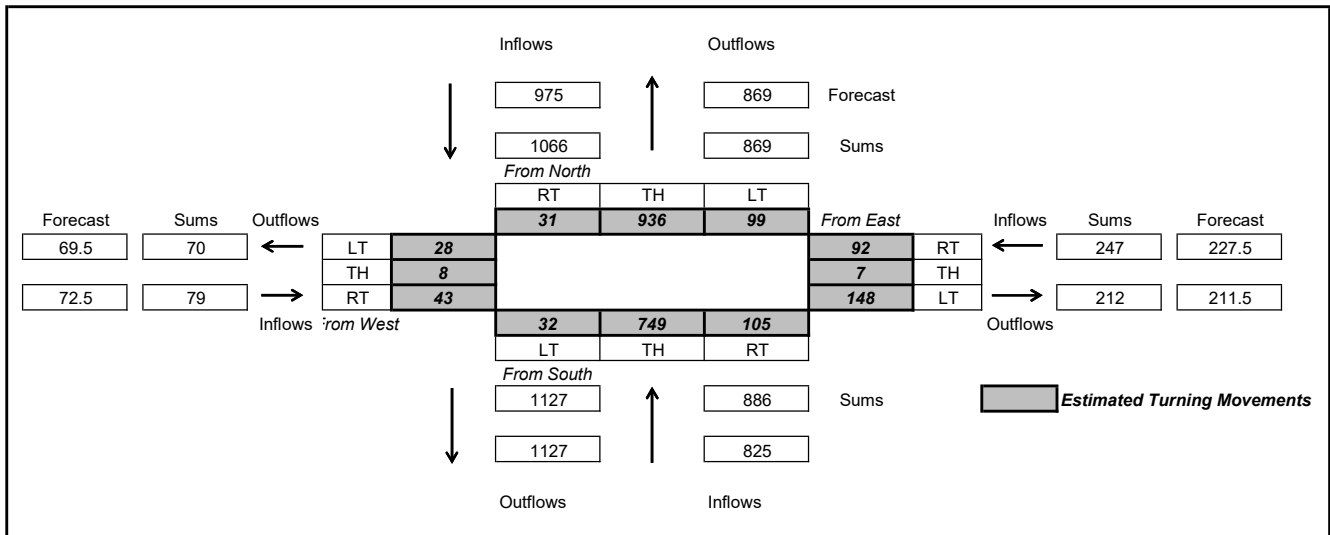
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



**Estimated Turning Movements**



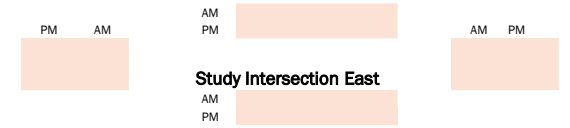
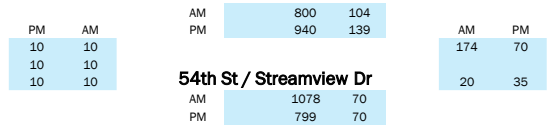
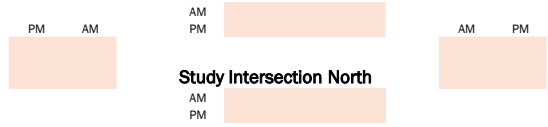
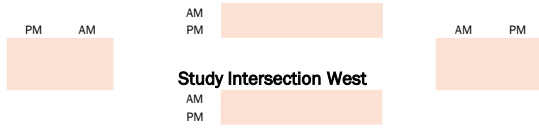
78) Streamview Dr & 54th St



## 54th St / Streamview Dr

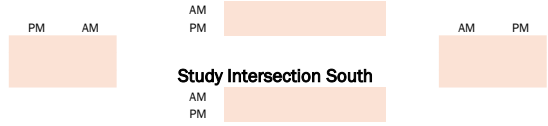
If intersection turning movements can be calculated using adjacent studied intersections, use that method  
 If they cannot, consult Replica and SANDAG TFIC to find the segment ADT for all legs of the intersection

Use these ADTs, and percentages of 7% and 9% for AM/PM respectively, to determine estimate of intersection turning movements  
 Fine-tune these volumes based upon surrounding study intersections



## Methodology

Volumes were taken from Int 73 and 75



AM	800	104
PM	940	139

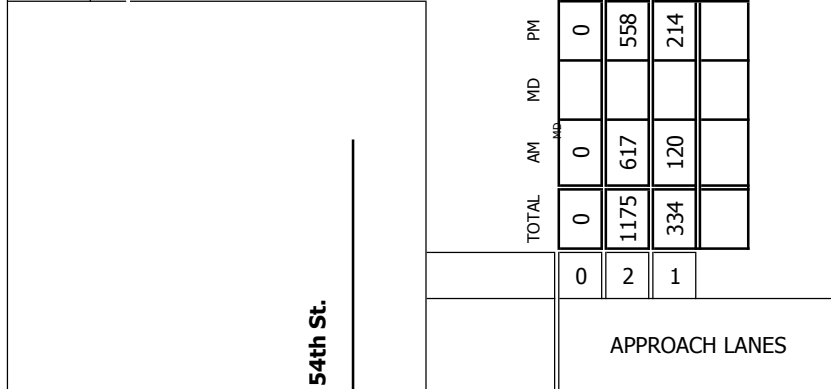
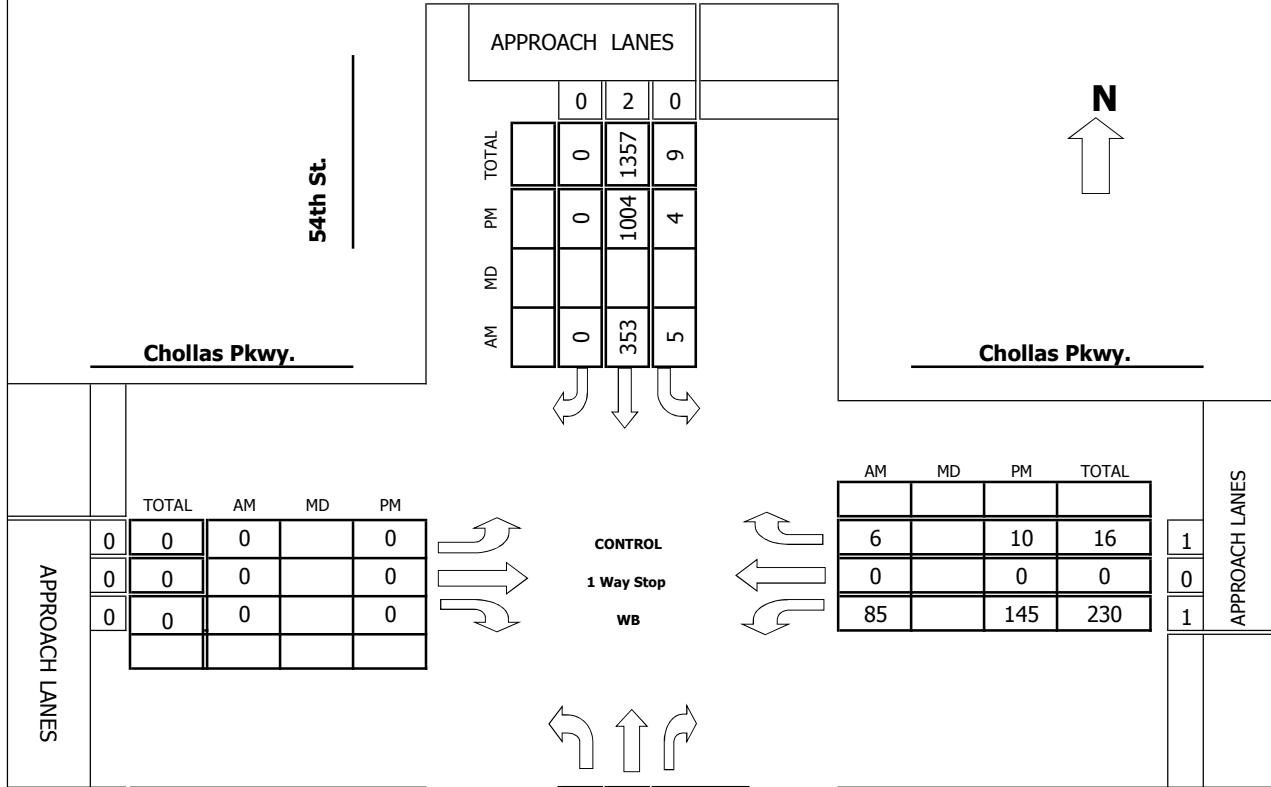
AM	PM
174	70
20	35

AM	1078	70
PM	799	70

79) 54th St & Chollas Pkwy

**Project #:** IC 068-16

**TMC SUMMARY OF 54th St. & Chollas Pkwy.**



**LOCATION #:** IC 068-16

**TURNING MOVEMENT COUNT**

**54th St. & Chollas Pkwy.**  
 (Intersection Name)

TUESDAY                      03/29/2016  
 Day                                      Date

**COUNT PERIODS**

<b>AM</b>	700AM	-	900AM
<b>NOON</b>		-	
<b>PM</b>	400PM	-	600PM

AM PEAK HOUR                      800 AM

NOON PEAK HOUR                      \_\_\_\_\_

PM PEAK HOUR                      430 PM

# Intersection Turning Movement

Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: 54th St.      DATE: 03/29/2016      LOCATION: San Diego  
 E-W STREET: Chollas Pkwy.      DAY: TUESDAY      PROJECT#: IC 068-16

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	0	2	1	0	2	0	0	0	0	1	0	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	125	13	1	63	0	0	0	0	17	0	0	219
7:15 AM	0	144	30	1	60	0	0	0	0	20	0	1	256
7:30 AM	0	129	28	0	67	0	0	0	0	22	0	1	247
7:45 AM	0	143	29	1	101	0	0	0	0	22	0	4	300
8:00 AM	0	146	31	2	78	0	0	0	0	26	0	2	285
8:15 AM	0	142	21	1	78	0	0	0	0	15	0	0	257
8:30 AM	0	167	25	2	83	0	0	0	0	22	0	2	301
8:45 AM	0	162	43	0	114	0	0	0	0	22	0	2	343
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	1158	220	8	644	0	0	0	0	166	0	12	2208
Approach %	0.00	84.03	15.97	1.23	98.77	0.00	####	####	####	93.26	0.00	6.74	
App/Depart	1378	/	1170	652	/	810	0	/	228	178	/	0	

AM Peak Hr Begins at: 800 AM

**PEAK**

Volumes	0	617	120	5	353	0	0	0	0	85	0	6	1186
Approach %	0.00	83.72	16.28	1.40	98.60	0.00	####	####	####	93.41	0.00	6.59	

**PEAK HR.**

FACTOR:	0.899	0.785	0.000	0.813	0.864
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CONTROL: 1 Way Stop (WB)  
 COMMENT 1:  
 GPS: 32.744894, -117.079161

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

N-S STREET: **54th St.**      DATE: **03/29/2016**      LOCATION: **San Diego**  
 E-W STREET: **Chollas Pkwy.**      DAY: **TUESDAY**      PROJECT# **IC 068-16**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	1	0	2	0	0	0	0	1	0	1	

1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	134	45	3	211	0	0	0	0	52	0	1	446
4:15 PM	0	139	48	1	207	0	0	0	0	45	0	3	443
4:30 PM	0	146	57	1	268	0	0	0	0	36	0	2	510
4:45 PM	0	121	52	0	202	0	0	0	0	38	0	3	416
5:00 PM	0	137	38	2	262	0	0	0	0	34	0	2	475
5:15 PM	0	154	67	1	272	0	0	0	0	37	0	3	534
5:30 PM	0	145	53	3	245	0	0	0	0	38	0	6	490
5:45 PM	0	126	61	1	207	0	0	0	0	37	0	2	434
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	1102	421	12	1874	0	0	0	0	317	0	22	3748
Approach %	0.00	72.36	27.64	0.64	99.36	0.00	####	####	####	93.51	0.00	6.49	
App/Depart	1523	/	1124	1886	/	2191	0	/	433	339	/	0	

PM Peak Hr Begins at: 430 PM

**PEAK**

Volumes	0	558	214	4	1004	0	0	0	0	145	0	10	1935
Approach %	0.00	72.28	27.72	0.40	99.60	0.00	####	####	####	93.55	0.00	6.45	

**PEAK HR.**

FACTOR:	0.873	0.923	0.000	0.945	0.906
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CONTROL: **1 Way Stop (WB)**  
 COMMENT 1: **0**  
 GPS: **32.744894, -117.079161**



## Pedestrian & Bicycle Study

**N-S STREET:** 54th St.  
**E-W STREET:** Chollas Pkwy.

**Date:** 03/29/2016  
**Day:** TUESDAY

**City:** San Diego  
**Project #:** IC 068-16

	PEDESTRIANS -- ADULTS ONLY			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	1	0
7:15 AM	1	0	3	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	1	1
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	1	0
<b>TOTAL</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>1</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

	PEDESTRIANS -- ADULTS ONLY			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	1	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	1	0
5:30 PM	1	1	1	3
5:45 PM	0	0	1	0
<b>TOTAL</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>3</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	1
4:15 PM	0	0	0	1
4:30 PM	0	0	0	0
4:45 PM	0	0	1	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	3	0
5:45 PM	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>

	PEDESTRIANS -- CHILDREN ONLY			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	1	0
7:15 AM	0	0	1	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	1	0	0
8:45 AM	0	0	1	0
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>

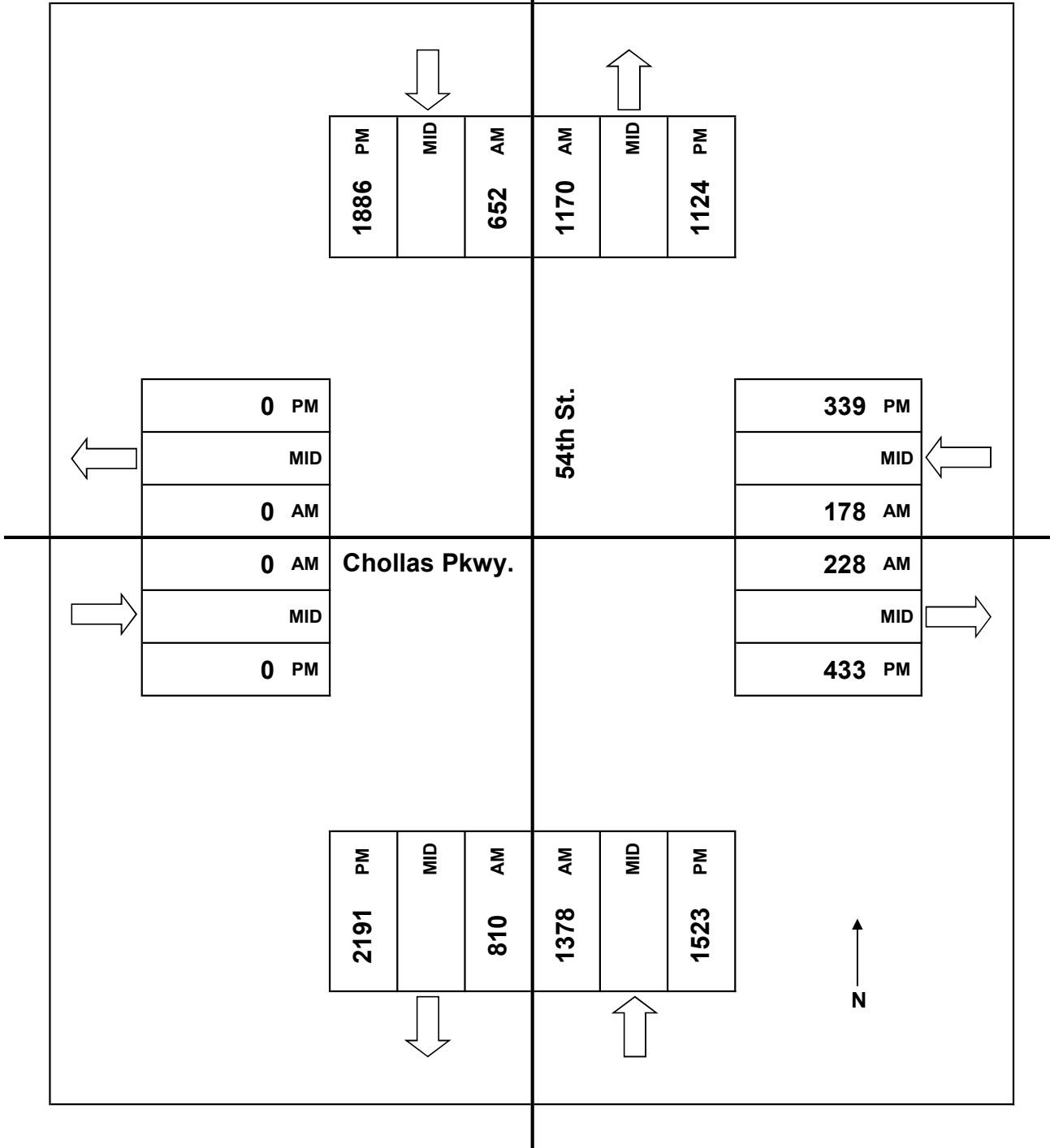
	PEDESTRIANS -- SENIORS ONLY			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	2	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>

	PEDESTRIANS -- CHILDREN ONLY			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	1	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	2	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	2	2
5:45 PM	0	0	0	2
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>4</b>

	PEDESTRIANS -- SENIORS ONLY			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	1	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	1	0
5:30 PM	0	1	0	2
5:45 PM	0	0	1	0
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>2</b>

JOB# IC 068-16  
VALIDATED: \_\_\_\_\_

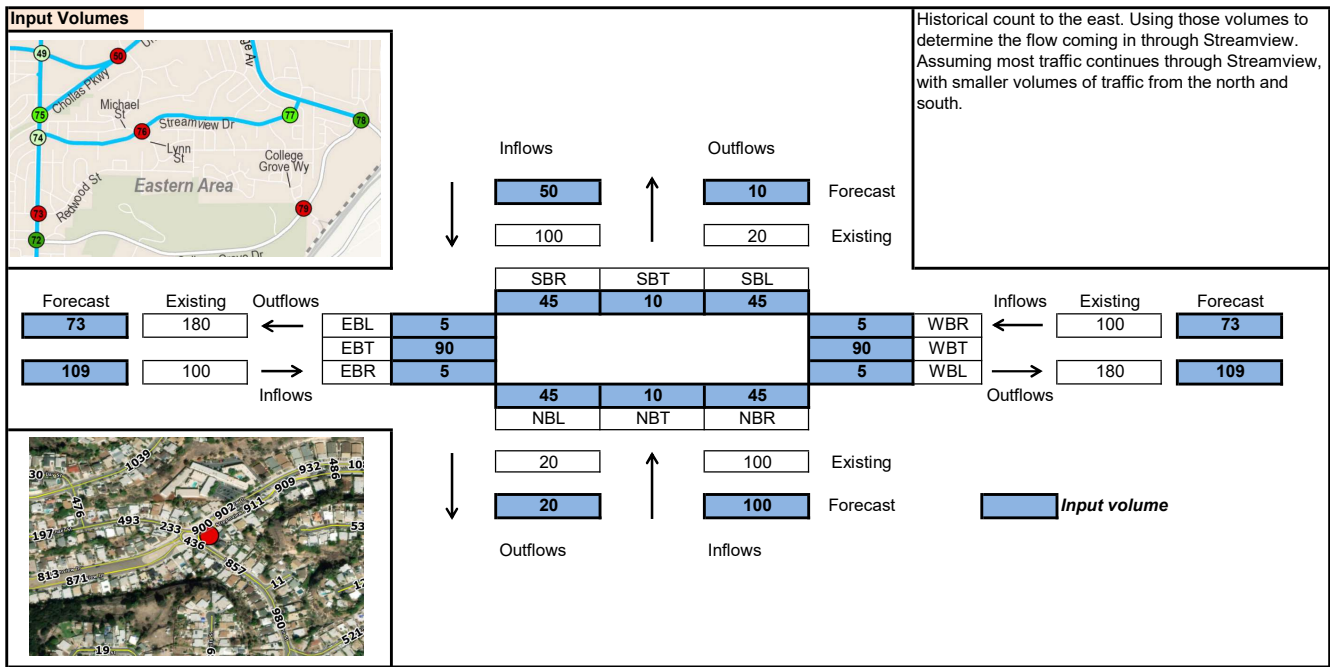
DATE: 03/29/2016  
DAY: TUESDAY



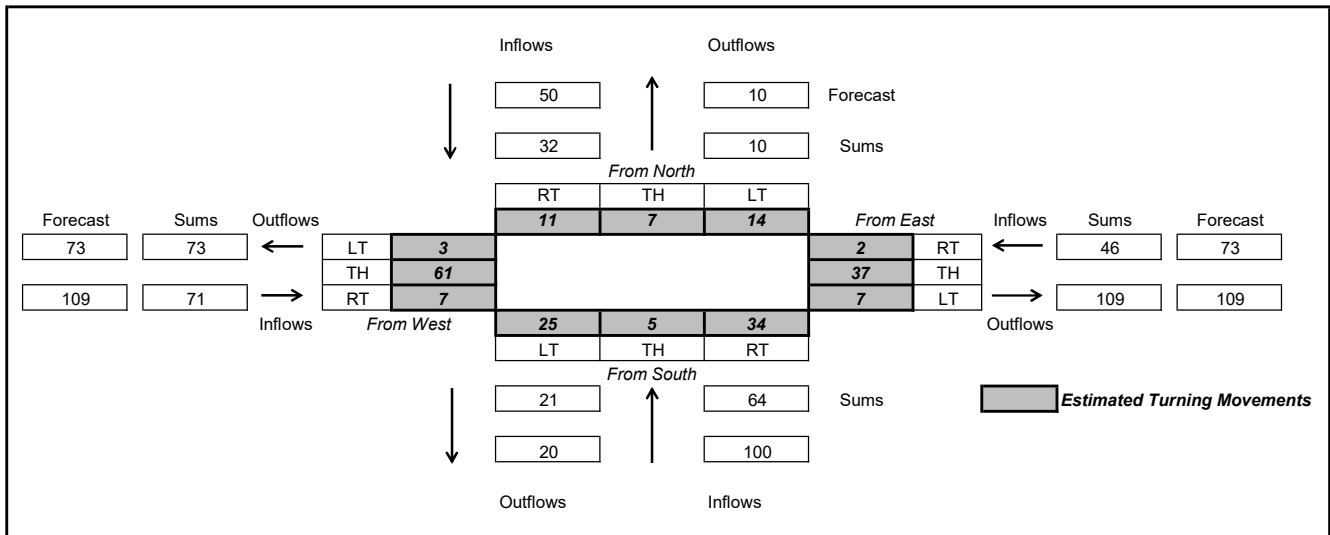
80) Lynn St & Streamview Dr



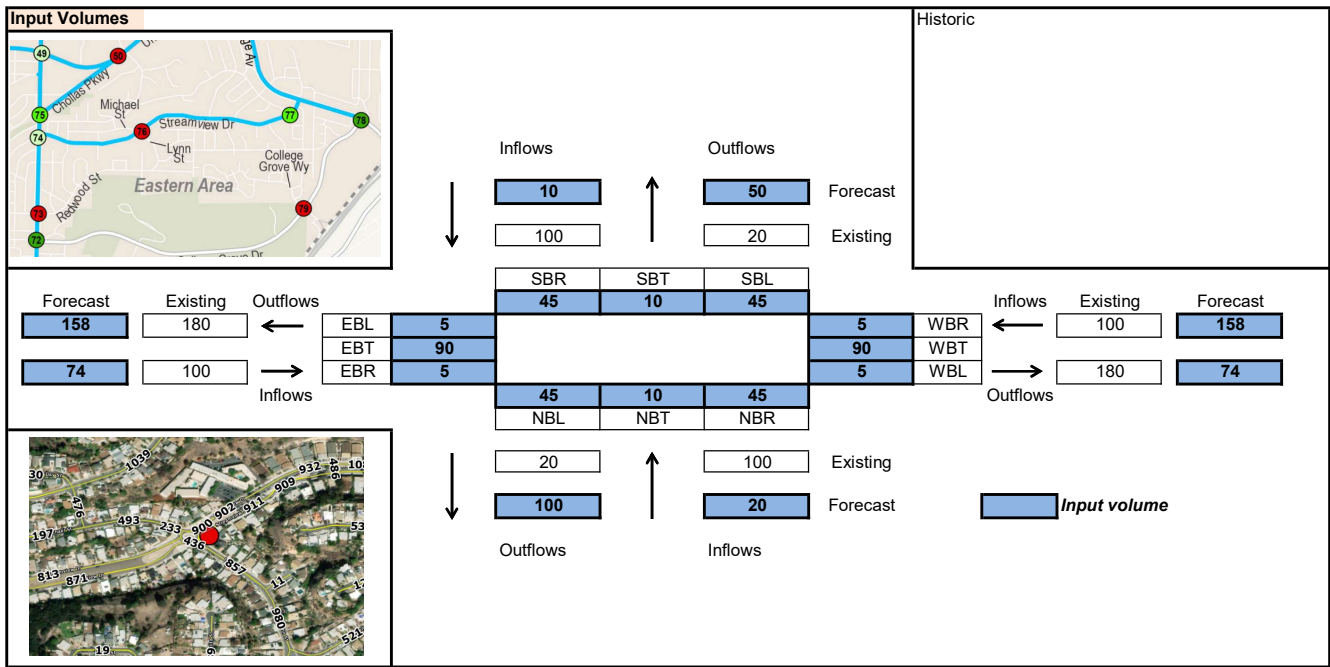
### Iterative Method Estimated Turning Movements



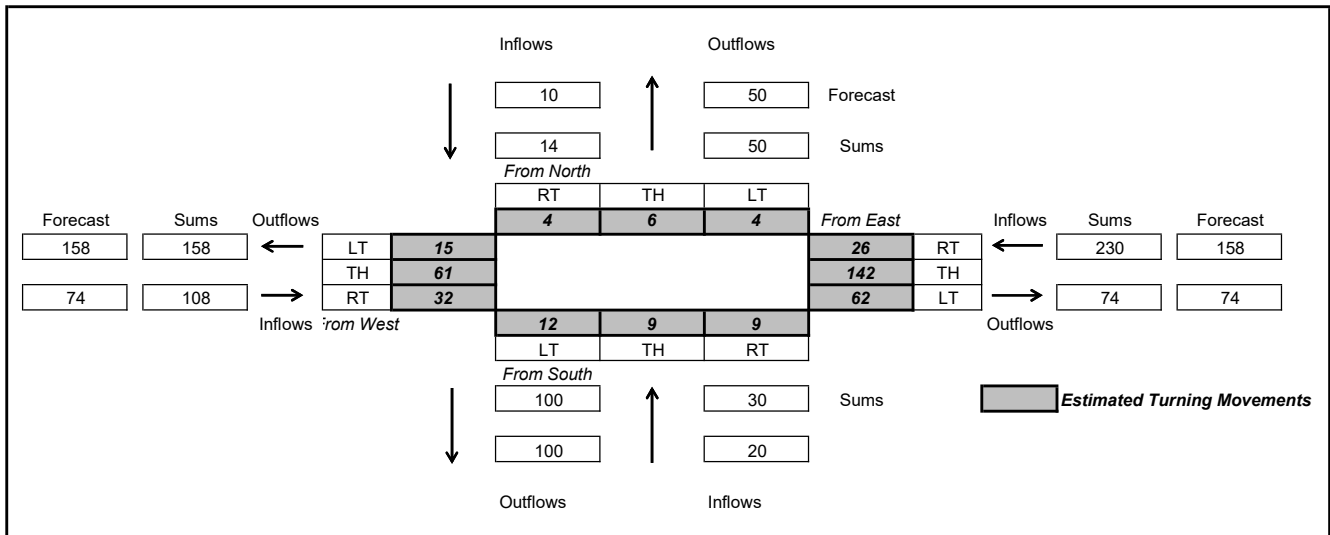
### Estimated Turning Movements



### Iterative Method Estimated Turning Movements



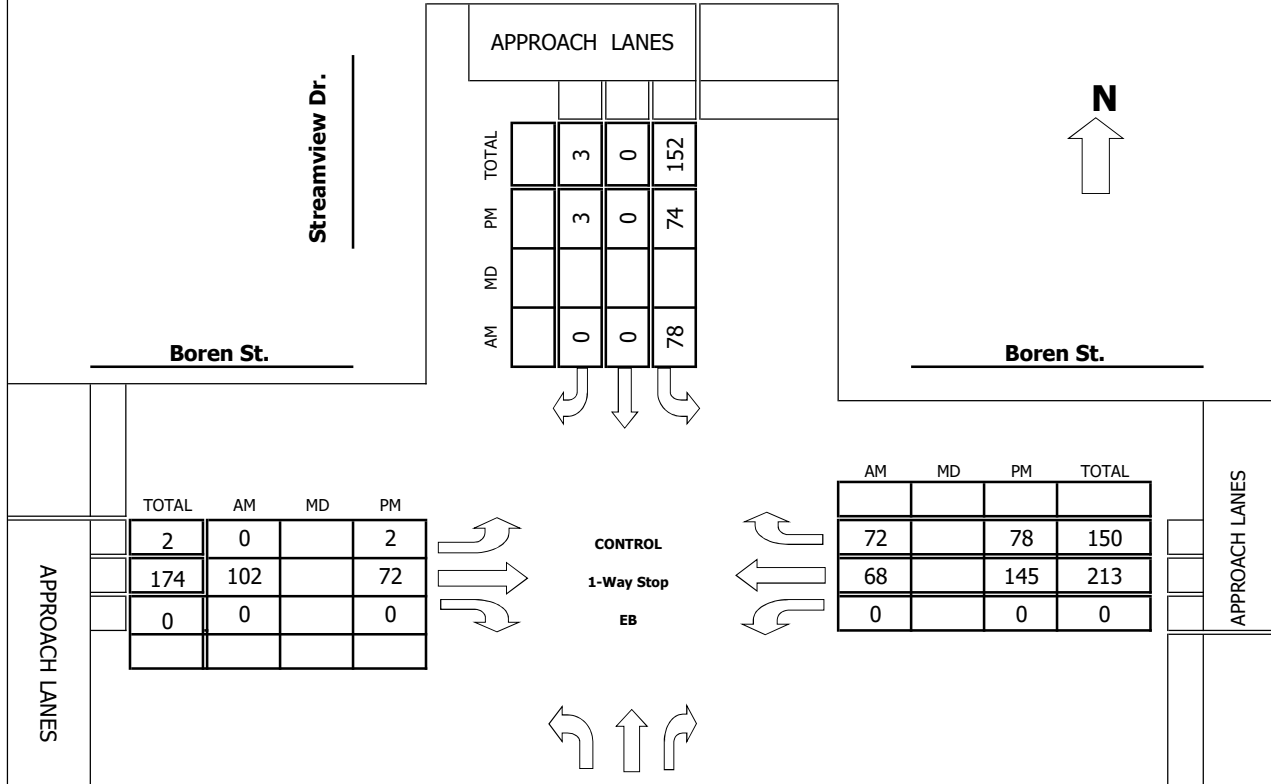
**Estimated Turning Movements**



81) Streamview Dr & Boren St

**Project #:** IC 049-17

**TMC SUMMARY OF Streamview Dr. & Boren St.**



TOTAL	AM	MD	PM
2	0		2
174	102		72
0	0		0

AM	MD	PM	TOTAL
72		78	150
68		145	213
0		0	0

APPROACH LANES			
AM	MD	PM	TOTAL
0		3	3
0		0	0
78		74	152

TOTAL	AM	MD	PM
0	0	0	0
0	0	0	0
0	0	0	0

**LOCATION #:** IC 049-17

**TURNING MOVEMENT COUNT**

**Streamview Dr. & Boren St.**  
(Intersection Name)

THURSDAY  
Day

03/23/17  
Date

**COUNT PERIODS**

<b>AM</b>	700AM	-	900AM
<b>NOON</b>		-	
<b>PM</b>	400PM	-	600PM

AM PEAK HOUR 715 AM

NOON PEAK HOUR \_\_\_\_\_

PM PEAK HOUR 500 PM

## Intersection Turning Movement Prepared by:



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: **Streamview Dr.**      DATE: **03/23/17**      LOCATION: **San Diego**  
 E-W STREET: **Boren St.**      DAY: **THURSDAY**      PROJECT# **IC 049-17**

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	7	0	0	2	22	0	0	10	8	49
7:15 AM	0	0	0	19	0	0	0	33	0	0	17	17	86
7:30 AM	0	0	0	21	0	0	0	25	0	0	13	14	73
7:45 AM	0	0	0	16	0	0	0	22	0	0	17	26	81
8:00 AM	0	0	0	22	0	0	0	22	0	0	21	15	80
8:15 AM	0	0	0	24	0	0	0	26	0	0	18	15	83
8:30 AM	0	0	0	20	0	1	0	25	0	0	12	14	72
8:45 AM	0	0	0	13	0	0	0	24	0	0	7	7	51
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	142	0	1	2	199	0	0	115	116	575
Approach %	####	####	####	99.30	0.00	0.70	1.00	99.00	0.00	0.00	49.78	50.22	
App/Depart	0	/	118	143	/	0	201	/	341	231	/	116	

AM Peak Hr Begins at: 715 AM

PEAK	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	78	0	0	0	102	0	0	68	72	320
Approach %	####	####	####	100.00	0.00	0.00	0.00	100.00	0.00	0.00	48.57	51.43	

PEAK HR. FACTOR:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0.000			0.886			0.773			0.814			0.930

CONTROL: **1-Way Stop (EB)**  
 COMMENT 1:  
 GPS: **32.744750, -117.059555**

# Intersection Turning Movement



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



N-S STREET: Streamview Dr.      DATE: 03/23/17      LOCATION: San Diego  
0  
 E-W STREET: Boren St.      DAY: THURSDAY      PROJECT# IC 049-17

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	0	0	

1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	0	15	0	0	0	16	0	0	27	30	88
4:15 PM	0	0	0	28	0	1	0	18	0	0	25	19	91
4:30 PM	0	0	0	15	0	1	0	30	0	0	35	14	95
4:45 PM	0	0	0	20	0	0	2	27	0	0	25	13	87
5:00 PM	0	0	0	16	0	0	0	22	0	0	33	18	89
5:15 PM	0	0	0	22	0	0	1	13	0	0	47	10	93
5:30 PM	0	0	0	16	0	0	0	17	0	0	36	28	97
5:45 PM	0	0	0	20	0	3	1	20	0	0	29	22	95
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	152	0	5	4	163	0	0	257	154	735
Approach %	####	####	####	96.82	0.00	3.18	2.40	97.60	0.00	0.00	62.53	37.47	
App/Depart	0	/	158	157	/	0	167	/	315	411	/	262	

PM Peak Hr Begins at: 500 PM

PEAK													
Volumes	0	0	0	74	0	3	2	72	0	0	145	78	374
Approach %	####	####	####	96.10	0.00	3.90	2.70	97.30	0.00	0.00	65.02	34.98	

PEAK HR. FACTOR:	0.000	0.837	0.841	0.871	0.964
------------------	-------	-------	-------	-------	-------

CONTROL: 1-Way Stop (EB)  
 COMMENT 1: 0  
 GPS: 32.744750, -117.059555



**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745



**veracitytrafficgroup**

### Pedestrian & Bicycle Study

**N-S STREET:** Streamview Dr.  
**E-W STREET:** Boren St.

**Date:** 03/23/17  
**Day:** THURSDAY

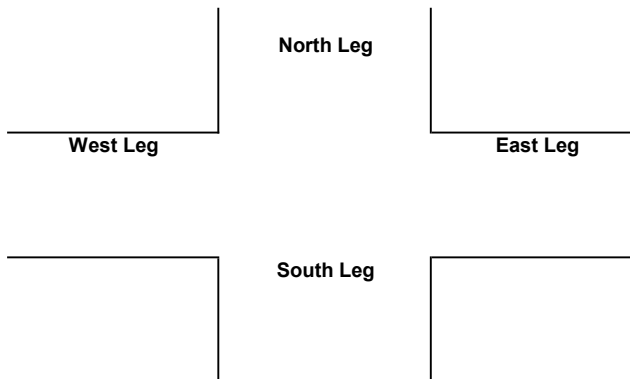
**City:** San Diego  
**Project #:** IC 049-17

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	1	0	2	0
7:15 AM	3	0	0	0
7:30 AM	0	0	2	0
7:45 AM	1	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	1	0
8:30 AM	1	0	5	0
8:45 AM	0	0	1	0
<b>TOTAL</b>	<b>6</b>	<b>0</b>	<b>11</b>	<b>0</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

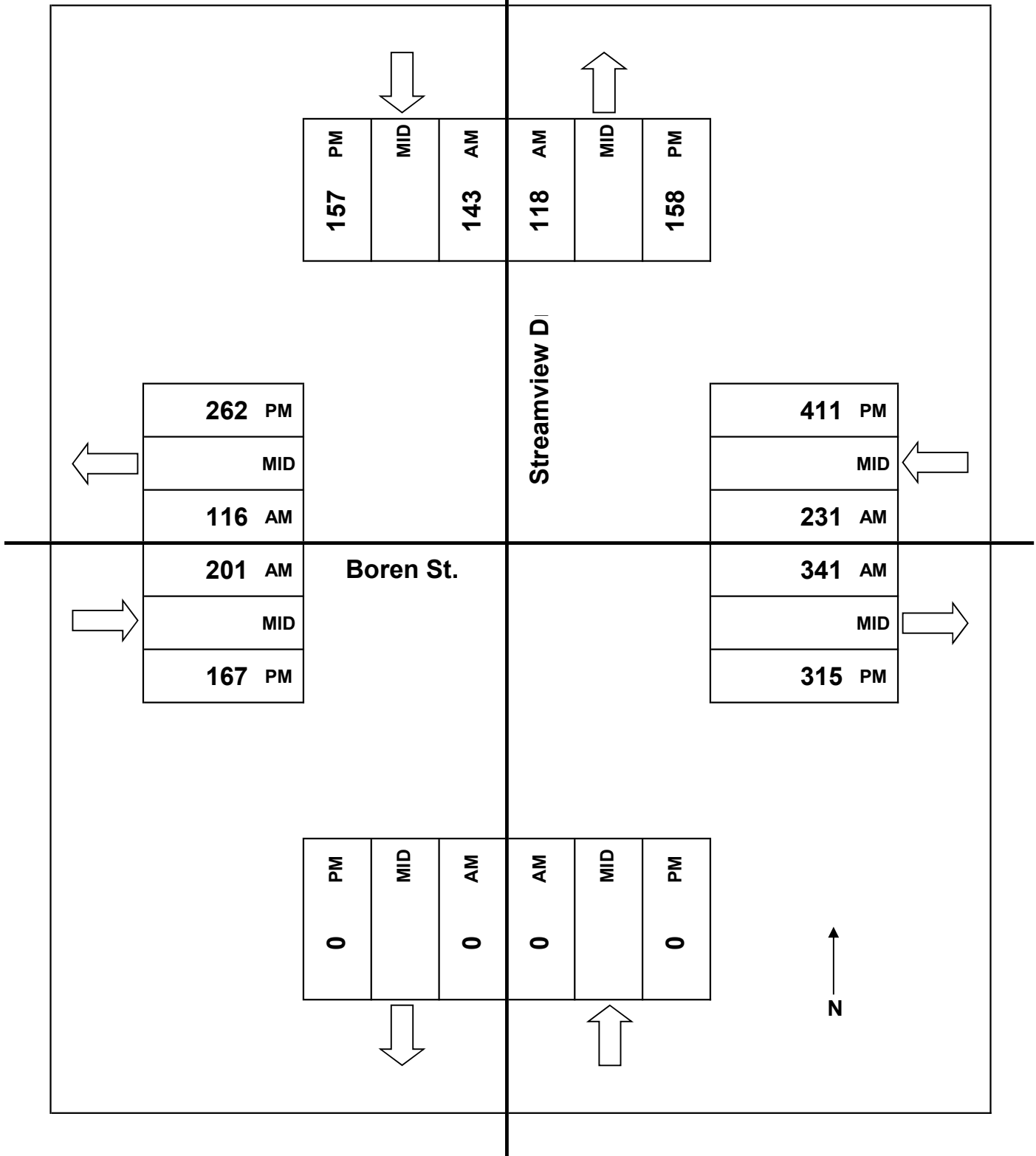
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	3	0	2	0
4:15 PM	0	0	0	0
4:30 PM	0	0	3	0
4:45 PM	0	0	1	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	1	0
5:45 PM	0	0	0	0
<b>TOTAL</b>	<b>3</b>	<b>0</b>	<b>7</b>	<b>0</b>

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



JOB# IC 049-17  
VALIDATED: \_\_\_\_\_

DATE: 03/23/17  
DAY: THURSDAY





82) College Ave & Streamview Dr

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: College Ave & Streamview Dr/Billman St  
 City: San Diego  
 Control: Signalized

Project ID: 24-040164-006  
 Date: 9/5/2024

### Data - Totals

NS/EW Streets:	College Ave				College Ave				Streamview Dr/Billman St				Streamview Dr/Billman St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	18	237	13	0	1	112	7	0	21	9	31	0	13	2	12	0	476
7:15 AM	24	325	13	0	9	93	1	0	27	12	33	0	18	3	14	0	572
7:30 AM	20	304	13	1	6	98	6	0	27	16	35	0	17	7	8	0	558
7:45 AM	32	350	10	0	8	123	9	0	19	5	27	0	9	8	17	0	617
8:00 AM	50	316	19	0	6	124	11	0	27	9	37	0	10	7	21	0	637
8:15 AM	47	313	9	0	6	141	3	4	26	6	41	0	15	3	7	0	621
8:30 AM	19	366	14	1	6	134	5	2	24	4	40	0	8	4	7	0	634
8:45 AM	19	327	14	0	10	201	13	1	9	6	31	0	8	4	6	0	649
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	229	2538	105	2	52	1026	55	7	180	67	275	0	98	38	92	0	4764
	7.97%	88.31%	3.65%	0.07%	4.56%	90.00%	4.82%	0.61%	34.48%	12.84%	52.68%	0.00%	42.98%	16.67%	40.35%	0.00%	
<b>PEAK HR :</b>	<b>08:00 AM - 09:00 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	135	1322	56	1	28	600	32	7	86	25	149	0	41	18	41	0	2541
<b>PEAK HR FACTOR :</b>	0.675	0.903	0.737	0.250	0.700	0.746	0.615	0.438	0.796	0.694	0.909	0.000	0.683	0.643	0.488	0.000	0.979
	0.946				0.741				0.890				0.658				
PM	1	2	0	0	1	2	0	0	1	1	0	0	1	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	44	215	23	0	20	255	19	0	12	5	33	0	18	13	4	0	661
4:15 PM	36	205	17	1	15	253	14	0	12	13	24	0	11	9	9	0	619
4:30 PM	31	206	18	1	10	214	12	0	14	8	23	0	13	7	4	0	561
4:45 PM	33	240	18	1	11	295	19	2	12	7	37	0	17	11	8	0	711
5:00 PM	44	204	16	0	19	246	14	2	15	10	24	1	17	12	5	0	629
5:15 PM	30	233	24	0	19	265	17	0	12	5	35	0	12	6	12	0	670
5:30 PM	30	180	22	1	15	232	15	2	10	12	36	0	20	6	9	0	590
5:45 PM	29	209	13	0	14	241	13	2	12	9	26	0	15	9	8	0	600
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	277	1692	151	4	123	2001	123	8	99	69	238	1	123	73	59	0	5041
	13.04%	79.66%	7.11%	0.19%	5.45%	88.74%	5.45%	0.35%	24.32%	16.95%	58.48%	0.25%	48.24%	28.63%	23.14%	0.00%	
<b>PEAK HR :</b>	<b>04:45 PM - 05:45 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	137	857	80	2	64	1038	65	6	49	34	132	1	66	35	34	0	2600
<b>PEAK HR FACTOR :</b>	0.778	0.893	0.833	0.500	0.842	0.880	0.855	0.750	0.817	0.708	0.892	0.250	0.825	0.729	0.708	0.000	0.914
	0.921				0.897				0.931				0.938				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** College Ave & Streamview Dr/Billman St  
**City:** San Diego  
**Control:** Signalized

**Project ID:** 24-040164-006  
**Date:** 9/5/2024

### Data - Bikes

NS/EW Streets:	College Ave				College Ave				Streamview Dr/Billman St				Streamview Dr/Billman St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0	0	0	0	3
<b>PEAK HR :</b>	08:00 AM - 09:00 AM																TOTAL
<b>PEAK HR VOL :</b>	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
<b>PEAK HR FACTOR :</b>	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.250				0.250				0.250								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	50.00%	0.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	9
<b>PEAK HR :</b>	04:45 PM - 05:45 PM																TOTAL
<b>PEAK HR VOL :</b>	1	0	1	0	0	3	0	0	0	0	2	0	0	0	0	0	7
<b>PEAK HR FACTOR :</b>	0.250	0.000	0.250	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.583
	0.500				0.375				0.250								

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** College Ave & Streamview Dr/Billman St  
**City:** San Diego

**Project ID:** 24-040164-006  
**Date:** 9/5/2024

### Data - Pedestrians (Crosswalks)

NS/EW Streets:	College Ave		College Ave		Streamview Dr/Billman St		Streamview Dr/Billman St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	1	0	2	1	1	0	5
7:15 AM	0	0	0	1	0	0	0	2	3
7:30 AM	0	0	2	0	0	0	0	0	2
7:45 AM	1	0	0	1	0	1	1	0	4
8:00 AM	2	0	3	0	1	1	1	0	8
8:15 AM	1	0	5	0	0	0	0	0	6
8:30 AM	1	1	0	1	0	0	0	0	3
8:45 AM	1	1	2	2	0	1	0	1	8
<b>TOTAL VOLUMES :</b>	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
<b>APPROACH %'s :</b>	6	2	13	5	3	4	3	3	39
	75.00%	25.00%	72.22%	27.78%	42.86%	57.14%	50.00%	50.00%	
<b>PEAK HR :</b>	<b>08:00 AM - 09:00 AM</b>								TOTAL
<b>PEAK HR VOL :</b>	5	2	10	3	1	2	1	1	25
<b>PEAK HR FACTOR :</b>	0.625	0.500	0.500	0.375	0.250	0.500	0.250	0.250	0.781
	0.875		0.650		0.375		0.500		

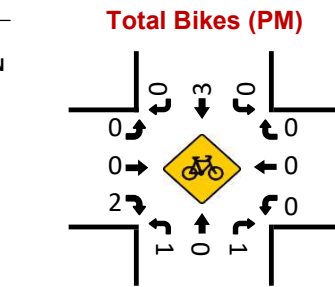
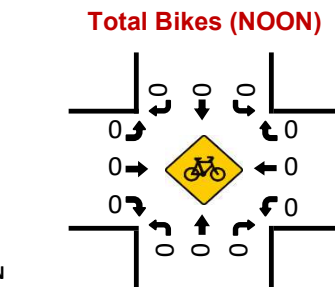
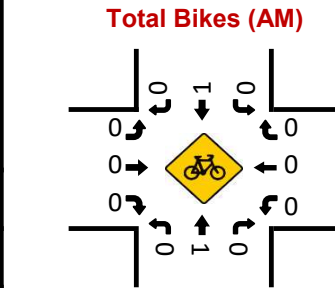
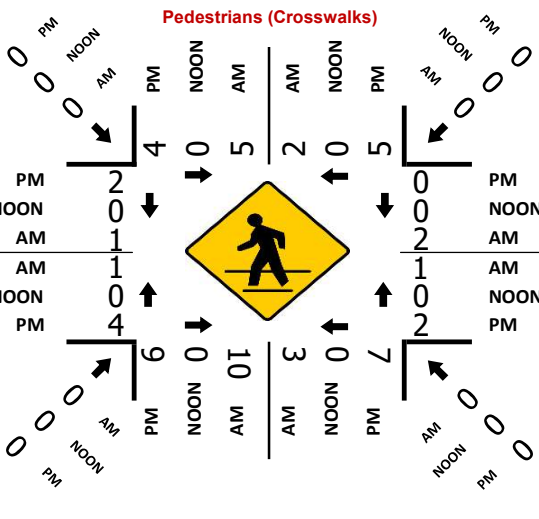
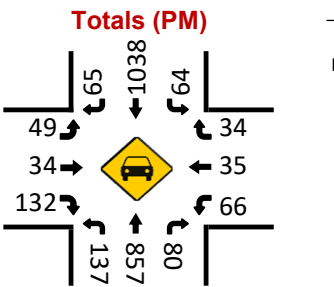
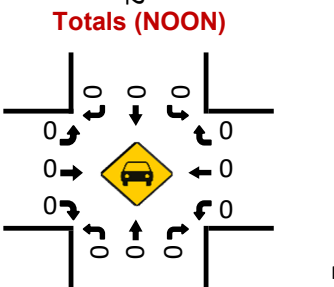
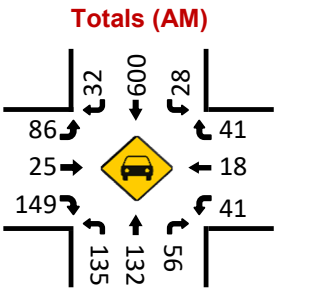
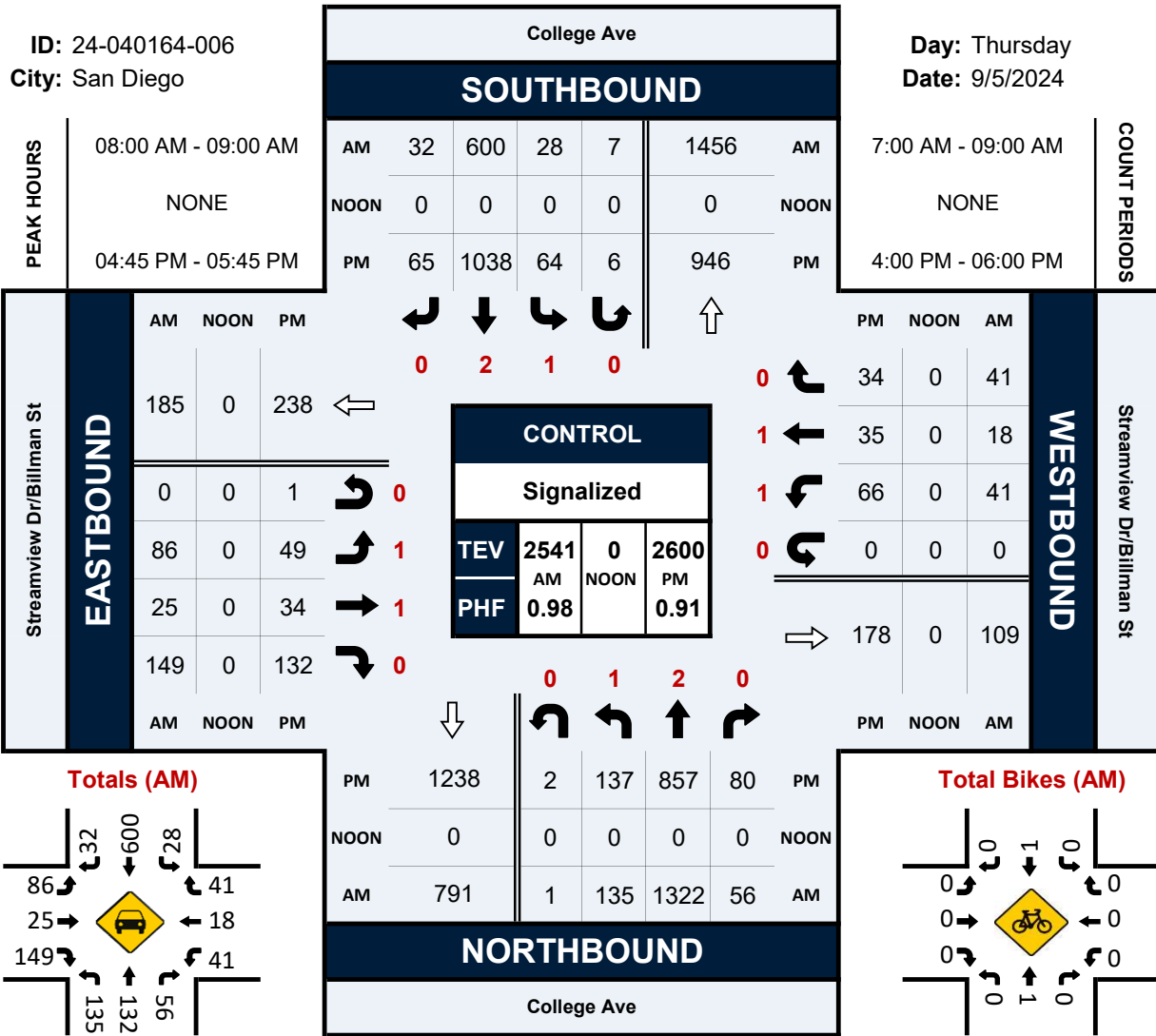
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	1	1	1	3	0	2	0	0	8
4:15 PM	0	1	3	0	1	0	1	0	6
4:30 PM	0	2	0	1	0	0	1	2	6
4:45 PM	0	2	4	2	0	0	0	1	9
5:00 PM	2	2	2	1	0	0	2	0	9
5:15 PM	2	1	1	4	0	0	1	1	10
5:30 PM	0	0	2	0	2	0	1	0	5
5:45 PM	0	2	2	1	0	0	2	0	7
<b>TOTAL VOLUMES :</b>	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
<b>APPROACH %'s :</b>	5	11	15	12	3	2	8	4	60
	31.25%	68.75%	55.56%	44.44%	60.00%	40.00%	66.67%	33.33%	
<b>PEAK HR :</b>	<b>04:45 PM - 05:45 PM</b>								TOTAL
<b>PEAK HR VOL :</b>	4	5	9	7	2	0	4	2	33
<b>PEAK HR FACTOR :</b>	0.500	0.625	0.563	0.438	0.250	0.250	0.500	0.500	0.825
	0.563		0.667		0.250		0.750		

# College Ave & Streamview Dr/Billman St

## Peak Hour Turning Movement Count

ID: 24-040164-006  
City: San Diego

Day: Thursday  
Date: 9/5/2024



83) College Grove Dr & College Ave

City of San Diego  
 N/S: College Grove Drive  
 E/W: College Avenue  
 Weather: Clear

File Name : 30\_SDG\_CG\_Col AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	College Grove Drive Southbound				College Avenue Westbound				College Grove Drive Northbound				College Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	104	35	139	17	8	2	27	28	221	10	259	14	12	20	46	471
07:15 AM	4	102	25	131	29	14	2	45	33	290	24	347	18	21	30	69	592
07:30 AM	5	135	29	169	23	19	5	47	23	346	29	398	24	29	32	85	699
07:45 AM	3	106	42	151	33	37	3	73	42	339	25	406	35	43	33	111	741
Total	12	447	131	590	102	78	12	192	126	1196	88	1410	91	105	115	311	2503
08:00 AM	2	108	46	156	24	21	1	46	51	315	14	380	22	59	42	123	705
08:15 AM	2	134	44	180	24	31	2	57	55	332	13	400	27	20	31	78	715
08:30 AM	4	135	47	186	27	21	2	50	50	322	16	388	42	14	31	87	711
08:45 AM	4	157	48	209	24	18	4	46	40	294	12	346	42	20	32	94	695
Total	12	534	185	731	99	91	9	199	196	1263	55	1514	133	113	136	382	2826
Grand Total	24	981	316	1321	201	169	21	391	322	2459	143	2924	224	218	251	693	5329
Apprch %	1.8	74.3	23.9		51.4	43.2	5.4		11	84.1	4.9		32.3	31.5	36.2		
Total %	0.5	18.4	5.9	24.8	3.8	3.2	0.4	7.3	6	46.1	2.7	54.9	4.2	4.1	4.7	13	

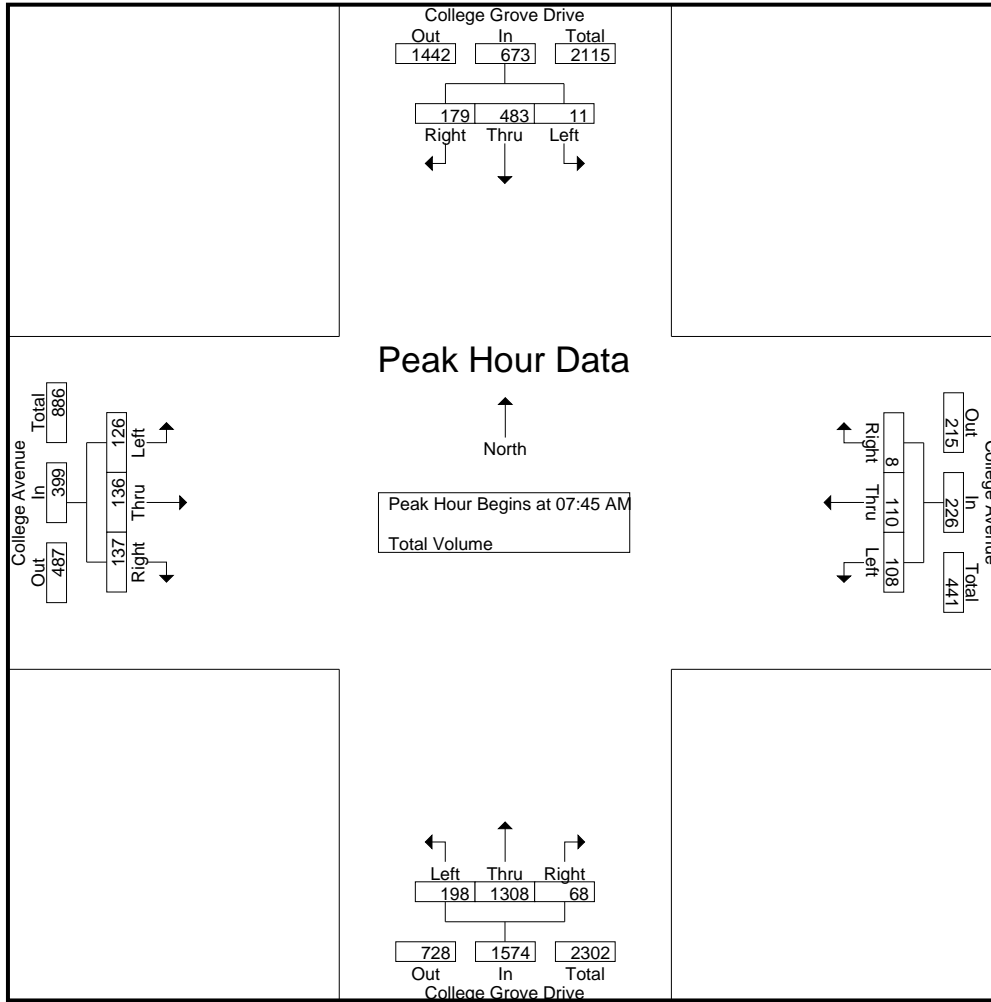
Start Time	College Grove Drive Southbound				College Avenue Westbound				College Grove Drive Northbound				College Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	3	106	42	151	<b>33</b>	<b>37</b>	<b>3</b>	<b>73</b>	42	<b>339</b>	<b>25</b>	<b>406</b>	35	43	33	111	<b>741</b>
08:00 AM	2	108	46	156	24	21	1	46	51	315	14	380	22	<b>59</b>	<b>42</b>	<b>123</b>	705
08:15 AM	2	134	44	180	24	31	2	57	<b>55</b>	332	13	400	27	20	31	78	715
08:30 AM	<b>4</b>	<b>135</b>	<b>47</b>	<b>186</b>	27	21	2	50	50	322	16	388	<b>42</b>	14	31	87	711
Total Volume	11	483	179	673	108	110	8	226	198	1308	68	1574	126	136	137	399	2872
% App. Total	1.6	71.8	26.6		47.8	48.7	3.5		12.6	83.1	4.3		31.6	34.1	34.3		
PHF	.688	.894	.952	.905	.818	.743	.667	.774	.900	.965	.680	.969	.750	.576	.815	.811	.969

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of San Diego  
 N/S: College Grove Drive  
 E/W: College Avenue  
 Weather: Clear

File Name : 30\_SDG\_CG\_Col AM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	2	108	46	156	<b>33</b>	<b>37</b>	<b>3</b>	<b>73</b>	23	<b>346</b>	<b>29</b>	398	35	43	33	111
+15 mins.	2	134	44	180	24	21	1	46	42	339	25	<b>406</b>	22	<b>59</b>	<b>42</b>	<b>123</b>
+30 mins.	4	135	47	186	24	31	2	57	51	315	14	380	27	20	31	78
+45 mins.	4	<b>157</b>	<b>48</b>	<b>209</b>	27	21	2	50	<b>55</b>	332	13	400	<b>42</b>	14	31	87
Total Volume	12	534	185	731	108	110	8	226	171	1332	81	1584	126	136	137	399
% App. Total	1.6	73.1	25.3		47.8	48.7	3.5		10.8	84.1	5.1		31.6	34.1	34.3	
PHF	.750	.850	.964	.874	.818	.743	.667	.774	.777	.962	.698	.975	.750	.576	.815	.811



City of San Diego  
 N/S: College Grove Drive  
 E/W: College Avenue  
 Weather: Clear

File Name : 30\_SDG\_CG\_Col MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

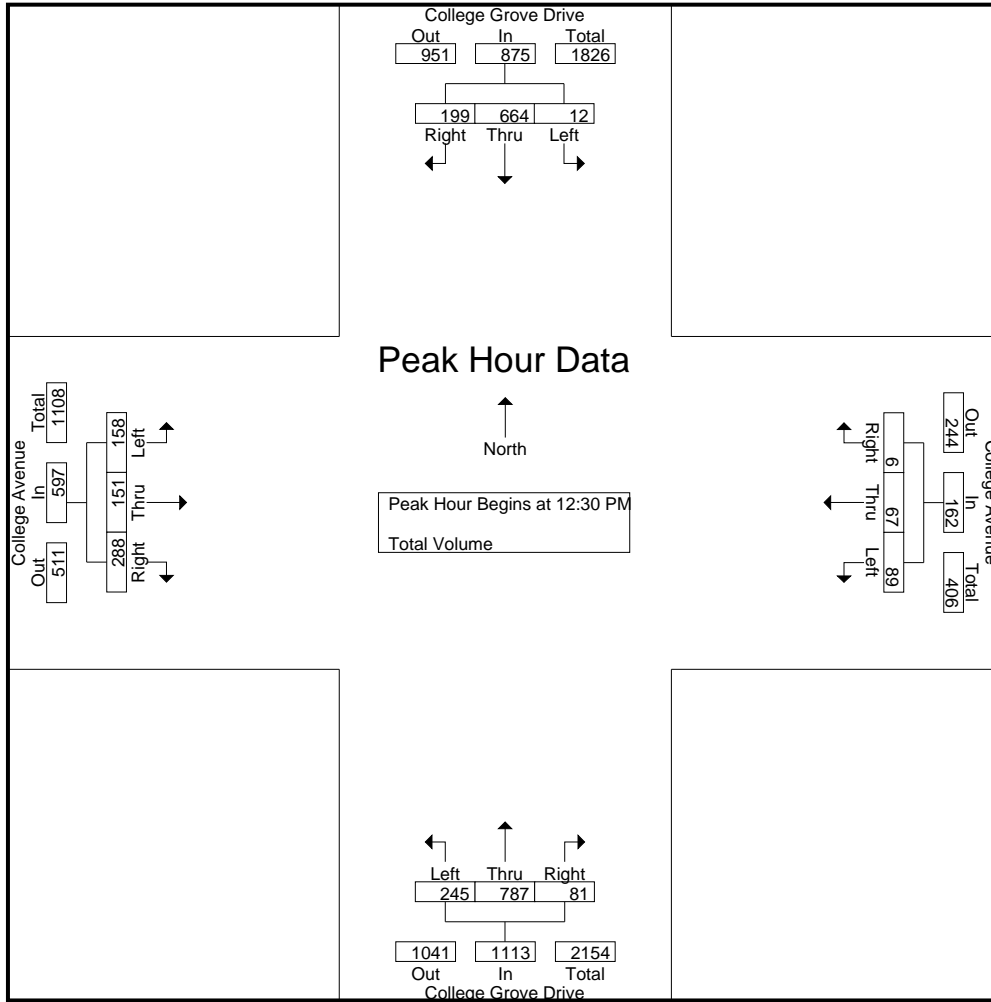
Start Time	College Grove Drive Southbound				College Avenue Westbound				College Grove Drive Northbound				College Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
11:30 AM	2	148	50	200	14	14	1	29	60	214	19	293	42	24	66	132	654
11:45 AM	4	140	58	202	19	13	0	32	59	158	26	243	54	20	67	141	618
Total	6	288	108	402	33	27	1	61	119	372	45	536	96	44	133	273	1272
12:00 PM	1	153	60	214	12	18	1	31	72	160	28	260	42	21	72	135	640
12:15 PM	2	180	66	248	33	17	6	56	63	184	15	262	32	28	78	138	704
12:30 PM	2	170	50	222	16	15	1	32	65	202	18	285	36	30	61	127	666
12:45 PM	3	156	45	204	23	15	1	39	57	189	18	264	42	44	84	170	677
Total	8	659	221	888	84	65	9	158	257	735	79	1071	152	123	295	570	2687
01:00 PM	4	176	47	227	27	18	3	48	58	175	25	258	41	41	73	155	688
01:15 PM	3	162	57	222	23	19	1	43	65	221	20	306	39	36	70	145	716
Grand Total	21	1285	433	1739	167	129	14	310	499	1503	169	2171	328	244	571	1143	5363
Apprch %	1.2	73.9	24.9		53.9	41.6	4.5		23	69.2	7.8		28.7	21.3	50		
Total %	0.4	24	8.1	32.4	3.1	2.4	0.3	5.8	9.3	28	3.2	40.5	6.1	4.5	10.6	21.3	

Start Time	College Grove Drive Southbound				College Avenue Westbound				College Grove Drive Northbound				College Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12:30 PM	2	170	50	222	16	15	1	32	<b>65</b>	202	18	285	36	30	61	127	666
12:45 PM	3	156	45	204	23	15	1	39	57	189	18	264	<b>42</b>	<b>44</b>	<b>84</b>	<b>170</b>	677
01:00 PM	<b>4</b>	<b>176</b>	47	<b>227</b>	<b>27</b>	18	<b>3</b>	<b>48</b>	58	175	<b>25</b>	258	41	41	73	155	688
01:15 PM	3	162	<b>57</b>	222	23	<b>19</b>	1	43	65	<b>221</b>	20	<b>306</b>	39	36	70	145	<b>716</b>
Total Volume	12	664	199	875	89	67	6	162	245	787	81	1113	158	151	288	597	2747
% App. Total	1.4	75.9	22.7		54.9	41.4	3.7		22	70.7	7.3		26.5	25.3	48.2		
PHF	.750	.943	.873	.964	.824	.882	.500	.844	.942	.890	.810	.909	.940	.858	.857	.878	.959

Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 12:30 PM

City of San Diego  
 N/S: College Grove Drive  
 E/W: College Avenue  
 Weather: Clear

File Name : 30\_SDG\_CG\_Col MD  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:15 PM				12:15 PM				12:30 PM				12:30 PM			
+0 mins.	2	<b>180</b>	<b>66</b>	<b>248</b>	<b>33</b>	17	<b>6</b>	<b>56</b>	<b>65</b>	202	18	285	36	30	61	127
+15 mins.	2	170	50	222	16	15	1	32	57	189	18	264	<b>42</b>	<b>44</b>	<b>84</b>	<b>170</b>
+30 mins.	3	156	45	204	23	15	1	39	58	175	<b>25</b>	258	41	41	73	155
+45 mins.	<b>4</b>	176	47	227	27	<b>18</b>	3	48	65	<b>221</b>	20	<b>306</b>	39	36	70	145
Total Volume	11	682	208	901	99	65	11	175	245	787	81	1113	158	151	288	597
% App. Total	1.2	75.7	23.1		56.6	37.1	6.3		22	70.7	7.3		26.5	25.3	48.2	
PHF	.688	.947	.788	.908	.750	.903	.458	.781	.942	.890	.810	.909	.940	.858	.857	.878

City of San Diego  
 N/S: College Grove Drive  
 E/W: College Avenue  
 Weather: Clear

File Name : 30\_SDG\_CG\_Col PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 1

Groups Printed- Total Volume

Start Time	College Grove Drive Southbound				College Avenue Westbound				College Grove Drive Northbound				College Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	2	234	72	308	17	16	1	34	71	214	25	310	38	20	80	138	790
04:15 PM	2	190	58	250	29	23	2	54	57	190	36	283	52	40	84	176	763
04:30 PM	3	213	76	292	24	18	0	42	60	203	32	295	38	31	71	140	769
04:45 PM	6	231	71	308	18	29	0	47	69	236	27	332	48	38	79	165	852
Total	13	868	277	1158	88	86	3	177	257	843	120	1220	176	129	314	619	3174
05:00 PM	4	177	75	256	24	21	3	48	84	196	19	299	47	33	82	162	765
05:15 PM	5	255	85	345	15	24	0	39	61	254	35	350	45	33	84	162	896
05:30 PM	2	216	81	299	24	24	2	50	57	203	28	288	41	27	84	152	789
05:45 PM	5	185	74	264	17	30	2	49	73	222	17	312	46	23	82	151	776
Total	16	833	315	1164	80	99	7	186	275	875	99	1249	179	116	332	627	3226
Grand Total	29	1701	592	2322	168	185	10	363	532	1718	219	2469	355	245	646	1246	6400
Apprch %	1.2	73.3	25.5		46.3	51	2.8		21.5	69.6	8.9		28.5	19.7	51.8		
Total %	0.5	26.6	9.2	36.3	2.6	2.9	0.2	5.7	8.3	26.8	3.4	38.6	5.5	3.8	10.1	19.5	

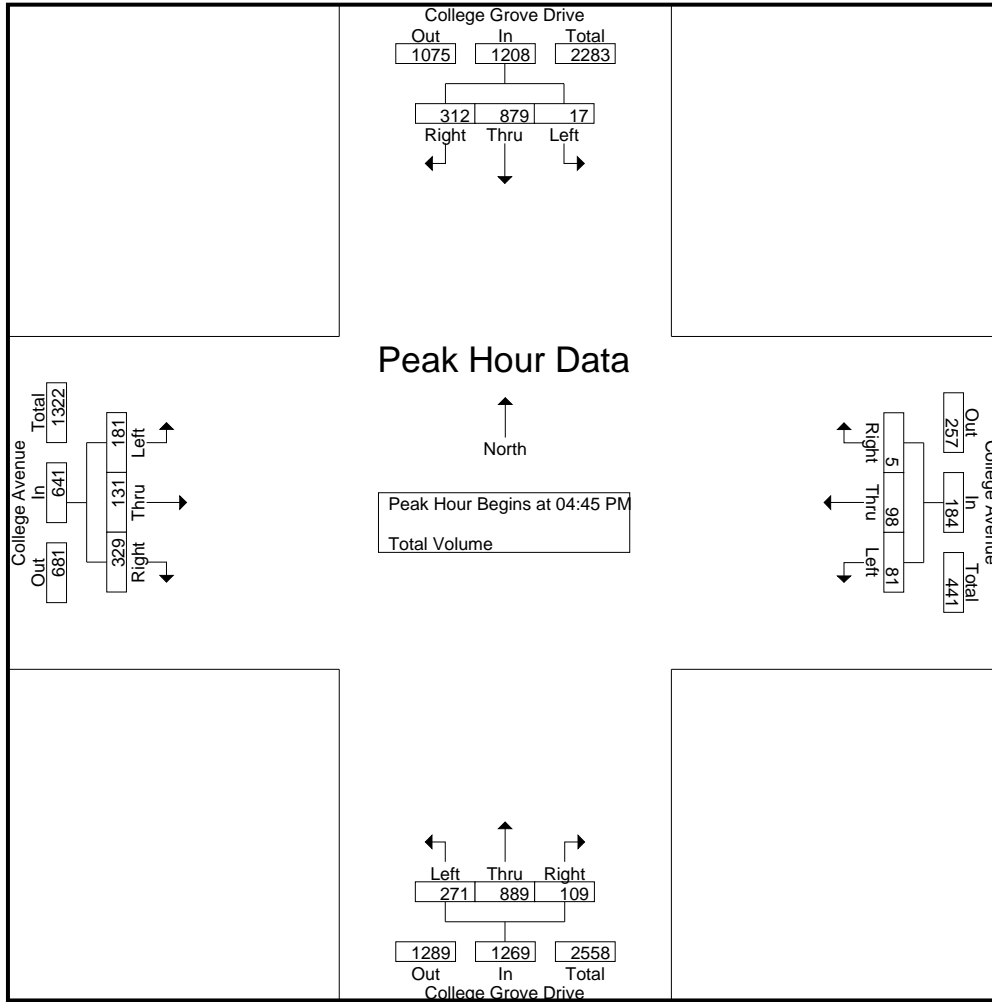
Start Time	College Grove Drive Southbound				College Avenue Westbound				College Grove Drive Northbound				College Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	<b>6</b>	231	71	308	18	<b>29</b>	0	47	69	236	27	332	<b>48</b>	<b>38</b>	79	<b>165</b>	852
05:00 PM	4	177	75	256	<b>24</b>	21	<b>3</b>	48	<b>84</b>	196	19	299	47	33	82	162	765
05:15 PM	5	<b>255</b>	<b>85</b>	<b>345</b>	15	24	0	39	61	<b>254</b>	<b>35</b>	<b>350</b>	45	33	<b>84</b>	162	<b>896</b>
05:30 PM	2	216	81	299	24	24	2	<b>50</b>	57	203	28	288	41	27	84	152	789
Total Volume	17	879	312	1208	81	98	5	184	271	889	109	1269	181	131	329	641	3302
% App. Total	1.4	72.8	25.8		44	53.3	2.7		21.4	70.1	8.6		28.2	20.4	51.3		
PHF	.708	.862	.918	.875	.844	.845	.417	.920	.807	.875	.779	.906	.943	.862	.979	.971	.921

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

City of San Diego  
 N/S: College Grove Drive  
 E/W: College Avenue  
 Weather: Clear

File Name : 30\_SDG\_CG\_Col PM  
 Site Code : 22924058  
 Start Date : 3/13/2024  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:30 PM				04:15 PM			
+0 mins.	6	231	71	308	29	23	2	54	60	203	32	295	52	40	84	176
+15 mins.	4	177	75	256	24	18	0	42	69	236	27	332	38	31	71	140
+30 mins.	5	255	85	345	18	29	0	47	84	196	19	299	48	38	79	165
+45 mins.	2	216	81	299	24	21	3	48	61	254	35	350	47	33	82	162
Total Volume	17	879	312	1208	95	91	5	191	274	889	113	1276	185	142	316	643
% App. Total	1.4	72.8	25.8		49.7	47.6	2.6		21.5	69.7	8.9		28.8	22.1	49.1	
PHF	.708	.862	.918	.875	.819	.784	.417	.884	.815	.875	.807	.911	.889	.888	.940	.913

Location: San Diego  
 N/S: College Grove Drive  
 E/W: College Avenue



Date: 3/13/2024  
 Day: Wednesday

**PEDESTRIANS**

	North Leg College Grove Drive	East Leg College Avenue	South Leg College Grove Drive	West Leg College Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	1	1
7:15 AM	0	2	2	2	6
7:30 AM	0	1	3	6	10
7:45 AM	0	0	2	3	5
8:00 AM	0	0	2	2	4
8:15 AM	0	1	1	2	4
8:30 AM	0	1	4	4	9
8:45 AM	0	0	1	0	1
<b>TOTAL VOLUMES:</b>	0	5	15	20	40

	North Leg College Grove Drive	East Leg College Avenue	South Leg College Grove Drive	West Leg College Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
11:30 AM	0	0	5	0	5
11:45 AM	0	0	2	2	4
12:00 PM	0	2	4	0	6
12:15 PM	0	0	10	5	15
12:30 PM	0	5	8	2	15
12:45 PM	0	2	6	2	10
1:00 PM	0	0	2	1	3
1:15 PM	0	1	11	1	13
<b>TOTAL VOLUMES:</b>	0	10	48	13	71

	North Leg College Grove Drive	East Leg College Avenue	South Leg College Grove Drive	West Leg College Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	6	2	8
4:15 PM	0	0	2	0	2
4:30 PM	0	2	9	1	12
4:45 PM	0	0	1	2	3
5:00 PM	0	0	6	1	7
5:15 PM	0	0	6	1	7
5:30 PM	0	0	2	0	2
5:45 PM	0	0	4	1	5
<b>TOTAL VOLUMES:</b>	0	2	36	8	46

Location: San Diego  
 N/S: College Grove Drive  
 E/W: College Avenue



Date: 3/13/2024  
 Day: Wednesday

BICYCLES

	Southbound College Grove Drive			Westbound College Avenue			Northbound College Grove Drive			Eastbound College Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	1	0	2	0	4

	Southbound College Grove Drive			Westbound College Avenue			Northbound College Grove Drive			Eastbound College Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	2	2	0	0	0	0	0	0	0	0	0	4

	Southbound College Grove Drive			Westbound College Avenue			Northbound College Grove Drive			Eastbound College Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	1	1	0	0	0	0	0	0	0	1	1	4

84) College Ave & SR-94 WB Ramps

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: College Ave & SR 94 WB On-Off Ramps/Livingston St  
 City: San Diego  
 Control: Signalized

Project ID: 24-040164-007  
 Date: 9/5/2024

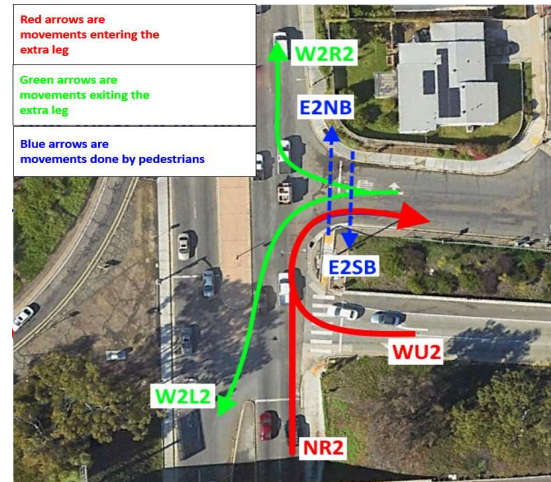
### Data - Totals

NS/EW Streets	College Ave					College Ave					SR 94 WB On-Off Ramps/Livingston St					SR 94 WB On-Off Ramps/Livingston St					WESTBOUND2		TOTAL
	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					W2L2	W2R2	
AM	NL	NT	NR	NU	NR2	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	WU2	W2L2	W2R2	TOTAL		
7:00 AM	0	2	0	0	0	0	2	1	0	0	0	0	0	1	0	1	0	0	0	0	584		
7:15 AM	0	218	0	0	12	0	113	98	0	0	0	0	0	29	0	211	0	1	0	4	689		
7:30 AM	0	234	0	0	18	0	104	83	0	0	0	0	0	33	0	193	0	4	0	6	675		
7:45 AM	0	259	0	0	30	0	131	72	0	0	0	0	0	34	0	204	0	3	0	4	737		
8:00 AM	0	265	0	0	29	0	130	77	0	0	0	0	0	31	0	187	0	4	0	15	738		
8:15 AM	0	291	0	0	27	0	137	70	0	0	0	0	0	32	0	180	0	8	0	8	753		
8:30 AM	0	246	0	0	23	0	139	71	0	0	0	0	0	22	0	187	0	1	0	9	698		
8:45 AM	0	219	0	0	22	0	158	99	0	0	0	0	0	30	0	204	0	6	0	5	743		
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	NR2	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	WU2	W2L2	W2R2	TOTAL		
<b>APPROACH %:</b>	0.00%	91.52%	0.00%	0.00%	8.48%	0.00%	60.41%	39.59%	0.00%	0	0	0	0	13.90%	0.00%	84.49%	0.00%	1.61%	0.00%	100.00%	5617		
<b>PEAK HR:</b>	08:00 AM - 09:00 AM																						TOTAL
<b>PEAK HR VOL:</b>	0	1021	0	0	101	0	564	317	0	0	0	0	0	115	0	758	0	19	0	37	2932		
<b>PEAK HR FACTOR:</b>	0.000	0.877	0.000	0.000	0.871	0.000	0.892	0.801	0.000	0.000	0.000	0.000	0.000	0.898	0.000	0.929	0.000	0.594	0.000	0.617	0.973		
	0.882					0.857																	
PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					WESTBOUND2		TOTAL
4:00 PM	NL	NT	NR	NU	NR2	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	WU2	W2L2	W2R2	TOTAL		
4:15 PM	0	230	0	0	33	0	249	145	0	0	0	0	0	62	0	147	0	6	0	8	880		
4:30 PM	0	279	0	0	35	0	256	137	0	0	0	0	0	53	0	118	0	3	0	11	892		
4:45 PM	0	236	0	0	26	0	238	156	0	0	0	0	0	48	0	107	0	3	0	5	819		
5:00 PM	0	286	0	0	35	0	279	137	0	0	0	0	0	50	0	100	0	5	0	7	899		
5:15 PM	0	271	0	0	47	0	256	144	0	0	0	0	0	45	0	113	0	6	0	7	889		
5:30 PM	0	268	0	0	28	0	226	158	0	0	0	0	0	47	0	113	0	8	0	5	853		
5:45 PM	0	267	0	0	33	0	265	140	0	0	0	0	0	33	0	108	0	3	0	4	853		
	0	231	0	0	29	0	232	124	0	0	0	0	0	34	0	133	0	8	0	6	797		
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	NR2	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	WU2	W2L2	W2R2	TOTAL		
<b>APPROACH %:</b>	0.00%	88.60%	0.00%	0.00%	11.40%	0.00%	63.69%	36.31%	0.00%	0	0	0	0	27.49%	0.00%	69.40%	0.00%	3.10%	0.00%	100.00%	6882		
<b>PEAK HR:</b>	04:15 PM - 05:15 PM																						TOTAL
<b>PEAK HR VOL:</b>	0	1072	0	0	143	0	1029	574	0	0	0	0	0	196	0	438	0	17	0	30	3499		
<b>PEAK HR FACTOR:</b>	0.000	0.937	0.000	0.000	0.761	0.000	0.922	0.920	0.000	0.000	0.000	0.000	0.000	0.925	0.000	0.928	0.000	0.708	0.000	0.682	0.973		
	0.946					0.963																	

**Explanation for extra leg movements**

**Movements exiting the extra leg**  
 W2L2 Movements exiting from Extra Leg (Livingston St) entering into College Ave heading NB.  
 W2R2 Movements exiting from Extra Leg (Livingston St) entering into College Ave heading SB.

**Movements entering the extra leg**  
 NR2 Movements coming from NB on College Ave entering into the Extra Leg (Livingston St)  
 WU2 Movements coming from WB on SR 94 WB Off Ramps entering into the Extra Leg (Livingston St)





# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** College Ave & SR 94 WB On-Off Ramps/Livingston St  
**City:** San Diego  
**Control:** Signalized

**Project ID:** 24-040164-007  
**Date:** 9/5/2024

### Data - Bikes

NS/EW Streets:	College Ave					College Ave				SR 94 WB On-Off Ramps/Livingston St				SR 94 WB On-Off Ramps/Livingston St					WESTBOUND2		
AM	NORTHBOUND					SOUTHBOUND				EASTBOUND				WESTBOUND					WESTBOUND2		TOTAL
	0	2	0	0	0	0	2	1	0	0	0	0	0	1	0	1	0	0	0	0	
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	WU2	W2L2	W2R2	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>TOTAL VOLUMES :</b>	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>APPROACH %'s :</b>	0.000	0.000	0.000	0.000	0.000	0.000	100.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
<b>PEAK HR :</b>	<b>08:00 AM - 09:00 AM</b>																				<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	0.375																			0.375	

PM	NORTHBOUND					SOUTHBOUND				EASTBOUND				WESTBOUND					WESTBOUND2		TOTAL
	0	2	0	0	0	0	2	1	0	0	0	0	0	1	0	1	0	0	0	0	
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	WU2	W2L2	W2R2	
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>TOTAL VOLUMES :</b>	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	
<b>APPROACH %'s :</b>	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
<b>PEAK HR :</b>	<b>04:15 PM - 05:15 PM</b>																				<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	
<b>PEAK HR FACTOR :</b>	0.000	0.500	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	
	0.500																			0.500	

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** College Ave & SR 94 WB On-Off Ramps/Livingston St  
**City:** San Diego

**Project ID:** 24-040164-007  
**Date:** 9/5/2024

### Data - Pedestrians (Crosswalks)

NS/EW Streets:	College Ave		College Ave		SR 94 WB On-Off Ramps/Livingston St		SR 94 WB On-Off Ramps/Livingston St				
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG 2		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	1	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	2	0	0	0	0	2
8:00 AM	0	0	0	0	1	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	2	0	0	0	2	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB 0	WB 0	EB 0	WB 0	NB 4	SB 3	NB 0	SB 0	NB 3	SB 0	TOTAL 10
<b>APPROACH %'s :</b>					57.14%	42.86%			100.00%	0.00%	
<b>PEAK HR :</b>	08:00 AM - 09:00 AM										TOTAL
<b>PEAK HR VOL :</b>	0	0	0	0	3	1	0	0	2	0	6
<b>PEAK HR FACTOR :</b>					0.375	0.250			0.250	0.250	0.375
					0.500				0.250		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG 2		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	2	0	0	0	1	3
4:15 PM	0	0	0	1	3	1	0	0	0	0	5
4:30 PM	0	0	0	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	2	0	0	0	1	0	3
5:15 PM	0	0	0	0	0	3	0	0	0	0	3
5:30 PM	0	0	0	0	1	0	0	0	1	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB 0	WB 0	EB 0	WB 1	NB 7	SB 7	NB 0	SB 0	NB 2	SB 1	TOTAL 18
<b>APPROACH %'s :</b>			0.00%	100.00%	50.00%	50.00%			66.67%	33.33%	
<b>PEAK HR :</b>	04:15 PM - 05:15 PM										TOTAL
<b>PEAK HR VOL :</b>	0	0	0	1	6	2	0	0	1	0	10
<b>PEAK HR FACTOR :</b>				0.250	0.500	0.500			0.250	0.250	0.500
				0.250	0.500				0.250		

# National Data & Surveying Services

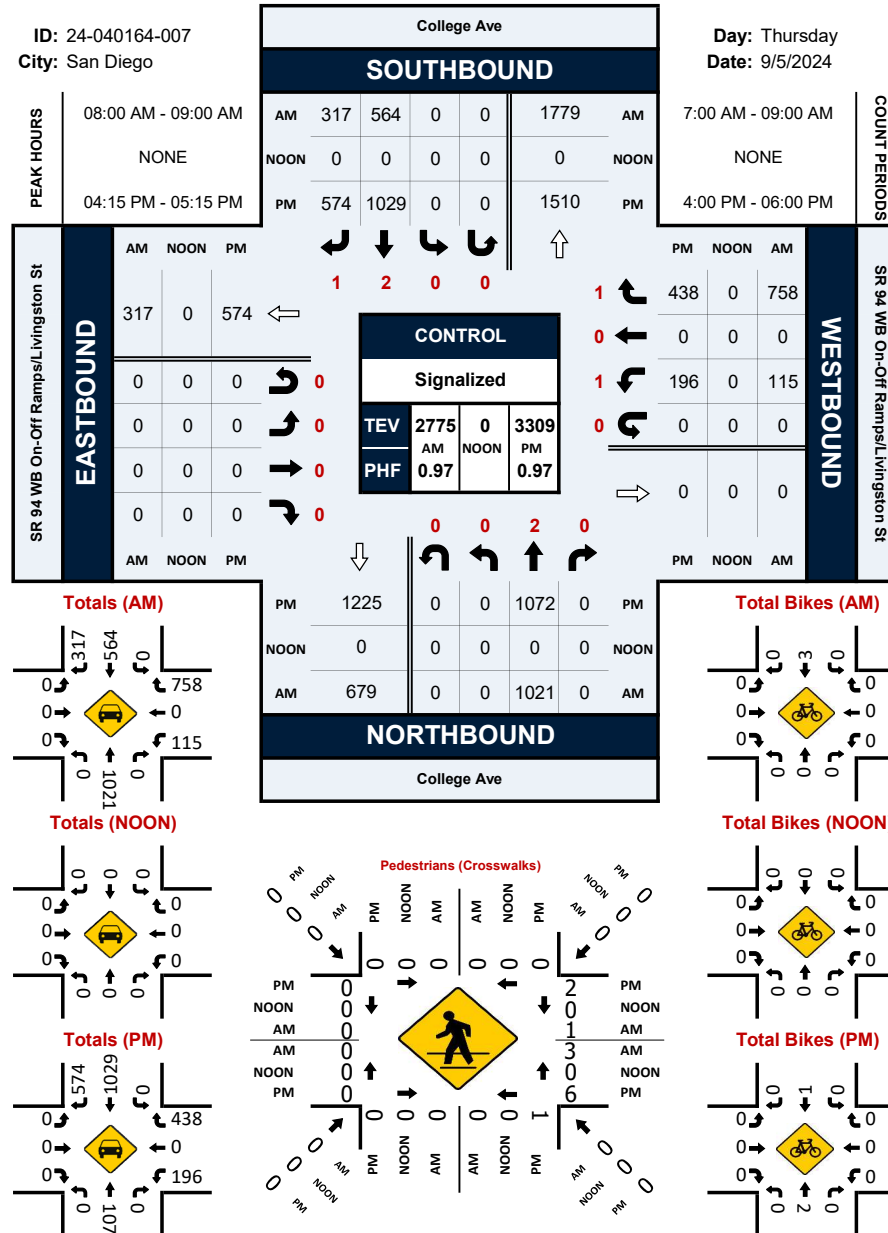
## Intersection Turning Movement Count

College Ave & SR 94 WB On-Off Ramps/Livingston St

### Peak Hour Turning Movement Count

ID: 24-040164-007  
City: San Diego

Day: Thursday  
Date: 9/5/2024



85) College Ave & Federal Blvd

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** College Ave/College Pl & Federal Blvd  
**City:** San Diego  
**Control:** Signalized

**Project ID:** 24-040164-008  
**Date:** 9/5/2024

### Data - Totals

NS/EW Streets:	College Ave/College Pl				College Ave/College Pl				Federal Blvd				Federal Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1.5 SL	0.5 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM	2	1	16	0	62	9	66	1	62	50	3	0	6	15	121	0	414
7:15 AM	4	9	8	0	73	0	60	2	88	45	4	0	1	27	131	0	452
7:30 AM	4	10	12	0	72	8	64	0	93	56	6	0	5	18	150	0	498
7:45 AM	5	14	6	0	88	3	63	0	94	45	15	0	3	36	188	0	560
8:00 AM	3	11	12	0	112	2	58	0	93	41	3	1	6	34	196	0	572
8:15 AM	3	14	9	0	99	4	63	3	66	20	5	0	2	18	204	0	510
8:30 AM	6	2	10	0	96	6	57	0	79	33	8	0	6	22	173	0	498
8:45 AM	1	1	7	1	106	11	71	2	66	41	2	0	5	34	170	0	518
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	16.37%	36.26%	46.78%	0.58%	56.15%	3.41%	39.81%	0.63%	62.90%	32.48%	4.51%	0.10%	2.16%	12.99%	84.85%	0.00%	4022
<b>PEAK HR :</b>	07:45 AM - 08:45 AM				395	15	241	3	332	139	31	1	17	110	761	0	2140
<b>PEAK HR VOL :</b>	17	41	37	0	395	15	241	3	332	139	31	1	17	110	761	0	2140
<b>PEAK HR FACTOR :</b>	0.708	0.732	0.771	0.000	0.882	0.625	0.956	0.250	0.883	0.772	0.517	0.250	0.708	0.764	0.933	0.000	0.935
	0.913				0.951				0.817				0.941				
PM	1 NL	1 NT	1 NR	0 NU	1.5 SL	0.5 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM	5	6	7	0	164	15	133	0	46	47	5	2	11	33	231	0	705
4:15 PM	5	5	9	0	180	4	123	0	53	59	3	1	7	34	239	1	723
4:30 PM	3	6	12	0	167	2	119	0	49	50	2	1	12	40	205	0	668
4:45 PM	4	6	5	0	186	7	131	0	48	40	5	0	6	34	258	0	730
5:00 PM	1	9	7	0	176	10	111	0	67	72	6	0	6	47	243	0	755
5:15 PM	7	7	6	0	153	9	108	1	29	57	6	0	8	34	241	0	666
5:30 PM	3	8	8	0	185	4	119	1	56	55	5	0	9	30	224	0	707
5:45 PM	7	4	8	0	153	1	111	1	47	42	7	0	12	37	204	0	634
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	23.65%	34.46%	41.89%	0.00%	57.46%	2.19%	40.23%	0.13%	45.93%	49.07%	4.53%	0.47%	3.22%	13.10%	83.64%	0.05%	5588
<b>PEAK HR :</b>	04:15 PM - 05:15 PM				709	23	484	0	217	221	16	2	31	155	945	1	2876
<b>PEAK HR VOL :</b>	13	26	33	0	709	23	484	0	217	221	16	2	31	155	945	1	2876
<b>PEAK HR FACTOR :</b>	0.650	0.722	0.688	0.000	0.953	0.575	0.924	0.000	0.810	0.767	0.667	0.500	0.646	0.824	0.916	0.250	0.952
	0.857				0.938				0.786				0.950				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** College Ave/College Pl & Federal Blvd  
**City:** San Diego  
**Control:** Signalized

**Project ID:** 24-040164-008  
**Date:** 9/5/2024

### Data - Bikes

NS/EW Streets:	College Ave/College Pl				College Ave/College Pl				Federal Blvd				Federal Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1.5 SL	0.5 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	0	0	0	0.00%	33.33%	66.67%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	5
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																TOTAL
<b>PEAK HR VOL :</b>	0	0	0	0	0	1	2	0	0	0	1	0	0	0	0	0	4
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.333
					0.375				0.250								
PM	1 NL	1 NT	1 NR	0 NU	1.5 SL	0.5 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	5
4:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	0	0	0	33.33%	33.33%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	60.00%	40.00%	0.00%	12
<b>PEAK HR :</b>	04:15 PM - 05:15 PM																TOTAL
<b>PEAK HR VOL :</b>	0	0	0	0	1	1	1	0	0	3	0	0	0	3	2	0	11
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.375	0.000	0.000	0.000	0.375	0.500	0.000	0.550
					0.375				0.375				0.417				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** College Ave/College Pl & Federal Blvd  
**City:** San Diego

**Project ID:** 24-040164-008  
**Date:** 9/5/2024

### Data - Pedestrians (Crosswalks)

NS/EW Streets:	College Ave/College Pl		College Ave/College Pl		Federal Blvd		Federal Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	1	2	0	1	4
7:15 AM	0	0	1	0	0	0	0	1	2
7:30 AM	0	0	1	0	0	0	0	1	2
7:45 AM	0	1	0	0	2	0	1	0	4
8:00 AM	0	0	1	0	0	0	0	1	2
8:15 AM	0	0	1	2	0	2	0	0	5
8:30 AM	0	0	2	1	3	0	0	0	6
8:45 AM	0	0	0	0	0	2	0	0	2
<b>TOTAL VOLUMES :</b>	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
<b>APPROACH %'s :</b>	0	1	6	3	6	6	1	4	27
	0.00%	100.00%	66.67%	33.33%	50.00%	50.00%	20.00%	80.00%	
<b>PEAK HR :</b>	<b>07:45 AM - 08:45 AM</b>								TOTAL
<b>PEAK HR VOL :</b>	0	1	4	3	5	2	1	1	17
<b>PEAK HR FACTOR :</b>		0.250	0.500	0.375	0.417	0.250	0.250	0.250	0.708
		0.250		0.583		0.583		0.500	

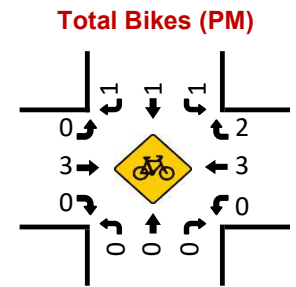
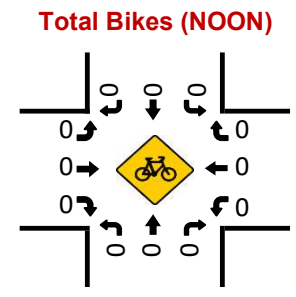
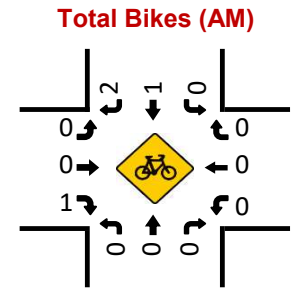
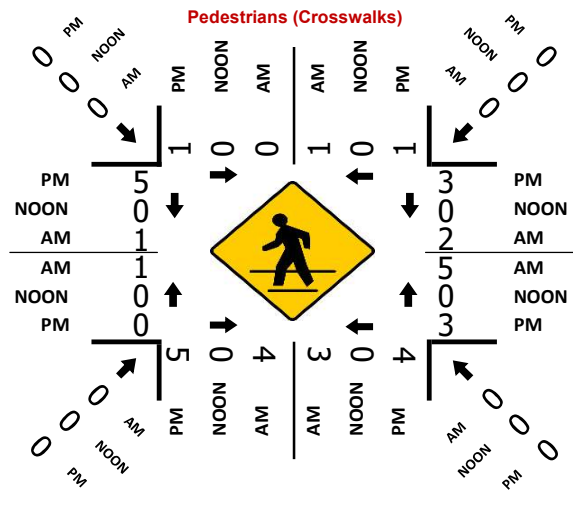
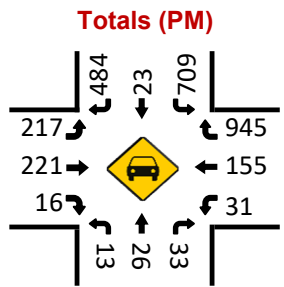
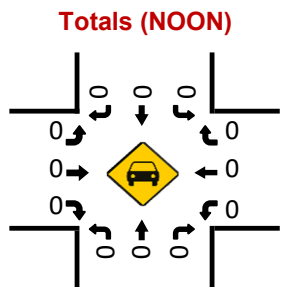
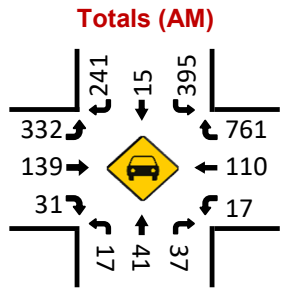
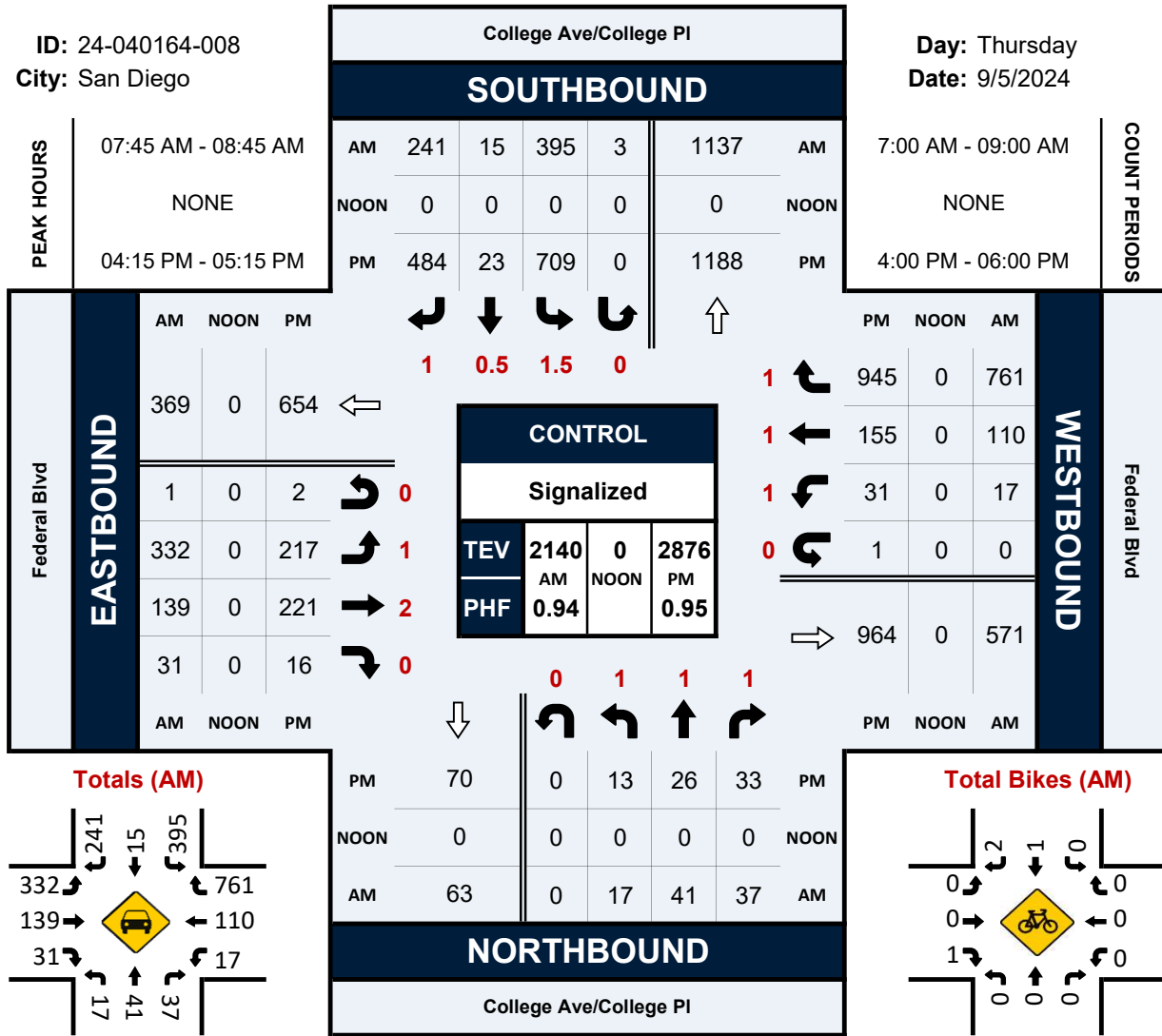
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	1	0	0	2	0	0	3
4:15 PM	1	0	2	1	1	1	0	1	7
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	1	2	0	2	0	3	9
5:00 PM	0	0	2	1	2	0	0	1	6
5:15 PM	2	0	1	3	0	3	2	2	13
5:30 PM	0	0	2	1	0	0	1	0	4
5:45 PM	1	0	2	0	0	0	0	2	5
<b>TOTAL VOLUMES :</b>	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
<b>APPROACH %'s :</b>	4	1	11	8	3	8	3	9	47
	80.00%	20.00%	57.89%	42.11%	27.27%	72.73%	25.00%	75.00%	
<b>PEAK HR :</b>	<b>04:15 PM - 05:15 PM</b>								TOTAL
<b>PEAK HR VOL :</b>	1	1	5	4	3	3	0	5	22
<b>PEAK HR FACTOR :</b>	0.250	0.250	0.625	0.500	0.375	0.375		0.417	0.611
		0.500		0.750		0.750		0.417	

# College Ave/College Pl & Federal Blvd

## Peak Hour Turning Movement Count

ID: 24-040164-008  
City: San Diego

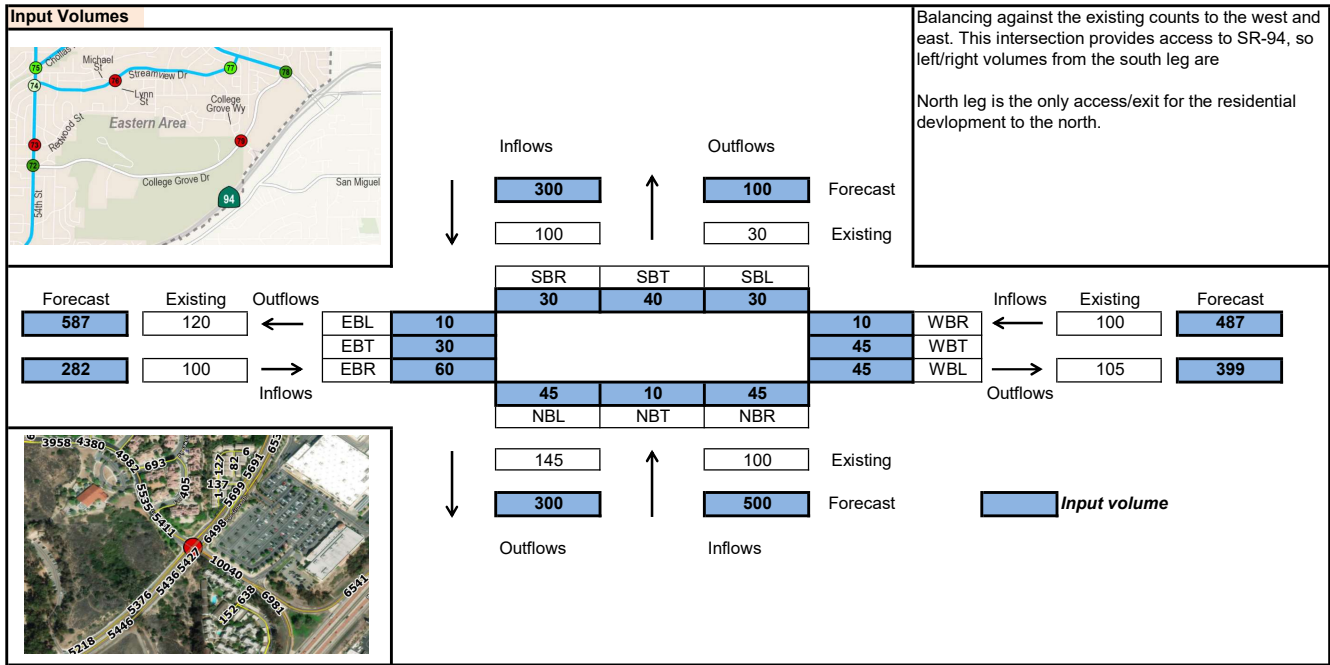
Day: Thursday  
Date: 9/5/2024



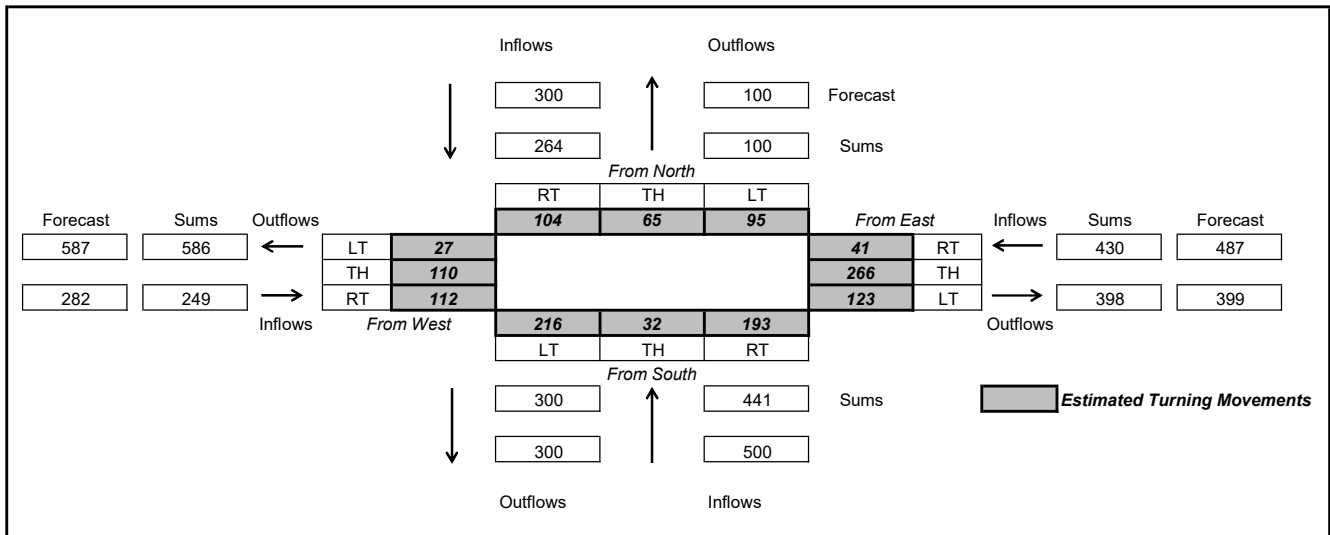


86) College Grove Way & College Grove Dr

### Iterative Method Estimated Turning Movements



### Estimated Turning Movements





87) SR-94 WB On-Ramp & A St

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** SR 94 WB On-Ramp/49th St & A St  
**City:** San Diego  
**Control:** 1-Way Yield(EB)/1-Way Stop(WB)

**Project ID:** 24-040164-004  
**Date:** 9/5/2024

### Data - Totals

NS/EW Streets:	SR 94 WB On-Ramp/49th St				SR 94 WB On-Ramp/49th St				A St				A St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	38	3	0	1	0	21	0	0	3	0	0	67
7:15 AM	0	0	0	0	0	31	2	0	4	2	23	0	2	3	0	0	67
7:30 AM	0	0	0	0	0	22	3	0	3	0	35	0	4	3	1	0	71
7:45 AM	0	0	0	0	1	35	3	0	3	0	26	0	3	4	1	0	76
8:00 AM	0	0	0	0	0	23	7	0	6	0	34	0	3	3	0	0	76
8:15 AM	0	0	0	0	1	22	6	0	10	0	26	0	5	4	0	0	74
8:30 AM	0	0	0	0	0	21	6	0	5	1	18	1	1	0	1	0	54
8:45 AM	0	0	0	0	0	16	6	0	8	0	17	0	3	0	3	0	53
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	0	0	0	0	3	208	36	0	40	3	200	1	21	20	6	0	538
					1.21%	84.21%	14.57%	0.00%	16.39%	1.23%	81.97%	0.41%	44.68%	42.55%	12.77%	0.00%	
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	0	0	0	2	102	19	0	22	0	121	0	15	14	2	0	297
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.500	0.729	0.679	0.000	0.550	0.000	0.864	0.000	0.750	0.875	0.500	0.000	0.977
					0.788				0.894				0.861				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	29	9	0	4	3	29	0	2	2	2	0	81
4:15 PM	0	0	0	0	0	40	2	0	7	4	47	0	1	0	2	0	103
4:30 PM	0	0	0	0	4	31	6	0	5	2	74	0	2	2	0	0	126
4:45 PM	0	0	0	0	0	28	3	0	5	3	45	1	4	2	0	0	91
5:00 PM	0	0	0	0	3	28	7	0	9	2	30	2	1	1	0	0	83
5:15 PM	0	0	0	0	1	16	11	0	5	3	37	0	3	1	0	0	77
5:30 PM	0	0	0	0	1	32	9	0	8	3	28	0	3	0	0	0	84
5:45 PM	0	0	0	0	1	27	5	0	6	1	31	1	2	2	0	0	76
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
<b>APPROACH %'s :</b>	0	0	0	0	11	231	52	0	49	21	321	4	18	10	4	0	721
					3.74%	78.57%	17.69%	0.00%	12.41%	5.32%	81.27%	1.01%	56.25%	31.25%	12.50%	0.00%	
<b>PEAK HR :</b>	04:15 PM - 05:15 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	0	0	0	7	127	18	0	26	11	196	3	8	5	2	0	403
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.438	0.794	0.643	0.000	0.722	0.688	0.662	0.375	0.500	0.625	0.250	0.000	0.800
					0.905				0.728				0.625				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: SR 94 WB On-Ramp/49th St & A St  
 City: San Diego  
 Control: 1-Way Yield(EB)/1-Way Stop(WB)

Project ID: 24-040164-004  
 Date: 9/5/2024

### Data - Bikes

NS/EW Streets:	SR 94 WB On-Ramp/49th St				SR 94 WB On-Ramp/49th St				A St				A St								
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
	0	0	0	0	1	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0					1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
<b>TOTAL VOLUMES :</b>	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0					TOTAL
<b>APPROACH %'s :</b>	0	0	0	0	0.00%	0.00%	100.00%	0.00%	0	0	0	0	0	0	0	0					1
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																				TOTAL
<b>PEAK HR VOL :</b>	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0					1
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.250
							0.250														
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND								
	0	0	0	0	1	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU					
4:00 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0					2
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0					1
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0					1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0					1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0					1
<b>TOTAL VOLUMES :</b>	0	0	0	0	0	0	2	0	4	0	0	0	0	0	0	0					TOTAL
<b>APPROACH %'s :</b>	0	0	0	0	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0	0	0	0					6
<b>PEAK HR :</b>	04:15 PM - 05:15 PM																				TOTAL
<b>PEAK HR VOL :</b>	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0					3
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.750
							0.250				0.500										

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** SR 94 WB On-Ramp/49th St & A St  
**City:** San Diego

**Project ID:** 24-040164-004  
**Date:** 9/5/2024

### Data - Pedestrians (Crosswalks)

NS/EW Streets:	SR 94 WB On-Ramp/49th St	SR 94 WB On-Ramp/49th St	A St		A St				
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	1	0	0	0	0	0	1
7:15 AM	0	0	0	1	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	3	0	0	0	0	3
8:15 AM	0	0	1	1	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
<b>APPROACH %'s :</b>	0	0	2	5	0	0	0	0	7
			28.57%	71.43%					
<b>PEAK HR :</b>	07:30 AM - 08:30 AM								TOTAL
<b>PEAK HR VOL :</b>	0	0	1	4	0	0	0	0	5
<b>PEAK HR FACTOR :</b>			0.250	0.333					0.417

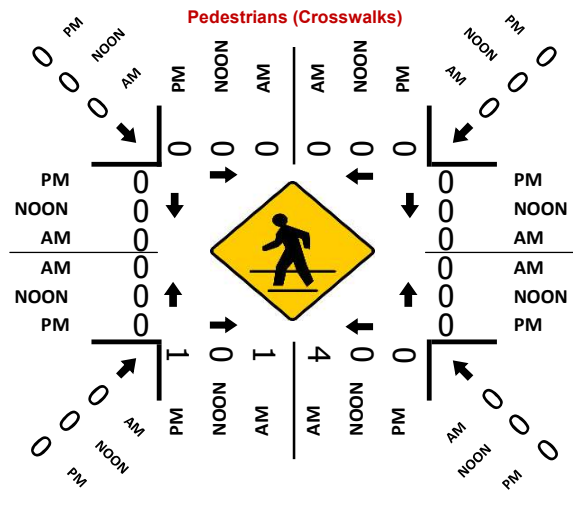
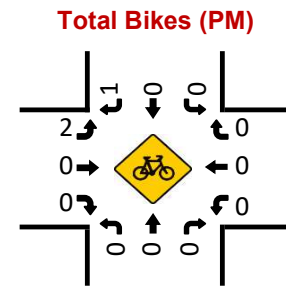
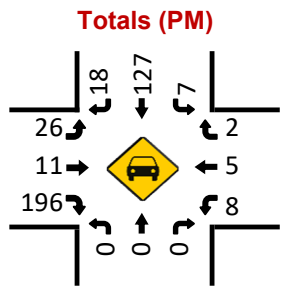
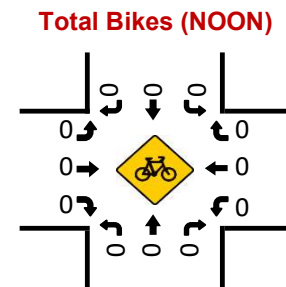
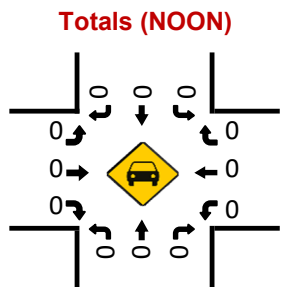
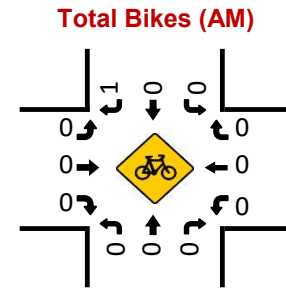
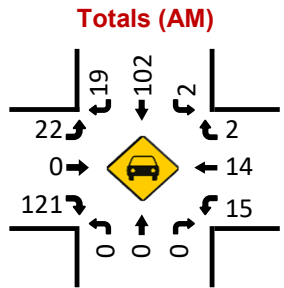
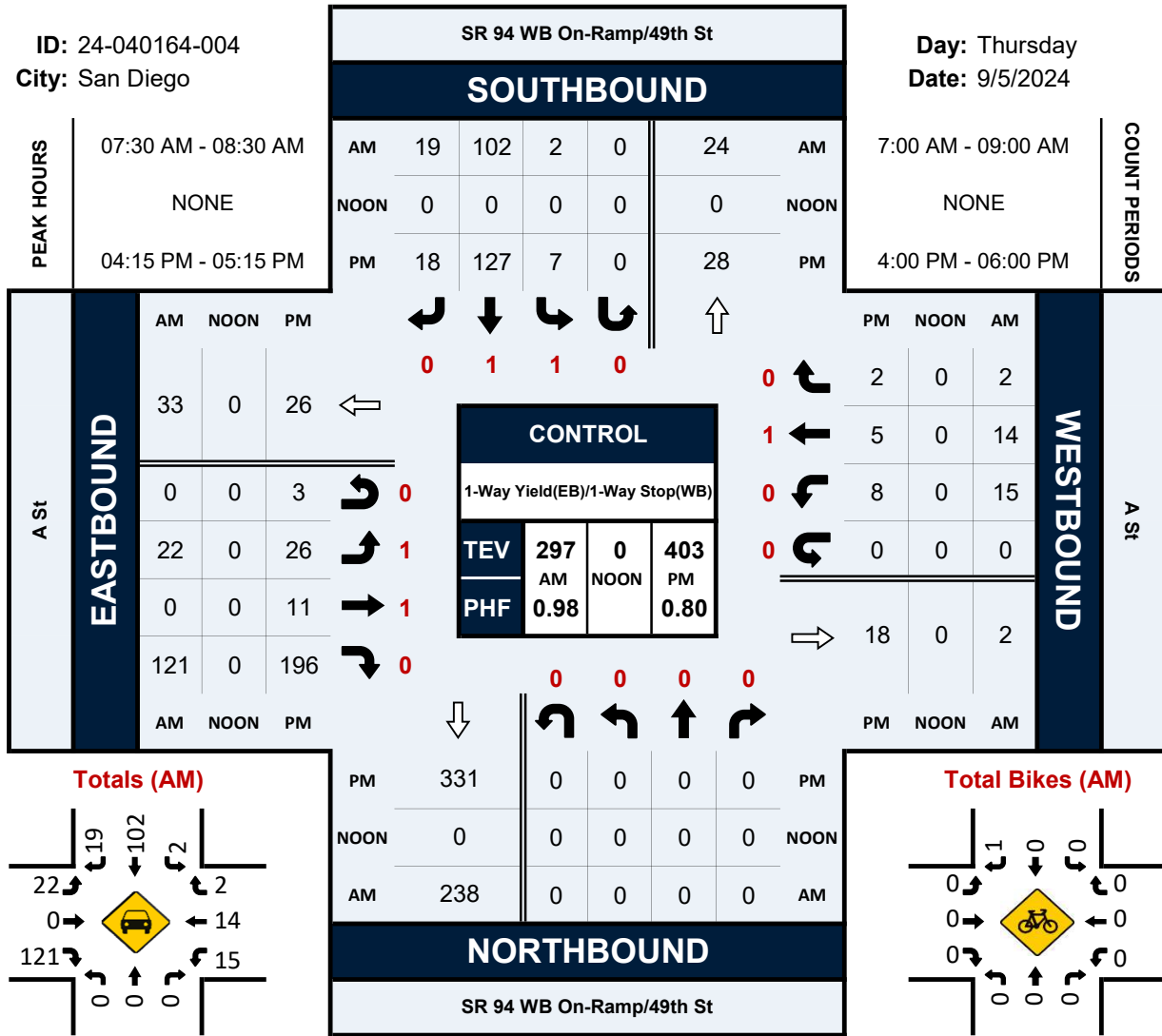
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	1	0	1	0	0	0	2
4:15 PM	0	0	1	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	1	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
<b>APPROACH %'s :</b>	0	0	2	1	1	1	0	0	5
			66.67%	33.33%	50.00%	50.00%			
<b>PEAK HR :</b>	04:15 PM - 05:15 PM								TOTAL
<b>PEAK HR VOL :</b>	0	0	1	0	0	0	0	0	1
<b>PEAK HR FACTOR :</b>			0.250	0.250					0.250

# SR 94 WB On-Ramp/49th St & A St

## Peak Hour Turning Movement Count

ID: 24-040164-004  
City: San Diego

Day: Thursday  
Date: 9/5/2024





88) SR-94 On-Ramp & 47th St

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: 47th St & SR 94 EB On-Ramp/ 1180 N 47th  
 City: San Diego  
 Control: No Control

Project ID: 24-040164-005  
 Date: 9/5/2024

### Data - Totals

NS/EW Streets:	47th St				47th St				SR 94 EB On-Ramp/ 1180 N 47th				SR 94 EB On-Ramp/ 1180 N 47th				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	124	50	0	9	57	0	0	0	0	0	0	0	0	0	0	240
7:15 AM	0	145	51	0	28	74	0	0	0	0	0	0	0	0	0	0	298
7:30 AM	0	146	45	0	35	108	0	0	0	1	0	0	0	0	0	0	335
7:45 AM	0	138	47	0	28	166	0	0	0	0	0	0	0	0	0	0	379
8:00 AM	0	146	61	0	19	133	0	0	1	1	1	0	0	0	0	0	362
8:15 AM	0	168	43	0	17	161	0	0	2	0	1	0	0	0	0	0	392
8:30 AM	0	145	50	0	19	85	0	0	0	0	0	0	0	0	0	0	299
8:45 AM	0	131	35	0	39	79	1	0	1	0	0	0	0	0	0	0	286
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	1143	382	0	194	863	1	0	4	2	2	0	0	0	0	0	2591
<b>APPROACH %'s :</b>	0.00%	74.95%	25.05%	0.00%	18.34%	81.57%	0.09%	0.00%	50.00%	25.00%	25.00%	0.00%					
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																TOTAL
<b>PEAK HR VOL :</b>	0	598	196	0	99	568	0	0	3	2	2	0	0	0	0	0	1468
<b>PEAK HR FACTOR :</b>	0.000	0.890	0.803	0.000	0.707	0.855	0.000	0.000	0.375	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.936
		0.941				0.860				0.583							
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	147	49	0	38	168	0	0	0	0	0	0	0	0	0	0	402
4:15 PM	0	145	57	0	35	165	0	0	0	0	0	0	0	0	0	0	402
4:30 PM	0	126	62	0	51	187	0	0	0	0	0	0	0	0	0	0	426
4:45 PM	0	126	39	0	37	166	0	0	0	0	0	0	0	0	0	0	368
5:00 PM	0	108	40	0	27	170	0	0	0	0	0	0	0	0	0	0	345
5:15 PM	0	119	42	0	29	184	0	0	0	0	0	0	0	0	0	0	374
5:30 PM	0	102	35	0	30	141	0	0	0	0	0	0	0	0	0	0	308
5:45 PM	0	103	27	0	37	130	0	0	0	0	0	0	0	0	0	0	297
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	976	351	0	284	1311	0	0	0	0	0	0	0	0	0	0	2922
<b>APPROACH %'s :</b>	0.00%	73.55%	26.45%	0.00%	17.81%	82.19%	0.00%	0.00%									
<b>PEAK HR :</b>	04:00 PM - 05:00 PM																TOTAL
<b>PEAK HR VOL :</b>	0	544	207	0	161	686	0	0	0	0	0	0	0	0	0	0	1598
<b>PEAK HR FACTOR :</b>	0.000	0.925	0.835	0.000	0.789	0.917	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.938
		0.929				0.890											

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: 47th St & SR 94 EB On-Ramp/ 1180 N 47th  
 City: San Diego  
 Control: No Control

Project ID: 24-040164-005  
 Date: 9/5/2024

### Data - Bikes

NS/EW Streets:	47th St				47th St				SR 94 EB On-Ramp/ 1180 N 47th				SR 94 EB On-Ramp/ 1180 N 47th				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																TOTAL
<b>PEAK HR VOL :</b>	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
					0.250												
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	7	0	0	0	10	0	0	0	0	0	0	0	0	0	0	17
<b>PEAK HR :</b>	04:00 PM - 05:00 PM																TOTAL
<b>PEAK HR VOL :</b>	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	9
<b>PEAK HR FACTOR :</b>	0.000	0.333	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.563
					0.333												
					0.625												

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** 47th St & SR 94 EB On-Ramp/ 1180 N 47th  
**City:** San Diego

**Project ID:** 24-040164-005  
**Date:** 9/5/2024

### Data - Pedestrians (Crosswalks)

NS/EW Streets:	47th St		47th St		SR 94 EB On-Ramp/ 1180 N 47th		SR 94 EB On-Ramp/ 1180 N 47th		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	3	0	0	3
7:15 AM	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	2	0	0	2
7:45 AM	0	0	0	0	0	5	0	0	5
8:00 AM	0	0	0	0	2	5	1	2	10
8:15 AM	0	0	0	0	0	7	0	0	7
8:30 AM	0	0	0	0	0	2	0	0	2
8:45 AM	0	0	0	0	2	0	0	0	2
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	1	0	0	4	24	1	2	32
	0.00%	100.00%			14.29%	85.71%	33.33%	66.67%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	2	19	1	2	24
PEAK HR FACTOR :					0.250	0.679	0.250	0.250	0.600
					0.750		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	9	0	2	1	12
4:15 PM	0	0	0	0	4	1	0	0	5
4:30 PM	0	0	0	0	0	3	0	2	5
4:45 PM	0	0	0	0	1	1	1	0	3
5:00 PM	0	0	0	0	0	0	3	0	3
5:15 PM	0	0	0	0	2	0	0	3	5
5:30 PM	0	0	0	0	0	2	0	0	2
5:45 PM	0	0	0	0	0	0	3	0	3
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	16	7	9	6	38
					69.57%	30.43%	60.00%	40.00%	
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	14	5	3	3	25
PEAK HR FACTOR :					0.389	0.417	0.375	0.375	0.521
					0.528		0.500		



## Appendix D - PEQE Scoring Inputs

### PEQE Segment Calculation

ID	Roadway	From	To	Northside/Eastside			Southside/Westside			Direction of Roadway	Northside/Eastside				Southside/Westside											
				Side of Street	Score	Grade	Side of Street	Score	Grade		Buffer	Lighting	Clear Zone	Posted Speed Limit	Buffer	Lighting	Clear Zone	Posted Speed Limit	Horizontal Buffer	Lighting	Clear Zone	Posted Speed Limit	Horizontal Buffer	Lighting	Clear Zone	Posted Speed Limit
1	35th St	Adams Ave to El Cajon Blvd	East Side	7	High	West Side	7	High	East-West	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	2	2		
2	35th St	El Cajon Blvd to Orange Ave	East Side	8	High	West Side	8	High	East-West	Vertical	Exceed Standard	No Obstructions	25	Vertical	Exceed Standard	No Obstructions	25	2	2	2	2	2	2	2		
3	35th St	Orange Ave to University Ave	East Side	7	High	West Side	7	High	East-West	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
4	43rd St	Meade Ave to El Cajon Blvd	East Side	7	High	West Side	7	High	East-West	Vertical	Standard	No Obstructions	30	Vertical	Standard	No Obstructions	30	2	1	2	2	2	1	2		
5	43rd St	El Cajon Blvd to Orange Ave	East Side	6	Medium	West Side	4	Medium	East-West	Vertical	Below Standard	No Obstructions	30	Vertical	Below Standard	Obstructed	30	2	0	2	2	2	0	2		
6	43rd St	Orange Ave to University Ave	East Side	7	High	West Side	7	High	East-West	Vertical	Standard	No Obstructions	30	Vertical	Standard	No Obstructions	30	2	1	2	2	2	1	2		
7	43rd St	University Ave to Lands St	East Side	7	High	West Side	7	High	East-West	Vertical	Standard	No Obstructions	30	Vertical	Standard	No Obstructions	30	2	1	2	2	2	1	2		
8	43rd St	Lands St to Thom St	East Side	6	Medium	West Side	6	Medium	East-West	Vertical	Below Standard	No Obstructions	30	Vertical	Below Standard	No Obstructions	30	2	0	2	2	2	0	2		
9	52nd St	Monroe Ave to El Cajon Blvd	East Side	8	High	West Side	8	High	East-West	Vertical	Exceed Standard	No Obstructions	25	Vertical	Exceed Standard	No Obstructions	25	2	2	2	2	2	2	2		
10	52nd St	El Cajon Blvd to Orange Ave	East Side	7	High	West Side	5	Medium	East-West	Vertical	Standard	No Obstructions	25	<6	Standard	No Obstructions	25	2	1	2	2	0	1	2		
11	52nd St	Orange Ave to University Ave	East Side	7	High	West Side	7	High	East-West	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
12	54th St	El Cajon Blvd to Orange Ave	East Side	4	Medium	West Side	4	Medium	East-West	<6	Standard	No Obstructions	35	<6	Standard	No Obstructions	35	0	1	2	1	0	1	2		
13	54th St	Orange Ave to University Ave	East Side	4	Medium	West Side	4	Medium	East-West	<6	Standard	No Obstructions	35	<6	Standard	No Obstructions	35	0	1	2	1	0	1	2		
14	54th St	University Ave to Streamview Dr	East Side	4	Medium	West Side	4	Medium	East-West	<6	Standard	No Obstructions	35	<6	Standard	No Obstructions	35	0	1	2	1	0	1	2		
15	54th St	Streamview Dr to College Grove Dr	East Side	1	Low	West Side	1	Low	East-West	<6	Standard	No Obstructions	35	<6	Standard	No Obstructions	35	0	1	2	1	0	1	2		
16	54th St	College Grove Dr to Euclid Ave	North Side	5	Medium	South Side	1	Low	North-South	6-13	Standard	Obstructed	40			Obstructed	40	1	1	2	1			0		
17	Adams Ave	1805 to 35th St	North Side	8	High	South Side	8	High	North-South	Vertical	Exceed Standard	No Obstructions	25	Vertical	Exceed Standard	No Obstructions	25	2	2	2	2	2	2	2		
18	Adams Ave	35th St to 115	North Side	8	High	South Side	8	High	North-South	Vertical	Exceed Standard	No Obstructions	25	Vertical	Exceed Standard	No Obstructions	25	2	2	2	2	2	2	2		
19	Adams Ave	115 to Marlborough Ave	North Side	8	High	South Side	8	High	North-South	Vertical	Exceed Standard	No Obstructions	25	Vertical	Exceed Standard	No Obstructions	25	2	2	2	2	2	2	2		
20	Adams Ave	54th St to University Ave	North Side	8	High	South Side	8	High	North-South	Vertical	Exceed Standard	No Obstructions	25	Vertical	Exceed Standard	No Obstructions	25	2	2	2	2	2	2	2		
21	Chollas Pkwy	University Ave to Streamview Dr	North Side	0	Low	South Side	0	Low	North-South			Obstructed	45			Obstructed	45	0	0	0	0	0	0	0		
22	College Ave	Streamview Dr to College Grove Dr	East Side	1	Low	West Side	1	Low	East-West			Obstructed	40			Obstructed	40	0	1	0	1	0	1	0		
23	College Ave	Streamview Dr to College Grove Dr	East Side	1	Low	West Side	1	Low	East-West			Obstructed	40			Obstructed	40	0	1	0	1	0	1	0		
24	El Cajon Blvd	1805 to 35th St	North Side	7	High	South Side	7	High	North-South	Vertical	Exceed Standard	No Obstructions	35	Vertical	Exceed Standard	No Obstructions	35	2	2	2	2	2	2	1		
25	El Cajon Blvd	35th St to 115	North Side	7	High	South Side	7	High	North-South	Vertical	Exceed Standard	No Obstructions	35	Vertical	Exceed Standard	No Obstructions	35	2	2	2	2	2	2	1		
26	El Cajon Blvd	115 to Marlborough Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Exceed Standard	No Obstructions	35	Vertical	Exceed Standard	No Obstructions	35	2	2	2	2	2	2	1		
27	El Cajon Blvd	Marlborough Ave to Fairmount Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Exceed Standard	No Obstructions	35	Vertical	Exceed Standard	No Obstructions	35	2	2	2	2	2	2	1		
28	El Cajon Blvd	Fairmount Ave to Highland Ave	North Side	4	Medium	South Side	4	Medium	North-South	<6	Standard	No Obstructions	35	<6	Standard	No Obstructions	35	0	1	2	1	0	1	2		
29	El Cajon Blvd	Highland Ave to Euclid Ave	North Side	4	Medium	South Side	4	Medium	North-South	<6	Standard	No Obstructions	35	<6	Standard	No Obstructions	35	0	1	2	1	0	1	2		
30	El Cajon Blvd	Euclid Ave to 50th St	North Side	4	Medium	South Side	4	Medium	North-South	<6	Standard	No Obstructions	35	<6	Standard	No Obstructions	35	0	1	2	1	0	1	2		
31	El Cajon Blvd	50th St to 54th St	North Side	5	Medium	South Side	5	Medium	North-South	<6	Standard	No Obstructions	35	<6	Standard	No Obstructions	35	0	2	2	1	0	2	2		
32	Euclid Ave	Monroe Ave to El Cajon Blvd	East Side	8	High	West Side	8	High	East-West	Vertical	Exceed Standard	No Obstructions	25	Vertical	Exceed Standard	No Obstructions	25	2	2	2	2	2	2	2		
33	Euclid Ave	El Cajon Blvd to Orange Ave	East Side	8	High	West Side	8	High	East-West	Vertical	Exceed Standard	No Obstructions	25	Vertical	Exceed Standard	No Obstructions	25	2	2	2	2	2	2	2		
34	Euclid Ave	Orange Ave to University Ave	East Side	7	High	West Side	7	High	East-West	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
35	Euclid Ave	University Ave to Lands St	East Side	7	High	West Side	7	High	East-West	Vertical	Standard	No Obstructions	30	Vertical	Standard	No Obstructions	30	2	1	2	2	2	1	2		
36	Euclid Ave	Lands St to Euclid Ave/Home Ave	East Side	5	Medium	West Side	2	Low	East-West	<6	Standard	No Obstructions	30			Obstructed	30	0	1	2	2	0	1	2		
37	Fairmount Ave	Montezuma Rd to El Cajon Blvd	East Side	0	Low	West Side	0	Low	East-West			Obstructed	55			Obstructed	50	0	0	0	0	0	0	0		
38	Fairmount Ave	El Cajon Blvd to Orange Ave	East Side	5	Medium	West Side	5	Medium	East-West	<6	Standard	No Obstructions	30	<6	Standard	No Obstructions	30	0	1	2	2	0	1	2		
39	Fairmount Ave	Orange Ave to University Ave	East Side	7	High	West Side	5	Medium	East-West	Vertical	Standard	No Obstructions	30	<6	Standard	No Obstructions	30	2	1	2	2	0	1	2		
40	Fairmount Ave	University Ave to Wightman St	East Side	6	Medium	West Side	5	Medium	East-West	6-13	Standard	No Obstructions	30	<6	Standard	No Obstructions	30	1	1	2	2	0	1	2		
41	Fairmount Ave	Wightman St to Lands St	East Side	6	Medium	West Side	5	Medium	East-West	6-13	Standard	No Obstructions	30	<6	Standard	No Obstructions	30	1	1	2	2	0	1	2		
42	Fairmount Ave	Lands St to Home Ave	East Side	6	Medium	West Side	6	Medium	East-West	6-13	Standard	No Obstructions	30	<6	Standard	No Obstructions	30	1	1	2	2	1	1	2		
43	Fairmount Ave	Home Ave to Federal Blvd	East Side	4	Medium	West Side	4	Medium	East-West	<6	Standard	No Obstructions	35	<6	Standard	No Obstructions	35	0	1	2	1	0	1	2		
44	Federal Blvd	47th St to Euclid Ave	North Side	6	Medium	South Side	6	Medium	North-South	Vertical	Standard	No Obstructions	35	Vertical	Standard	No Obstructions	35	2	1	2	1	2	1	2		
45	Home Ave	1805 On-Ramps to Fairmount Ave	East Side	4	Medium	West Side	4	Medium	East-West	<6	Standard	No Obstructions	35	<6	Standard	No Obstructions	35	0	1	2	1	0	1	2		
46	Home Ave	Fairmount Ave to Euclid Ave	East Side	6	Medium	West Side	2	Low	East-West	Vertical	Standard	No Obstructions	40	<6	Standard	Obstructed	35	2	1	2	1	0	1	2		
47	Lands St	Central Ave to Marlborough Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
48	Lands St	Marlborough Ave to Fairmount Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
49	Lands St	Fairmount Ave to Euclid Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
50	Marlborough Ave	Adams Ave to El Cajon Blvd	East Side	6	Medium	West Side	6	Medium	East-West	Vertical	Below Standard	No Obstructions	25	Vertical	Below Standard	No Obstructions	25	2	0	2	2	2	0	2		
51	Marlborough Ave	El Cajon Blvd to University Ave	East Side	7	High	West Side	7	High	East-West	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
52	Marlborough Ave	University Ave to Lands St	East Side	7	High	West Side	7	High	East-West	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
53	Monroe Ave	Euclid Ave to Fairmount Ave	North Side	6	Medium	South Side	6	Medium	North-South	<6	Exceed Standard	No Obstructions	25	<6	Exceed Standard	No Obstructions	25	0	2	2	2	0	2	2		
54	Orange Ave	33rd St to 35th St	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
55	Orange Ave	35th St to 38th St	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
56	Orange Ave	38th St to 115	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
57	Orange Ave	115 to Fairmount Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
58	Orange Ave	Fairmount Ave to Merlo Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
59	Orange Ave	Merlo Ave to 50th St	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
60	Orange Ave	50th St to 54th St	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
61	Orange Ave	54th St to College Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	25	Vertical	Standard	No Obstructions	25	2	1	2	2	2	1	2		
62	Streamview Dr	1805 to 35th St	North Side	5	Medium	South Side	5	Medium	North-South	<6	Standard	No Obstructions	30	<6	Standard	No Obstructions	30	0	1	2	2	0	1	2		
63	University Ave	35th St to 115	North Side	8	High	South Side	8	High	North-South	Vertical	Exceed Standard	No Obstructions	25	Vertical	Exceed Standard	No Obstructions	25	2	2	2	2	2	2	2		
64	University Ave	115 to Marlborough Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	30	Vertical	Standard	No Obstructions	30	2	1	2	2	2	1	2		
65	University Ave	Marlborough Ave to Fairmount Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	30	Vertical	Standard	No Obstructions	30	2	1	2	2	2	1	2		
66	University Ave	Fairmount Ave to Highland Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	30	Vertical	Standard	No Obstructions	30	2	1	2	2	2	1	2		
67	University Ave	Highland Ave to Euclid Ave	North Side	7	High	South Side	7	High	North-South	Vertical	Standard	No Obstructions	30	Vertical	Standard	No Obstructions	30	2	1	2	2	2	1	2		
68	University Ave	Euclid Ave to 50th St	North Side	5	Medium	South Side	5	Medium	North-South	6-13	Standard	No Obstructions	35	6-13	Standard	No Obstructions	35	1	1	2	1	1	1	2		
69	University Ave	50th St to 54th St	North Side	4	Medium	South Side	5	Medium																		







#	NEW ID	Intersection	Crossing	North Leg										South Leg										East Leg										West Leg																														
				Physical Features					Operational Features					Physical Features					Operational Features					Physical Features					Operational Features					Physical Features					Operational Features																									
				High	Advan	Raised	Bubb	Count	EP	No	Ped	ADA	Control	Score	Grade	Crossing	High	Advan	Raised	Bubb	Count	EP	No	Ped	ADA	Control	Score	Grade	Crossing	High	Advan	Raised	Bubb	Count	EP	No	Ped	ADA	Control	Score	Grade	Crossing	High	Advan	Raised	Bubb	Count	EP	No	Ped	ADA	Control	Score	Grade										
51	51	University Ave & College Ave	Yes	x	x		x						ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x				ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x				ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x				ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x			
52	52	University Ave & Rolando Blvd	Yes	x	x		x						ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x				ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x				ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x				ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x			
53	53	Wightman St & 35th St	Yes	x									ADA	RA	5	Medium	Yes	x								ADA	RA	5	Medium	Yes	x								ADA	RA	5	Medium	Yes	x								ADA	RA	5	Medium	Yes	x							
54	54	Wightman St & Central Ave	Yes				x						ADA	PermissiveL	eft	4	Medium	Yes				x				ADA	PermissiveL	eft	4	Medium	Yes				x				ADA	PermissiveL	eft	4	Medium	No								ADA	PermissiveL	eft	4	Medium	No							
55	55	Wightman St & Marlborough Ave	Yes		x								ADA	AllWayStop	PermissiveL	eft	5	Medium				x				ADA	AllWayStop	PermissiveL	eft	5	Medium				x				ADA	AllWayStop	PermissiveL	eft	5	Medium				x				ADA	AllWayStop	PermissiveL	eft	5	Medium				x			
56	56	Wightman St & Fairmount Ave	Yes	x	x		x						ADA	PermissiveL	eft	6	Medium	Yes	x	x		x				ADA	PermissiveL	eft	6	Medium	Yes	x	x		x				ADA	PermissiveL	eft	6	Medium	Yes	x	x		x				ADA	PermissiveL	eft	6	Medium	Yes	x	x		x			
57	57	Wightman St & Euclid Ave	Yes	x	x		x		x				ADA	PermissiveL	eft	7	High	Yes	x	x		x				ADA	PermissiveL	eft	7	High	No								ADA	PermissiveL	eft	7	High	Yes	x	x		x		x		ADA	PermissiveL	eft	7	High	Yes	x	x		x		x	
58	58	Landis St & Central Ave	Yes	x									ADA	RA	5	Medium	Yes	x							ADA	RA	5	Medium	Yes	x							ADA	RA	5	Medium	No								ADA	RA	5	Medium	No											
59	59	Landis St & Marlborough Dr	Yes	x	x								ADA	SideStop	5	Medium	Yes	x	x						ADA	SideStop	5	Medium	Yes	x	x						ADA	SideStop	5	Medium	Yes	x	x						ADA	SideStop	5	Medium	Yes	x	x									
60	60	Landis St & 43rd St	Yes	x	x								ADA	AllWayStop	PermissiveL	eft	6	Medium	Yes	x						ADA	AllWayStop	PermissiveL	eft	6	Medium	Yes	x	x					ADA	AllWayStop	PermissiveL	eft	6	Medium	Yes	x	x					ADA	AllWayStop	PermissiveL	eft	6	Medium	Yes	x	x				
61	61	Landis St & Fairmount Ave	Yes	x	x		x						ADA	PermissiveL	eft	6	Medium	Yes	x	x		x				ADA	PermissiveL	eft	6	Medium	Yes	x	x		x				ADA	PermissiveL	eft	6	Medium	Yes	x	x		x				ADA	PermissiveL	eft	6	Medium	Yes	x	x		x			
62	62	Landis St & Euclid Ave	No										ADA	None	2	Low	Yes								ADA	None	2	Low	No								ADA	None	2	Low	No								ADA	None	2	Low	No											
63	63	43rd St & Fairmount Ave	Yes	x			x						ADA	SignalProtec	tedLeft	6	Medium	Yes	x	x		x				ADA	SignalProtec	tedLeft	6	Medium	Yes	x			x				ADA	SignalProtec	tedLeft	6	Medium	Yes	x	x		x				ADA	SignalProtec	tedLeft	6	Medium	Yes	x	x		x			
64	64	Poplar St & Fairmount Ave	Yes	x			x						ADA	PermissiveL	eft	5	Medium	Yes	x	x		x				ADA	PermissiveL	eft	5	Medium	Yes	x	x		x				ADA	PermissiveL	eft	5	Medium	Yes	x	x		x				ADA	PermissiveL	eft	5	Medium	Yes	x	x		x			
65	65	Home Ave & I-805 SB Ramp	Yes	x	x		x	x					Ramp	SignalProtec	tedLeft	7	High	Yes				x	x			Ramp	SignalProtec	tedLeft	7	High									Ramp	SignalProtec	tedLeft	7	High								Ramp	SignalProtec	tedLeft	7	High									
66	66	Home Ave & I-805 NB Ramp	No											PermissiveL	eft	0	Low	Yes	x	x		x	x			Ramp	PermissiveL	eft	6	Medium	No								Ramp	PermissiveL	eft	6	Medium	No							Ramp	PermissiveL	eft	6	Medium	No								
67	67	Home Ave & Fairmount Ave	Yes	x			x						ADA	SignalProtec	tedLeft	6	Medium	Yes	x	x		x				Ramp	SignalProtec	tedLeft	6	Medium	Yes	x	x		x				Ramp	SignalProtec	tedLeft	6	Medium	Yes	x	x		x				Ramp	SignalProtec	tedLeft	6	Medium	Yes	x	x		x			
68	68	Home Ave & Euclid Ave	Yes	x	x		x	x					ADA	SignalProtec	tedLeft	8	High	Yes	x	x		x	x			ADA	SignalProtec	tedLeft	8	High	Yes	x	x		x	x			ADA	SignalProtec	tedLeft	8	High	No								ADA	SignalProtec	tedLeft	8	High	No							
69	69	Federal Blvd & 47th St	Yes				x						ADA	SignalProtec	tedLeft	5	Medium	Yes				x				ADA	SignalProtec	tedLeft	5	Medium	Yes				x				ADA	SignalProtec	tedLeft	5	Medium	Yes				x				ADA	SignalProtec	tedLeft	5	Medium	Yes				x			
70	70	Federal Blvd & Euclid Ave	Yes	x	x		x						ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x				ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x				ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x				ADA	SignalProtec	tedLeft	7	High	Yes	x	x		x			
71	71	Euclid Ave & 54th St	Yes	x	x		x						ADA	PermissiveL	eft	6	Medium	No									PermissiveL	eft	6	Medium	No								ADA	PermissiveL	eft	6	Medium	No							ADA	PermissiveL	eft	6	Medium	No								
73	72	54th St & College Grove	Yes	x	x		x						Ramp	PermissiveL	eft	5	Medium	No									PermissiveL	eft	5	Medium	No								ADA	PermissiveL	eft	5	Medium	No							ADA	PermissiveL	eft	5	Medium	No								
74	73	54th St & Redwood St	Yes	x	x		x						ADA	PermissiveL	eft	6	Medium	Yes	x	x		x				ADA	PermissiveL	eft	6	Medium	Yes	x			x				ADA	PermissiveL	eft	6	Medium	Yes	x	x		x				ADA	PermissiveL	eft	6	Medium	Yes	x	x		x			
75	80	54th St & Chollas Rd	No											PermissiveL	eft	0	Low	No									PermissiveL	eft	0	Low	Yes	x	x		x				ADA	PermissiveL	eft	7	High								ADA	PermissiveL	eft	7	High									
76	74	54th St & Streamview	No											SignalProtec	tedLeft	7	High	Yes	x	x		x				Ramp	SignalProtec	tedLeft	7	High	Yes	x	x		x				ADA	SignalProtec	tedLeft	7	High	No							ADA	SignalProtec	tedLeft	7	High	No								
77	76	Streamview & Lynn St	Yes	x									ADA	RA	5	Medium	Yes	x							ADA	RA	5	Medium	Yes	x							ADA	RA	5	Medium	Yes	x						ADA	RA	5	Medium	Yes	x											
78	77	Streamview & Boren St	No											PermissiveL	eft	0	Low	No									PermissiveL	eft	0	Low	No									PermissiveL	eft	0	Low	Yes							Ramp	PermissiveL	eft	3	Low	Yes								
79	78	College Grove & College Ave	Yes				x						Ramp	SignalProtec	tedLeft	4	Medium	Yes				x				Ramp	SignalProtec	tedLeft	4	Medium	Yes				x				Ramp	SignalProtec	tedLeft	4	Medium	No							Ramp	SignalProtec	tedLeft	4	Medium	No								
80	79	College Grove & College Grove Way	Yes				x						ADA	SignalProtec	tedLeft	5	Medium	Yes	x			x				ADA	SignalProtec	tedLeft	5	Medium	Yes				x				ADA	SignalProtec	tedLeft	5	Medium	Yes				x				ADA	SignalProtec	tedLeft	5	Medium	Yes				x			
75new	75	54th St & Chollas Pkwy	No											PermissiveL	eft	0	Low	No									PermissiveL	eft	0	Low	Yes	x	x						ADA	PermissiveL	eft	3	Low	No							ADA	PermissiveL	eft	3	Low	No								

## Appendix E - Intersection Analysis Worksheets

HCM 6th TWSC  
2: Adams Ave & W Mountain View Dr

Existing AM  
AM Peak Hour

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	53	595	314	18	37	58
Future Vol, veh/h	53	595	314	18	37	58
Conflicting Peds, #/hr	18	0	0	18	2	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	80	80	91	91
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	59	661	393	23	41	64

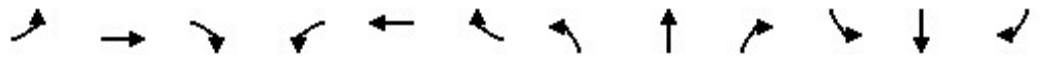
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	434	0	-	0	1204 424
Stage 1	-	-	-	-	423 -
Stage 2	-	-	-	-	781 -
Critical Hdwy	4.13	-	-	-	6.43 6.23
Critical Hdwy Stg 1	-	-	-	-	5.43 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.227	-	-	-	3.527 3.327
Pot Cap-1 Maneuver	1120	-	-	-	202 628
Stage 1	-	-	-	-	659 -
Stage 2	-	-	-	-	450 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1101	-	-	-	185 617
Mov Cap-2 Maneuver	-	-	-	-	315 -
Stage 1	-	-	-	-	613 -
Stage 2	-	-	-	-	442 -

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1101	-	-	-	449
HCM Lane V/C Ratio	0.053	-	-	-	0.233
HCM Control Delay (s)	8.5	-	-	-	15.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.9

HCM 6th Signalized Intersection Summary  
3: 35th St & Adams Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	544	29	126	304	73	18	12	139	80	3	10
Future Volume (veh/h)	15	544	29	126	304	73	18	12	139	80	3	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	16	591	27	137	330	68	20	13	135	87	3	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	638	971	44	483	823	170	143	27	185	415	18	15
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	979	1761	80	799	1493	308	128	184	1277	1395	124	101
Grp Volume(v), veh/h	16	0	618	137	0	398	168	0	0	96	0	0
Grp Sat Flow(s),veh/h/ln	979	0	1841	799	0	1800	1589	0	0	1620	0	0
Q Serve(g_s), s	0.3	0.0	7.3	4.5	0.0	4.1	1.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.4	0.0	7.3	11.8	0.0	4.1	3.2	0.0	0.0	1.6	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.17	0.12		0.80	0.91		0.06
Lane Grp Cap(c), veh/h	638	0	1015	483	0	992	355	0	0	447	0	0
V/C Ratio(X)	0.03	0.00	0.61	0.28	0.00	0.40	0.47	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	1920	0	3426	1529	0	3350	2072	0	0	1828	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.4	0.0	4.9	8.9	0.0	4.2	13.2	0.0	0.0	12.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.3	0.0	0.3	0.4	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.0	0.5	0.0	0.5	1.0	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.5	0.0	5.5	9.2	0.0	4.4	13.5	0.0	0.0	12.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		634			535			168				96
Approach Delay, s/veh		5.5			5.7			13.5				12.5
Approach LOS		A			A			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.7		9.6		22.7		9.6				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		60.0		40.0		60.0		40.0				
Max Q Clear Time (g_c+I1), s		9.3		3.6		13.8		5.2				
Green Ext Time (p_c), s		5.0		0.4		4.0		0.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				7.0								
HCM 6th LOS				A								

# HCM 6th Signalized Intersection Summary

## 4: 40th St & Adams Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	453	308	157	381	0	220	0	145	0	0	0
Future Volume (veh/h)	1	453	308	157	381	0	220	0	145	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	1	503	270	194	470	0	259	0	136	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.81	0.81	0.81	0.85	0.85	0.85	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	3	684	863	336	1034	0	336	0	590	0	3	0
Arrive On Green	0.00	0.37	0.37	0.19	0.56	0.00	0.19	0.00	0.19	0.00	0.00	0.00
Sat Flow, veh/h	1767	1856	1532	1767	1856	0	1767	0	1532	0	1856	0
Grp Volume(v), veh/h	1	503	270	194	470	0	259	0	136	0	0	0
Grp Sat Flow(s),veh/h/ln	1767	1856	1532	1767	1856	0	1767	0	1532	0	1856	0
Q Serve(g_s), s	0.0	14.3	5.7	6.1	9.1	0.0	8.5	0.0	3.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.3	5.7	6.1	9.1	0.0	8.5	0.0	3.7	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	684	863	336	1034	0	336	0	590	0	3	0
V/C Ratio(X)	0.34	0.74	0.31	0.58	0.45	0.00	0.77	0.00	0.23	0.00	0.00	0.00
Avail Cap(c_a), veh/h	145	1130	1231	349	1034	0	727	0	929	0	553	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	30.3	16.6	7.2	22.4	8.0	0.0	23.4	0.0	12.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	58.5	1.6	0.2	1.3	0.1	0.0	1.4	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	5.5	2.5	2.4	2.8	0.0	3.4	0.0	1.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.8	18.2	7.4	23.7	8.1	0.0	24.8	0.0	12.9	0.0	0.0	0.0
LnGrp LOS	F	B	A	C	A	A	C	A	B	A	A	A
Approach Vol, veh/h		774			664			395				0
Approach Delay, s/veh		14.5			12.7			20.7				0.0
Approach LOS		B			B			C				
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	27.9		0.0	4.8	39.4		16.6				
Change Period (Y+Rc), s	4.7	5.5		5.0	* 4.7	5.5		5.1				
Max Green Setting (Gmax), s	18	37.0		18.1	* 5	18.0		25.0				
Max Q Clear Time (g_c+1/3), s	10	16.3		0.0	2.0	11.1		10.5				
Green Ext Time (p_c), s	0.1	4.1		0.0	0.0	1.1		1.1				

### Intersection Summary

HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
5: I-15 NB Ramps & Adams Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	338	255	0	0	337	374	209	2	83	0	0	0
Future Volume (veh/h)	338	255	0	0	337	374	209	2	83	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	363	274	0	0	410	400	275	3	83			
Peak Hour Factor	0.93	0.93	0.93	0.89	0.89	0.89	0.76	0.76	0.76			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	417	1150	0	0	572	474	354	4	310			
Arrive On Green	0.24	0.62	0.00	0.00	0.31	0.31	0.20	0.20	0.20			
Sat Flow, veh/h	1767	1856	0	0	1856	1537	1749	19	1534			
Grp Volume(v), veh/h	363	274	0	0	410	400	278	0	83			
Grp Sat Flow(s),veh/h/ln	1767	1856	0	0	1856	1537	1768	0	1534			
Q Serve(g_s), s	12.3	4.1	0.0	0.0	12.2	15.2	9.3	0.0	2.8			
Cycle Q Clear(g_c), s	12.3	4.1	0.0	0.0	12.2	15.2	9.3	0.0	2.8			
Prop In Lane	1.00		0.00	0.00		1.00	0.99		1.00			
Lane Grp Cap(c), veh/h	417	1150	0	0	572	474	358	0	310			
V/C Ratio(X)	0.87	0.24	0.00	0.00	0.72	0.84	0.78	0.00	0.27			
Avail Cap(c_a), veh/h	709	1150	0	0	893	740	851	0	738			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	22.9	5.3	0.0	0.0	19.1	20.2	23.5	0.0	21.0			
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.0	0.6	3.1	1.4	0.0	0.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/lr	5.0	1.1	0.0	0.0	4.8	5.2	3.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	5.3	0.0	0.0	19.8	23.2	24.9	0.0	21.1			
LnGrp LOS	C	A	A	A	B	C	C	A	C			
Approach Vol, veh/h		637			810			361				
Approach Delay, s/veh		17.0			21.5			24.0				
Approach LOS		B			C			C				
Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		44.6		17.7	19.4	25.2						
Change Period (Y+Rc), s		6.0		5.1	* 4.7	6.0						
Max Green Setting (Gmax), s		30.0		30.0	* 25	30.0						
Max Q Clear Time (g_c+l1), s		6.1		11.3	14.3	17.2						
Green Ext Time (p_c), s		0.9		1.2	0.4	2.0						

Intersection Summary

HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.  
\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 6: Marlborough Dr & Adams Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	191	28	5	269	19	115	29	6	62	192	28
Future Volume (veh/h)	65	191	28	5	269	19	115	29	6	62	192	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.95	0.97		0.93	0.96		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	84	248	30	6	299	15	144	36	2	79	246	30
Peak Hour Factor	0.77	0.77	0.77	0.90	0.90	0.90	0.80	0.80	0.80	0.78	0.78	0.78
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	443	547	66	468	592	30	553	117	5	228	453	50
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1040	1613	195	1074	1747	88	1002	341	15	250	1315	144
Grp Volume(v), veh/h	84	0	278	6	0	314	182	0	0	355	0	0
Grp Sat Flow(s),veh/h/ln1040	0	1808	1074	0	1834	1358	0	0	1710	0	0	0
Q Serve(g_s), s	2.2	0.0	3.7	0.1	0.0	4.2	0.0	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	6.4	0.0	3.7	3.9	0.0	4.2	2.6	0.0	0.0	5.1	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.05	0.79		0.01	0.22		0.08
Lane Grp Cap(c), veh/h	443	0	613	468	0	622	676	0	0	731	0	0
V/C Ratio(X)	0.19	0.00	0.45	0.01	0.00	0.50	0.27	0.00	0.00	0.49	0.00	0.00
Avail Cap(c_a), veh/h	1769	0	2918	1836	0	2961	1781	0	0	2303	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.7	0.0	8.0	9.5	0.0	8.2	7.5	0.0	0.0	8.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.0	0.0	0.2	0.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln0.4	0.0	0.0	0.9	0.0	0.0	1.0	0.5	0.0	0.0	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.8	0.0	8.2	9.5	0.0	8.4	7.6	0.0	0.0	8.5	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		362			320			182			355	
Approach Delay, s/veh		8.8			8.4			7.6			8.5	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.4		15.6		15.4		15.6				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		50.0		40.0		50.0		40.0				
Max Q Clear Time (g_c+I1), s		8.4		7.1		6.2		4.6				
Green Ext Time (p_c), s		1.3		1.4		1.2		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				8.4								
HCM 6th LOS				A								



<b>Intersection</b>												
Intersection Delay, s/veh	9.4											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	150	21	15	3	37	10	30	21	2	11	23	171
Future Vol, veh/h	150	21	15	3	37	10	30	21	2	11	23	171
Peak Hour Factor	0.82	0.82	0.82	0.74	0.74	0.74	0.66	0.66	0.66	0.80	0.80	0.80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	183	26	18	4	50	14	45	32	3	14	29	214
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.2	8.5	8.8	9.2
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	57%	81%	6%	5%
Vol Thru, %	40%	11%	74%	11%
Vol Right, %	4%	8%	20%	83%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	53	186	50	205
LT Vol	30	150	3	11
Through Vol	21	21	37	23
RT Vol	2	15	10	171
Lane Flow Rate	80	227	68	256
Geometry Grp	1	1	1	1
Degree of Util (X)	0.113	0.309	0.092	0.306
Departure Headway (Hd)	5.07	4.904	4.898	4.299
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	703	730	726	833
Service Time	3.126	2.959	2.964	2.341
HCM Lane V/C Ratio	0.114	0.311	0.094	0.307
HCM Control Delay	8.8	10.2	8.5	9.2
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.4	1.3	0.3	1.3

Intersection

Intersection Delay, s/veh 13.2

Intersection LOS B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	363	108	94	0	0	161
Future Vol, veh/h	363	108	94	0	0	161
Peak Hour Factor	0.98	0.98	0.71	0.71	0.89	0.89
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	370	110	132	0	0	181
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left NB			WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right SB		WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	15.1	9.9	10.5
HCM LOS	C	A	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	0%
Vol Thru, %	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	94	363	108	161
LT Vol	0	363	0	0
Through Vol	94	0	0	161
RT Vol	0	0	108	0
Lane Flow Rate	132	370	110	181
Geometry Grp	2	5	5	2
Degree of Util (X)	0.201	0.602	0.142	0.271
Departure Headway (Hd)	5.454	5.855	4.647	5.384
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	651	611	762	662
Service Time	3.541	3.644	2.435	3.462
HCM Lane V/C Ratio	0.203	0.606	0.144	0.273
HCM Control Delay	9.9	17.2	8.2	10.5
HCM Lane LOS	A	C	A	B
HCM 95th-tile Q	0.7	4	0.5	1.1

<b>Intersection</b>												
Intersection Delay, s/veh	8.8											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	39	15	36	27	14	29	40	116	30	26	95	35
Future Vol, veh/h	39	15	36	27	14	29	40	116	30	26	95	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	42	16	39	29	15	32	43	126	33	28	103	38
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.3	9.1	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	22%	43%	39%	17%
Vol Thru, %	62%	17%	20%	61%
Vol Right, %	16%	40%	41%	22%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	186	90	70	156
LT Vol	40	39	27	26
Through Vol	116	15	14	95
RT Vol	30	36	29	35
Lane Flow Rate	202	98	76	170
Geometry Grp	1	1	1	1
Degree of Util (X)	0.253	0.129	0.1	0.212
Departure Headway (Hd)	4.505	4.739	4.75	4.495
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	797	754	752	797
Service Time	2.537	2.78	2.793	2.528
HCM Lane V/C Ratio	0.253	0.13	0.101	0.213
HCM Control Delay	9.1	8.5	8.3	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1	0.4	0.3	0.8

Intersection												
Intersection Delay, s/veh	8.9											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	36	21	33	38	21	41	37	107	42	36	87	32
Future Vol, veh/h	36	21	33	38	21	41	37	107	42	36	87	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	39	23	36	41	23	45	40	116	46	39	95	35
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.6	9.2	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	40%	38%	23%
Vol Thru, %	58%	23%	21%	56%
Vol Right, %	23%	37%	41%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	186	90	100	155
LT Vol	37	36	38	36
Through Vol	107	21	21	87
RT Vol	42	33	41	32
Lane Flow Rate	202	98	109	168
Geometry Grp	1	1	1	1
Degree of Util (X)	0.255	0.131	0.144	0.215
Departure Headway (Hd)	4.549	4.804	4.76	4.604
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	786	743	751	777
Service Time	2.59	2.85	2.806	2.647
HCM Lane V/C Ratio	0.257	0.132	0.145	0.216
HCM Control Delay	9.2	8.6	8.6	8.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1	0.4	0.5	0.8

Intersection												
Intersection Delay, s/veh	18.2											
Intersection LOS	C											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↗			↖	↗
Traffic Vol, veh/h	36	105	99	11	294	1	249	24	8	1	28	197
Future Vol, veh/h	36	105	99	11	294	1	249	24	8	1	28	197
Peak Hour Factor	0.91	0.91	0.91	0.89	0.89	0.89	0.91	0.91	0.91	0.81	0.81	0.81
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	40	115	109	12	330	1	274	26	9	1	35	243
Number of Lanes	0	1	1	0	1	1	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	12.8	24	19.9	14.4
HCM LOS	B	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	26%	0%	4%	0%	3%	0%
Vol Thru, %	0%	75%	74%	0%	96%	0%	97%	0%
Vol Right, %	0%	25%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	249	32	141	99	305	1	29	197
LT Vol	249	0	36	0	11	0	1	0
Through Vol	0	24	105	0	294	0	28	0
RT Vol	0	8	0	99	0	1	0	197
Lane Flow Rate	274	35	155	109	343	1	36	243
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.589	0.069	0.325	0.203	0.682	0.002	0.074	0.453
Departure Headway (Hd)	7.752	7.06	7.551	6.701	7.164	6.429	7.435	6.698
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	465	506	474	533	504	555	480	535
Service Time	5.517	4.825	5.324	4.473	4.927	4.191	5.202	4.465
HCM Lane V/C Ratio	0.589	0.069	0.327	0.205	0.681	0.002	0.075	0.454
HCM Control Delay	21.1	10.4	14	11.2	24	9.2	10.8	14.9
HCM Lane LOS	C	B	B	B	C	A	B	B
HCM 95th-tile Q	3.7	0.2	1.4	0.8	5.1	0	0.2	2.3

**Intersection**

Intersection Delay, s/veh 10.2

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	84	36	96	223	15	56	5	21	9	18	27
Future Vol, veh/h	5	84	36	96	223	15	56	5	21	9	18	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	91	39	104	242	16	61	5	23	10	20	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	11.3	9	8.4
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	68%	4%	29%	17%
Vol Thru, %	6%	67%	67%	33%
Vol Right, %	26%	29%	4%	50%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	82	125	334	54
LT Vol	56	5	96	9
Through Vol	5	84	223	18
RT Vol	21	36	15	27
Lane Flow Rate	89	136	363	59
Geometry Grp	1	1	1	1
Degree of Util (X)	0.128	0.172	0.455	0.081
Departure Headway (Hd)	5.15	4.567	4.509	4.95
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	693	783	799	720
Service Time	3.205	2.613	2.545	3.008
HCM Lane V/C Ratio	0.128	0.174	0.454	0.082
HCM Control Delay	9	8.6	11.3	8.4
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.4	0.6	2.4	0.3

**Intersection**

Intersection Delay, s/veh 10.7

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	94	35	98	280	7	22	1	12	8	17	32
Future Vol, veh/h	2	94	35	98	280	7	22	1	12	8	17	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	102	38	107	304	8	24	1	13	9	18	35
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	11.9	8.6	8.5
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	63%	2%	25%	14%
Vol Thru, %	3%	72%	73%	30%
Vol Right, %	34%	27%	2%	56%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	35	131	385	57
LT Vol	22	2	98	8
Through Vol	1	94	280	17
RT Vol	12	35	7	32
Lane Flow Rate	38	142	418	62
Geometry Grp	1	1	1	1
Degree of Util (X)	0.055	0.178	0.511	0.085
Departure Headway (Hd)	5.216	4.493	4.399	4.951
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	685	797	820	722
Service Time	3.262	2.523	2.422	2.994
HCM Lane V/C Ratio	0.055	0.178	0.51	0.086
HCM Control Delay	8.6	8.5	11.9	8.5
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.2	0.6	3	0.3

HCM 6th Signalized Intersection Summary  
14: 35th St & Meade Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	44	36	40	44	36	49	45	90	49	44	73	40
Future Volume (veh/h)	44	36	40	44	36	49	45	90	49	44	73	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	48	39	38	48	39	48	49	98	48	48	79	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	362	187	129	350	173	151	302	221	96	319	216	89
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	405	705	485	378	651	568	306	947	409	351	926	382
Grp Volume(v), veh/h	125	0	0	135	0	0	195	0	0	165	0	0
Grp Sat Flow(s),veh/h/ln	1595	0	0	1597	0	0	1662	0	0	1659	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.2	0.0	0.0	1.9	0.0	0.0	1.5	0.0	0.0
Prop In Lane	0.38		0.30	0.36		0.36	0.25		0.25	0.29		0.23
Lane Grp Cap(c), veh/h	678	0	0	673	0	0	618	0	0	625	0	0
V/C Ratio(X)	0.18	0.00	0.00	0.20	0.00	0.00	0.32	0.00	0.00	0.26	0.00	0.00
Avail Cap(c_a), veh/h	4940	0	0	4961	0	0	3509	0	0	3450	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.7	0.0	0.0	5.7	0.0	0.0	6.5	0.0	0.0	6.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.8	0.0	0.0	5.8	0.0	0.0	6.7	0.0	0.0	6.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		125			135			195			165	
Approach Delay, s/veh		5.8			5.8			6.7			6.5	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		10.1		9.5		10.1		9.5				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		60.0		40.0		60.0		40.0				
Max Q Clear Time (g_c+I1), s		3.1		3.5		3.2		3.9				
Green Ext Time (p_c), s		0.8		1.0		0.8		1.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											6.3	
HCM 6th LOS											A	



HCM 6th Signalized Intersection Summary  
 15: I-805 SB Ramps & El Cajon Blvd

Existing AM  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑↑	↑↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	663	670	153	949	0	0	0	0	152	2	452
Future Volume (veh/h)	0	663	670	153	949	0	0	0	0	152	2	452
Initial Q (Qb), veh	0	0	0	5	5	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	729	588	174	1078	0				170	0	0
Peak Hour Factor	0.91	0.91	0.91	0.88	0.88	0.88				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	2579	1148	252	4250	0				270	0	
Arrive On Green	0.00	0.73	0.73	0.02	0.28	0.00				0.08	0.00	0.00
Sat Flow, veh/h	0	3618	1569	3428	5233	0				3534	0	1572
Grp Volume(v), veh/h	0	729	588	174	1078	0				170	0	0
Grp Sat Flow(s),veh/h/ln	0	1763	1569	1714	1689	0				1767	0	1572
Q Serve(g_s), s	0.0	9.0	20.7	6.6	21.5	0.0				6.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.0	20.7	6.6	21.5	0.0				6.1	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2579	1148	252	4250	0				270	0	
V/C Ratio(X)	0.00	0.28	0.51	0.69	0.25	0.00				0.63	0.00	
Avail Cap(c_a), veh/h	0	2588	1152	527	4250	0				1196	0	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	0.83	0.83	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.9	7.5	62.3	15.5	0.0				58.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	1.6	2.8	0.1	0.0				0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	9.1	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0	0.0	3.1	6.7	3.7	10.0	0.0				2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.2	9.2	74.3	15.7	0.0				59.2	0.0	0.0
LnGrp LOS	A	A	A	E	B	A				E	A	
Approach Vol, veh/h		1317			1252						170	
Approach Delay, s/veh		7.5			23.8						59.2	
Approach LOS		A			C						E	
Timer - Assigned Phs	1	2			6		8					
Phs Duration (G+Y+Rc), s	3.6	100.9			114.6		15.4					
Change Period (Y+Rc), s	4.7	5.5			5.5		5.5					
Max Green Setting (Gmax), s	20	50.3			75.0		44.0					
Max Q Clear Time (g_c+1), s	10	22.7			23.5		8.1					
Green Ext Time (p_c), s	0.4	17.5			18.6		0.3					

Intersection Summary

HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

Notes

- User approved volume balancing among the lanes for turning movement.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
- Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 16: I-805 NB Ramps & El Cajon Blvd

Existing AM  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑			↑↑↑		↔	↔	↔			
Traffic Volume (veh/h)	419	378	0	0	652	433	452	2	90	0	0	0
Future Volume (veh/h)	419	378	0	0	652	433	452	2	90	0	0	0
Initial Q (Qb), veh	5	0	0	0	5	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	436	394	0	0	709	422	498	0	77			
Peak Hour Factor	0.96	0.96	0.96	0.92	0.92	0.92	0.91	0.91	0.91			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	524	3808	0	0	1900	851	578	0	253			
Arrive On Green	0.25	1.00	0.00	0.00	0.56	0.56	0.16	0.00	0.16			
Sat Flow, veh/h	3428	5233	0	0	3544	1539	3534	0	1549			
Grp Volume(v), veh/h	436	394	0	0	709	422	498	0	77			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	0	1689	1539	1767	0	1549			
Q Serve(g_s), s	15.8	0.0	0.0	0.0	15.1	21.5	17.8	0.0	5.7			
Cycle Q Clear(g_c), s	15.8	0.0	0.0	0.0	15.1	21.5	17.8	0.0	5.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	524	3808	0	0	1889	862	578	0	253			
V/C Ratio(X)	0.83	0.10	0.00	0.00	0.38	0.49	0.86	0.00	0.30			
Avail Cap(c_a), veh/h	923	3808	0	0	1896	864	1183	0	518			
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	47.2	0.0	0.0	0.0	16.2	17.6	52.9	0.0	47.9			
Incr Delay (d2), s/veh	3.2	0.1	0.0	0.0	0.6	2.0	1.5	0.0	0.2			
Initial Q Delay(d3),s/veh	3.9	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.9	0.0	0.0	0.0	6.2	8.2	8.1	0.0	5.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	0.1	0.0	0.0	16.8	19.6	54.4	0.0	48.1			
LnGrp LOS	D	A	A	A	B	B	D	A	D			
Approach Vol, veh/h		830			1131			575				
Approach Delay, s/veh		28.5			17.8			53.6				
Approach LOS		C			B			D				
Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		103.2		26.8	24.7	78.5						
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5						
Max Green Setting (Gmax), s		75.5		43.5	35.0	35.0						
Max Q Clear Time (g_c+I1), s		2.0		19.8	17.8	23.5						
Green Ext Time (p_c), s		4.5		1.1	1.4	8.4						

Intersection Summary

HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
17: 35th St & El Cajon Blvd

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	350	23	33	548	51	82	107	32	45	40	72
Future Volume (veh/h)	26	350	23	33	548	51	82	107	32	45	40	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.92	0.98		0.95	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	27	357	18	38	630	48	86	113	29	52	47	72
Peak Hour Factor	0.98	0.98	0.98	0.87	0.87	0.87	0.95	0.95	0.95	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	831	2317	1015	49	743	306	136	161	38	107	99	124
Arrive On Green	0.47	0.66	0.66	0.03	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1767	3526	1545	1767	3526	1452	475	779	183	345	479	599
Grp Volume(v), veh/h	27	357	18	38	630	48	228	0	0	171	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1545	1767	1763	1452	1436	0	0	1424	0	0
Q Serve(g_s), s	1.1	5.0	0.5	2.8	22.3	3.5	6.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	5.0	0.5	2.8	22.3	3.5	20.0	0.0	0.0	13.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.38		0.13	0.30		0.42
Lane Grp Cap(c), veh/h	831	2317	1015	49	743	306	334	0	0	330	0	0
V/C Ratio(X)	0.03	0.15	0.02	0.78	0.85	0.16	0.68	0.00	0.00	0.52	0.00	0.00
Avail Cap(c_a), veh/h	831	2317	1015	198	1955	805	373	0	0	367	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.00	0.00	0.97	0.00	0.00
Uniform Delay (d), s/veh	18.5	8.5	7.7	62.8	49.3	41.9	48.8	0.0	0.0	46.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	9.6	11.6	1.1	3.2	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.9	0.2	1.4	10.9	1.4	7.4	0.0	0.0	5.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	8.6	7.8	72.5	60.9	43.0	52.0	0.0	0.0	46.6	0.0	0.0
LnGrp LOS	B	A	A	E	E	D	D	A	A	D	A	A
Approach Vol, veh/h		402			716			228			171	
Approach Delay, s/veh		9.3			60.3			52.0			46.6	
Approach LOS		A			E			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	90.3		31.7	66.0	32.3		31.7				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.9	* 4.9		4.9				
Max Green Setting (Gmax), s	14.6	71.1		30.1	13.6	* 72		30.1				
Max Q Clear Time (g_c+14), s	14.8	7.0		15.9	3.1	24.3		22.0				
Green Ext Time (p_c), s	0.0	1.6		0.6	0.0	3.1		0.6				

Intersection Summary

HCM 6th Ctrl Delay	44.0
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 18: El Cajon Blvd & I-15 SB Ramps

Existing AM  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		↑↑↑	↑	↑	↑↑↑			↑		↑↑	↑	↑	
Traffic Volume (veh/h)	0	485	260	364	599	0	0	0	0	165	77	176	
Future Volume (veh/h)	0	485	260	364	599	0	0	0	0	165	77	176	
Initial Q (Qb), veh	0	10	10	10	10	0	0	0	0	5	5	5	
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		0.96	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach		No			No			No			No		
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0	0	1856	0	1856	1856	1856	
Adj Flow Rate, veh/h	0	557	299	433	713	0	0	0	0	196	145	127	
Peak Hour Factor	0.87	0.87	0.87	0.84	0.84	0.84	0.92	0.92	0.92	0.84	0.84	0.84	
Percent Heavy Veh, %	0	3	3	3	3	0	0	3	0	3	3	3	
Cap, veh/h	0	2667	802	439	4109	0	0	1	0	355	190	157	
Arrive On Green	0.00	0.53	0.53	0.25	0.81	0.00	0.00	0.00	0.00	0.10	0.10	0.10	
Sat Flow, veh/h	0	5233	1525	1767	5233	0	0-74222	0	3534	1856	1508		
Grp Volume(v), veh/h	0	557	299	433	713	0	0	0	0	196	145	127	
Grp Sat Flow(s),veh/h/ln	0	1689	1525	1767	1689	0	0	1856	0	1767	1856	1508	
Q Serve(g_s), s	0.0	7.6	15.0	31.7	4.0	0.0	0.0	0.0	0.0	6.9	9.9	10.8	
Cycle Q Clear(g_c), s	0.0	7.6	15.0	31.7	4.0	0.0	0.0	0.0	0.0	6.9	9.9	10.8	
Prop In Lane	0.00		1.00	1.00		0.00	0.00		0.00	1.00		1.00	
Lane Grp Cap(c), veh/h	0	2667	802	439	4109	0	0	1	0	355	190	157	
V/C Ratio(X)	0.00	0.21	0.37	0.99	0.17	0.00	0.00	0.00	0.00	0.55	0.76	0.81	
Avail Cap(c_a), veh/h	0	2667	803	439	4109	0	0	500	0	378	198	161	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(l)	0.00	1.00	1.00	0.93	0.93	0.00	0.00	0.00	0.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	0.0	16.7	19.2	48.8	2.8	0.0	0.0	0.0	0.0	56.0	57.5	57.8	
Incr Delay (d2), s/veh	0.0	0.2	1.3	37.6	0.1	0.0	0.0	0.0	0.0	0.7	13.7	23.4	
Initial Q Delay(d3),s/veh	0.0	0.1	1.8	75.8	0.1	0.0	0.0	0.0	0.0	3.2	21.1	38.5	
%ile BackOfQ(50%),veh/lr0.0	0.0	3.4	7.4	27.9	1.4	0.0	0.0	0.0	0.0	3.6	7.2	7.5	
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	0.0	17.0	22.3	162.2	3.0	0.0	0.0	0.0	0.0	60.0	92.3	119.7	
LnGrp LOS		A	B	C	F	A	A	A	A	A	E	F	F
Approach Vol, veh/h		856			1146			0			468		
Approach Delay, s/veh		18.8			63.1			0.0			86.2		
Approach LOS		B			E						F		
Timer - Assigned Phs	1	2	4	6	8								
Phs Duration (G+Y+Rc), s	37.0	74.0	19.0	111.0	0.0								
Change Period (Y+Rc), s	4.7	5.5	6.1	5.5	4.0								
Max Green Setting (Gmax), s	32	28.5	13.9	65.5	35.0								
Max Q Clear Time (g_c+Q), s	33.7	17.0	12.8	6.0	0.0								
Green Ext Time (p_c), s	0.0	2.5	0.2	3.5	0.0								

Intersection Summary

HCM 6th Ctrl Delay	52.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 19: I-15 NB Ramps & El Cajon Blvd

Existing AM  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘ ↑↑↑	↑↑↑			↑↑↑	↗	↘		↗		↑	
Traffic Volume (veh/h)	210	452	0	0	808	315	143	0	319	0	0	0
Future Volume (veh/h)	210	452	0	0	808	315	143	0	319	0	0	0
Initial Q (Qb), veh	5	5	0	0	5	5	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	0	1856	0	1856	0
Adj Flow Rate, veh/h	241	520	0	0	1085	258	164	0	287	0	0	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3	0	3	0
Cap, veh/h	280	4331	0	0	4970	1044	218	0	0	0	1	0
Arrive On Green	0.30	1.00	0.00	0.00	0.67	0.67	0.06	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1767	5233	0	0	7422	1562	3428	164		0-7422		0
Grp Volume(v), veh/h	241	520	0	0	1085	258	164	61.9		0	0	0
Grp Sat Flow(s),veh/h/ln	1767	1689	0	0	1856	1562	1714	E		0	1856	0
Q Serve(g_s), s	17.1	0.0	0.0	0.0	7.3	8.5	6.1			0.0	0.0	0.0
Cycle Q Clear(g_c), s	17.1	0.0	0.0	0.0	7.3	8.5	6.1			0.0	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	280	4331	0	0	4970	1044	218			0	1	0
V/C Ratio(X)	0.86	0.12	0.00	0.00	0.22	0.25	0.75			0.00	0.00	0.00
Avail Cap(c_a), veh/h	377	4331	0	0	4973	1047	396			0	500	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(l)	0.94	0.94	0.00	0.00	1.00	1.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	43.8	0.0	0.0	0.0	8.4	9.0	59.9			0.0	0.0	0.0
Incr Delay (d2), s/veh	10.8	0.1	0.0	0.0	0.1	0.6	2.0			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	16.6	0.0	0.0	0.0	0.0	0.2	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	0.0	0.0	0.0	3.0	3.6	2.7			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.2	0.1	0.0	0.0	8.5	9.8	61.9			0.0	0.0	0.0
LnGrp LOS	E	A	A	A	A	A	E			A	A	A
Approach Vol, veh/h		761			1343							0
Approach Delay, s/veh		22.6			8.7							0.0
Approach LOS		C			A							
Timer - Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		116.6	13.4	0.0	24.0	92.6						
Change Period (Y+Rc), s		5.5	5.1	4.0	* 4.7	5.5						
Max Green Setting (Gmax), s		65.4	15.0	35.0	* 28	33.0						
Max Q Clear Time (g_c+l1), s		2.0	8.1	0.0	19.1	10.5						
Green Ext Time (p_c), s		2.5	0.2	0.0	0.2	5.9						

Intersection Summary

HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
20: 43rd St & El Cajon Blvd

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↘	↑↑			↕			↕	
Traffic Volume (veh/h)	0	692	43	119	803	0	0	0	0	217	253	69
Future Volume (veh/h)	0	692	43	119	803	0	0	0	0	217	253	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		1.00	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	834	40	127	854	0	0	0	0	252	294	68
Peak Hour Factor	0.83	0.83	0.83	0.94	0.94	0.94	0.92	0.92	0.92	0.86	0.86	0.86
Percent Heavy Veh, %	0	3	3	3	3	0	3	3	3	3	3	3
Cap, veh/h	0	919	393	662	2373	0	0	467	0	348	382	91
Arrive On Green	0.00	0.26	0.26	0.75	1.00	0.00	0.00	0.00	0.00	0.25	0.25	0.25
Sat Flow, veh/h	0	3618	1508	1767	3618	0	0	1856	0	1184	1520	360
Grp Volume(v), veh/h	0	834	40	127	854	0	0	0	0	314	0	300
Grp Sat Flow(s),veh/h/ln	0	1763	1508	1767	1763	0	0	1856	0	1477	0	1586
Q Serve(g_s), s	0.0	29.8	2.6	2.7	0.0	0.0	0.0	0.0	0.0	26.3	0.0	22.7
Cycle Q Clear(g_c), s	0.0	29.8	2.6	2.7	0.0	0.0	0.0	0.0	0.0	26.3	0.0	22.7
Prop In Lane	0.00		1.00	1.00		0.00	0.00		0.00	0.80		0.23
Lane Grp Cap(c), veh/h	0	919	393	662	2373	0	0	467	0	421	0	399
V/C Ratio(X)	0.00	0.91	0.10	0.19	0.36	0.00	0.00	0.00	0.00	0.75	0.00	0.75
Avail Cap(c_a), veh/h	0	1359	581	662	2373	0	0	487	0	437	0	416
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.70	0.70	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	46.5	36.5	10.5	0.0	0.0	0.0	0.0	0.0	46.3	0.0	44.9
Incr Delay (d2), s/veh	0.0	14.3	0.5	0.0	0.3	0.0	0.0	0.0	0.0	6.6	0.0	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.7	1.0	1.0	0.1	0.0	0.0	0.0	0.0	10.4	0.0	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	60.8	37.0	10.6	0.3	0.0	0.0	0.0	0.0	52.9	0.0	52.1
LnGrp LOS	A	E	D	B	A	A	A	A	A	D	A	D
Approach Vol, veh/h		874		981		0		0		614		
Approach Delay, s/veh		59.7		1.6		0.0		0.0		52.5		
Approach LOS		E		A						D		
Timer - Assigned Phs	1	2	4	6	8							
Phs Duration (G+Y+Rc), s	53.6	38.8	37.6	92.4	37.6							
Change Period (Y+Rc), s	4.9	* 4.9	4.9	4.9	4.9							
Max Green Setting (Gmax), s	31.6	* 50	34.1	86.1	34.1							
Max Q Clear Time (g_c+14), s	14.7	31.8	28.3	2.0	0.0							
Green Ext Time (p_c), s	0.2	2.1	1.9	2.3	0.0							

Intersection Summary

HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 21: Fairmount Ave & El Cajon Blvd

Existing AM  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	712	77	0	834	392	83	657	132	0	0	0
Future Volume (veh/h)	102	712	77	0	834	392	83	657	132	0	0	0
Initial Q (Qb), veh	0	0	0	0	15	15	0	30	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.94	0.94		0.93	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	124	868	76	0	948	354	93	738	131	0	0	0
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.89	0.89	0.89	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	147	2254	936	0	1841	770	51	844	34	0	530	0
Arrive On Green	0.17	1.00	1.00	0.00	0.52	0.52	0.29	0.29	0.29	0.00	0.00	0.00
Sat Flow, veh/h	1767	3526	1464	0	3618	1474	295	2558	453	0	1856	0
Grp Volume(v), veh/h	124	868	76	0	948	354	509	0	453	0	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1464	0	1763	1474	1738	0	1567	0	1856	0
Q Serve(g_s), s	8.8	0.0	0.0	0.0	22.8	19.6	34.6	0.0	37.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.8	0.0	0.0	0.0	22.8	19.6	37.1	0.0	37.1	0.0	0.0	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.18		0.29	0.00		0.00
Lane Grp Cap(c), veh/h	147	2254	936	0	1841	770	550	0	473	0	530	0
V/C Ratio(X)	0.84	0.39	0.08	0.00	0.51	0.46	0.93	0.00	0.96	0.00	0.00	0.00
Avail Cap(c_a), veh/h	280	2254	936	0	1841	770	529	0	447	0	530	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.89	0.89	0.89	0.00	1.00	1.00	0.97	0.00	0.97	0.00	0.00	0.00
Uniform Delay (d), s/veh	53.4	0.0	0.0	0.0	21.0	21.2	47.4	0.0	46.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	4.4	0.4	0.2	0.0	1.0	2.0	22.1	0.0	31.7	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	1.0	5.1	64.8	0.0	95.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.1	0.0	0.0	10.9	10.4	31.3	0.0	31.9	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.8	0.4	0.2	0.0	23.0	28.2	134.4	0.0	173.8	0.0	0.0	0.0
LnGrp LOS	E	A	A	A	C	C	F	A	F	A	A	A
Approach Vol, veh/h		1068			1302			962				0
Approach Delay, s/veh		7.1			24.5			153.0				0.0
Approach LOS		A			C			F				
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		88.0		42.0	15.2	72.8		42.0				
Change Period (Y+Rc), s		4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s		83.1		37.1	20.6	58.1		37.1				
Max Q Clear Time (g_c+I1), s		2.0		0.0	10.8	24.8		39.1				
Green Ext Time (p_c), s		4.6		0.0	0.1	5.8		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay												56.0
HCM 6th LOS												E

HCM 6th Signalized Intersection Summary  
 22: El Cajon Blvd & Euclid Ave

Existing AM  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	560	81	49	915	106	223	222	55	10	19	34
Future Volume (veh/h)	60	560	81	49	915	106	223	222	55	10	19	34
Initial Q (Qb), veh	5	5	0	10	10	0	10	10	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.96		0.96	0.97		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	73	683	87	57	1064	106	262	261	59	12	23	35
Peak Hour Factor	0.82	0.82	0.82	0.86	0.86	0.86	0.85	0.85	0.85	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	107	1744	218	106	1760	168	409	378	65	144	89	136
Arrive On Green	0.05	0.56	0.56	0.04	0.55	0.55	0.12	0.25	0.25	0.01	0.14	0.14
Sat Flow, veh/h	1767	3128	398	1767	3222	321	1767	1451	328	1767	634	965
Grp Volume(v), veh/h	73	385	385	57	582	588	262	0	320	12	0	58
Grp Sat Flow(s),veh/h/ln	1767	1763	1763	1767	1763	1780	1767	0	1779	1767	0	1599
Q Serve(g_s), s	5.3	16.1	16.1	4.2	29.0	29.1	15.6	0.0	21.5	0.8	0.0	4.2
Cycle Q Clear(g_c), s	5.3	16.1	16.1	4.2	29.0	29.1	15.6	0.0	21.5	0.8	0.0	4.2
Prop In Lane	1.00		0.23	1.00		0.18	1.00		0.18	1.00		0.60
Lane Grp Cap(c), veh/h	107	980	981	106	958	969	409	0	451	144	0	226
V/C Ratio(X)	0.68	0.39	0.39	0.54	0.61	0.61	0.64	0.00	0.71	0.08	0.00	0.26
Avail Cap(c_a), veh/h	144	982	983	144	963	973	404	0	467	243	0	321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.6	16.6	16.6	60.8	20.8	20.7	42.3	0.0	45.6	47.5	0.0	49.8
Incr Delay (d2), s/veh	3.3	1.2	1.2	1.6	2.9	2.8	2.7	0.0	4.9	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	49.5	0.1	0.1	139.7	0.5	0.5	12.0	0.0	12.2	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	7.1	7.1	7.3	13.4	13.5	8.7	0.0	13.2	0.3	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	113.3	17.9	17.9	202.1	24.1	24.0	57.1	0.0	62.7	47.6	0.0	50.3
LnGrp LOS	F	B	B	F	C	C	E	A	E	D	A	D
Approach Vol, veh/h		843			1227			582				70
Approach Delay, s/veh		26.1			32.4			60.2				49.9
Approach LOS		C			C			E				D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.8	77.3	20.0	22.9	11.2	75.9	5.8	37.1				
Change Period (Y+Rc), s	4.4	4.9	4.4	4.9	4.4	4.9	4.4	4.9				
Max Green Setting (Gmax), s	10.6	59.1	15.6	26.1	10.6	59.1	7.6	34.1				
Max Q Clear Time (g_c+10), s	10.2	18.1	17.6	6.2	7.3	31.1	2.8	23.5				
Green Ext Time (p_c), s	0.0	5.9	0.0	0.2	0.0	8.6	0.0	1.6				

Intersection Summary

HCM 6th Ctrl Delay	36.8
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



# HCM 6th Signalized Intersection Summary

## 23: Winona Ave & El Cajon Blvd

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	546	30	30	950	30	50	80	30	50	170	50
Future Volume (veh/h)	30	546	30	30	950	30	50	80	30	50	170	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	593	28	33	1033	28	54	87	28	54	185	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	509	2308	109	42	1419	38	92	138	39	79	213	53
Arrive On Green	0.29	0.67	0.67	0.02	0.40	0.40	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1767	3428	162	1767	3506	95	287	715	199	238	1099	274
Grp Volume(v), veh/h	33	305	316	33	519	542	169	0	0	288	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1826	1767	1763	1838	1201	0	0	1611	0	0
Q Serve(g_s), s	1.8	8.9	8.9	2.4	32.3	32.3	0.0	0.0	0.0	6.1	0.0	0.0
Cycle Q Clear(g_c), s	1.8	8.9	8.9	2.4	32.3	32.3	16.8	0.0	0.0	22.9	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.05	0.32		0.17	0.19		0.17
Lane Grp Cap(c), veh/h	509	1187	1230	42	713	744	269	0	0	345	0	0
V/C Ratio(X)	0.06	0.26	0.26	0.79	0.73	0.73	0.63	0.00	0.00	0.84	0.00	0.00
Avail Cap(c_a), veh/h	509	1187	1230	158	1098	1145	291	0	0	369	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.6	8.4	8.4	63.1	32.7	32.7	48.1	0.0	0.0	51.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.5	11.4	6.4	6.2	2.5	0.0	0.0	13.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.8	3.4	3.5	1.2	14.8	15.4	5.4	0.0	0.0	10.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	8.9	8.9	74.6	39.1	38.8	50.6	0.0	0.0	64.7	0.0	0.0
LnGrp LOS	C	A	A	E	D	D	D	A	A	E	A	A
Approach Vol, veh/h		654			1094			169			288	
Approach Delay, s/veh		10.1			40.0			50.6			64.7	
Approach LOS		B			D			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	92.4		30.1	42.3	57.6		30.1				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.9	* 5		4.9				
Max Green Setting (Gmax), s	1.6	77.1		27.1	7.6	* 81		27.1				
Max Q Clear Time (g_c+1/4), s	14.4	10.9		24.9	3.8	34.3		18.8				
Green Ext Time (p_c), s	0.0	9.0		0.3	0.0	18.3		0.4				

### Intersection Summary

HCM 6th Ctrl Delay	35.2
HCM 6th LOS	D

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
24: 52nd St & El Cajon Blvd

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	550	60	50	900	50	78	110	80	100	70	39
Future Volume (veh/h)	60	550	60	50	900	50	78	110	80	100	70	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	65	598	54	54	978	49	85	120	76	109	76	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	373	2296	207	547	2398	120	122	152	88	147	94	40
Arrive On Green	0.70	0.70	0.70	0.70	0.70	0.70	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	545	3270	295	774	3416	171	387	683	397	476	424	180
Grp Volume(v), veh/h	65	322	330	54	505	522	281	0	0	222	0	0
Grp Sat Flow(s),veh/h/ln	545	1763	1802	774	1763	1825	1467	0	0	1081	0	0
Q Serve(g_s), s	7.4	8.7	8.7	3.6	15.5	15.5	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	22.9	8.7	8.7	12.2	15.5	15.5	24.0	0.0	0.0	26.9	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.09	0.30		0.27	0.49		0.17
Lane Grp Cap(c), veh/h	373	1237	1265	547	1237	1281	363	0	0	282	0	0
V/C Ratio(X)	0.17	0.26	0.26	0.10	0.41	0.41	0.77	0.00	0.00	0.79	0.00	0.00
Avail Cap(c_a), veh/h	373	1237	1265	547	1237	1281	365	0	0	284	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.9	7.1	7.1	9.3	8.1	8.1	48.3	0.0	0.0	49.6	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.5	0.5	0.4	1.0	1.0	9.1	0.0	0.0	13.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	3.2	3.3	0.6	5.8	5.9	9.7	0.0	0.0	8.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	7.6	7.6	9.7	9.1	9.1	57.4	0.0	0.0	63.3	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	E	A	A	E	A	A
Approach Vol, veh/h		717			1081			281			222	
Approach Delay, s/veh		8.1			9.1			57.4			63.3	
Approach LOS		A			A			E			E	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		96.2		33.8		96.2		33.8				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		91.1		29.1		91.1		29.1				
Max Q Clear Time (g_c+I1), s		24.9		28.9		17.5		26.0				
Green Ext Time (p_c), s		1.7		0.0		21.2		0.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					19.9							
HCM 6th LOS					B							

HCM 6th Signalized Intersection Summary  
25: 54th St & El Cajon Blvd

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	373	157	130	582	283	328	577	211	182	439	86
Future Volume (veh/h)	62	373	157	130	582	283	328	577	211	182	439	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.93	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	65	389	128	148	661	254	357	627	202	194	467	70
Peak Hour Factor	0.96	0.96	0.96	0.88	0.88	0.88	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	388	1266	544	173	819	340	407	718	231	219	990	426
Arrive On Green	0.22	0.36	0.36	0.10	0.23	0.23	0.12	0.28	0.28	0.12	0.28	0.28
Sat Flow, veh/h	1767	3526	1515	1767	3526	1462	3428	2607	839	1767	3526	1517
Grp Volume(v), veh/h	65	389	128	148	661	254	357	424	405	194	467	70
Grp Sat Flow(s),veh/h/ln	1767	1763	1515	1767	1763	1462	1714	1763	1683	1767	1763	1517
Q Serve(g_s), s	3.9	10.3	7.7	10.7	23.0	15.6	13.3	29.8	29.9	14.0	14.3	2.7
Cycle Q Clear(g_c), s	3.9	10.3	7.7	10.7	23.0	15.6	13.3	29.8	29.9	14.0	14.3	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	388	1266	544	173	819	340	407	486	464	219	990	426
V/C Ratio(X)	0.17	0.31	0.24	0.86	0.81	0.75	0.88	0.87	0.87	0.89	0.47	0.16
Avail Cap(c_a), veh/h	388	1266	544	198	949	394	438	583	557	266	1250	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	30.0	29.2	57.8	47.2	25.7	56.4	44.9	44.9	56.0	38.8	12.2
Incr Delay (d2), s/veh	0.1	0.6	1.0	24.2	8.4	14.0	14.0	10.3	10.9	22.2	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	4.5	3.0	5.9	11.0	6.7	6.5	14.2	13.7	7.6	6.2	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.2	30.7	30.2	82.0	55.6	39.7	70.3	55.2	55.8	78.2	39.3	12.5
LnGrp LOS	D	C	C	F	E	D	E	E	E	E	D	B
Approach Vol, veh/h		582			1063			1186			731	
Approach Delay, s/veh		31.7			55.5			60.0			47.1	
Approach LOS		C			E			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	51.6	19.8	41.5	33.5	35.2	20.5	40.8				
Change Period (Y+Rc), s	4.4	4.9	4.4	* 5	4.9	* 5	4.4	5.0				
Max Green Setting (Gmax), s	14.6	34.1	16.6	* 46	13.6	* 35	19.6	43.0				
Max Q Clear Time (g_c+1/2), s	11.7	12.3	15.3	16.3	5.9	25.0	16.0	31.9				
Green Ext Time (p_c), s	0.0	3.8	0.1	5.5	0.0	4.1	0.1	3.9				

Intersection Summary

HCM 6th Ctrl Delay	51.4
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	2.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	81	42	458	84	16	171
Future Vol, veh/h	81	42	458	84	16	171
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	88	46	498	91	17	186

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	764	544	0	0	589
Stage 1	544	-	-	-	-
Stage 2	220	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227
Pot Cap-1 Maneuver	370	537	-	-	981
Stage 1	580	-	-	-	-
Stage 2	814	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	363	537	-	-	981
Mov Cap-2 Maneuver	363	-	-	-	-
Stage 1	580	-	-	-	-
Stage 2	799	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.1	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	408	981
HCM Lane V/C Ratio	-	-	0.328	0.018
HCM Control Delay (s)	-	-	18.1	8.7
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.4	0.1

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	32	38	44	44	34	34	64	29	39	106	45
Future Vol, veh/h	30	32	38	44	44	34	34	64	29	39	106	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	33	35	41	48	48	37	37	70	32	42	115	49
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.9	8.8	9.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	27%	30%	36%	21%
Vol Thru, %	50%	32%	36%	56%
Vol Right, %	23%	38%	28%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	127	100	122	190
LT Vol	34	30	44	39
Through Vol	64	32	44	106
RT Vol	29	38	34	45
Lane Flow Rate	138	109	133	207
Geometry Grp	1	1	1	1
Degree of Util (X)	0.18	0.144	0.177	0.264
Departure Headway (Hd)	4.691	4.756	4.796	4.595
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	761	750	745	779
Service Time	2.742	2.809	2.847	2.641
HCM Lane V/C Ratio	0.181	0.145	0.179	0.266
HCM Control Delay	8.8	8.6	8.9	9.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.5	0.6	1.1

<b>Intersection</b>												
Intersection Delay, s/veh	8.9											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	31	42	46	43	37	41	37	80	34	43	72	46
Future Vol, veh/h	31	42	46	43	37	41	37	80	34	43	72	46
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	34	46	50	47	40	45	40	87	37	47	78	50
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	8.8	9	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	26%	36%	27%
Vol Thru, %	53%	35%	31%	45%
Vol Right, %	23%	39%	34%	29%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	151	119	121	161
LT Vol	37	31	43	43
Through Vol	80	42	37	72
RT Vol	34	46	41	46
Lane Flow Rate	164	129	132	175
Geometry Grp	1	1	1	1
Degree of Util (X)	0.214	0.17	0.174	0.226
Departure Headway (Hd)	4.698	4.734	4.776	4.654
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	762	754	747	768
Service Time	2.747	2.785	2.829	2.703
HCM Lane V/C Ratio	0.215	0.171	0.177	0.228
HCM Control Delay	9	8.8	8.8	9.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.6	0.6	0.9

HCM 6th Signalized Intersection Summary  
29: 54th St & Trojan Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	
Traffic Volume (veh/h)	50	60	30	140	30	90	30	875	30	30	906	60
Future Volume (veh/h)	50	60	30	140	30	90	30	875	30	30	906	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	54	65	28	152	33	87	33	951	28	33	985	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	181	64	249	48	102	48	1917	56	48	1863	102
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.03	0.55	0.55	0.03	0.55	0.55
Sat Flow, veh/h	440	858	306	803	230	486	1767	3497	103	1767	3398	186
Grp Volume(v), veh/h	147	0	0	272	0	0	33	479	500	33	511	528
Grp Sat Flow(s),veh/h/ln	1604	0	0	1519	0	0	1767	1763	1837	1767	1763	1822
Q Serve(g_s), s	0.0	0.0	0.0	6.6	0.0	0.0	1.3	11.8	11.8	1.3	12.9	12.9
Cycle Q Clear(g_c), s	5.2	0.0	0.0	11.8	0.0	0.0	1.3	11.8	11.8	1.3	12.9	12.9
Prop In Lane	0.37		0.19	0.56		0.32	1.00		0.06	1.00		0.10
Lane Grp Cap(c), veh/h	408	0	0	400	0	0	48	966	1007	48	966	999
V/C Ratio(X)	0.36	0.00	0.00	0.68	0.00	0.00	0.69	0.50	0.50	0.69	0.53	0.53
Avail Cap(c_a), veh/h	636	0	0	611	0	0	141	966	1007	141	966	999
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	23.8	0.0	0.0	26.2	0.0	0.0	33.8	9.8	9.8	33.8	10.1	10.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.8	0.0	0.0	6.4	1.8	1.7	5.6	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	4.3	0.0	0.0	0.6	4.2	4.4	0.6	4.6	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	0.0	0.0	27.0	0.0	0.0	40.2	11.6	11.6	39.4	11.9	11.8
LnGrp LOS	C	A	A	C	A	A	D	B	B	D	B	B
Approach Vol, veh/h		147			272			1012			1072	
Approach Delay, s/veh		24.0			27.0			12.5			12.7	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	44.1		19.6	6.3	44.1		19.6				
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9				
Max Green Setting (Gmax), s	5.6	* 24		25.1	5.6	24.3		25.1				
Max Q Clear Time (g_c+1), s	13.3	13.8		7.2	3.3	14.9		13.8				
Green Ext Time (p_c), s	0.0	3.1		0.5	0.0	3.1		0.9				

Intersection Summary

HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.  
\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC  
30: Orange Ave & 33rd St

Existing AM  
AM Peak Hour

Intersection												
Int Delay, s/veh	59.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↔	↔		↖	↗	
Traffic Vol, veh/h	199	249	50	51	256	204	23	20	23	161	36	161
Future Vol, veh/h	199	249	50	51	256	204	23	20	23	161	36	161
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	55	-	-	105	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	216	271	54	55	278	222	25	22	25	175	39	175

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	500	0	0	325	0	0	1336	1340	298	1253	1256	389
Stage 1	-	-	-	-	-	-	730	730	-	499	499	-
Stage 2	-	-	-	-	-	-	606	610	-	754	757	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1059	-	-	1229	-	-	130	152	739	~ 148	171	657
Stage 1	-	-	-	-	-	-	412	426	-	552	542	-
Stage 2	-	-	-	-	-	-	482	483	-	400	414	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1059	-	-	1229	-	-	60	116	739	~ 100	130	657
Mov Cap-2 Maneuver	-	-	-	-	-	-	60	116	-	~ 100	130	-
Stage 1	-	-	-	-	-	-	328	339	-	439	518	-
Stage 2	-	-	-	-	-	-	312	461	-	288	330	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.7			0.8			82			216		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	112	1059	-	-	1229	-	-	100	377
HCM Lane V/C Ratio	0.641	0.204	-	-	0.045	-	-	1.75	0.568
HCM Control Delay (s)	82	9.3	-	-	8.1	-	-	448.1	26.4
HCM Lane LOS	F	A	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	3.2	0.8	-	-	0.1	-	-	14	3.4

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon



HCM 6th Signalized Intersection Summary  
31: 35th St & Orange Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	334	35	42	429	92	25	50	22	44	18	46
Future Volume (veh/h)	79	334	35	42	429	92	25	50	22	44	18	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	86	363	33	46	466	89	27	54	19	48	20	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	647	1220	111	773	1102	210	119	95	30	154	33	60
Arrive On Green	0.73	0.73	0.73	0.73	0.73	0.73	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	847	1676	152	981	1514	289	375	1050	334	646	361	666
Grp Volume(v), veh/h	86	0	396	46	0	555	100	0	0	113	0	0
Grp Sat Flow(s),veh/h/ln	847	0	1828	981	0	1803	1759	0	0	1673	0	0
Q Serve(g_s), s	2.4	0.0	4.1	0.9	0.0	6.5	0.0	0.0	0.0	0.5	0.0	0.0
Cycle Q Clear(g_c), s	8.9	0.0	4.1	5.0	0.0	6.5	2.9	0.0	0.0	3.4	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.16	0.27		0.19	0.42		0.40
Lane Grp Cap(c), veh/h	647	0	1331	773	0	1313	244	0	0	247	0	0
V/C Ratio(X)	0.13	0.00	0.30	0.06	0.00	0.42	0.41	0.00	0.00	0.46	0.00	0.00
Avail Cap(c_a), veh/h	647	0	1331	773	0	1313	882	0	0	832	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.85	0.00	0.00
Uniform Delay (d), s/veh	4.6	0.0	2.6	3.4	0.0	2.9	23.6	0.0	0.0	23.8	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.6	0.1	0.0	1.0	0.4	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.9	0.2	0.0	1.5	1.2	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.1	0.0	3.1	3.6	0.0	3.9	24.0	0.0	0.0	24.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		482			601			100				113
Approach Delay, s/veh		3.5			3.9			24.0				24.2
Approach LOS		A			A			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.2		9.8		44.2		9.8				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		18.1		26.1		18.1		26.1				
Max Q Clear Time (g_c+l1), s		10.9		5.4		8.5		4.9				
Green Ext Time (p_c), s		2.1		0.4		3.4		0.3				

Intersection Summary

HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th TWSC  
32: Orange Ave & Central Ave

Existing AM  
AM Peak Hour

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷			↕			↕	
Traffic Vol, veh/h	0	368	0	0	526	0	28	0	19	9	0	14
Future Vol, veh/h	0	368	0	0	526	0	28	0	19	9	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	105	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	400	0	0	572	0	30	0	21	10	0	15




















Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	572	0	0	400	0	0	980	972	400	983	972	572
Stage 1	-	-	-	-	-	-	400	400	-	572	572	-
Stage 2	-	-	-	-	-	-	580	572	-	411	400	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	996	-	-	1153	-	-	228	251	648	227	251	518
Stage 1	-	-	-	-	-	-	624	600	-	503	503	-
Stage 2	-	-	-	-	-	-	498	503	-	616	600	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	996	-	-	1153	-	-	221	251	648	220	251	518
Mov Cap-2 Maneuver	-	-	-	-	-	-	221	251	-	220	251	-
Stage 1	-	-	-	-	-	-	624	600	-	503	503	-
Stage 2	-	-	-	-	-	-	483	503	-	596	600	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			19.4			16.5		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	301	996	-	-	1153	-	-	339
HCM Lane V/C Ratio	0.17	-	-	-	-	-	-	0.074
HCM Control Delay (s)	19.4	0	-	-	0	-	-	16.5
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.2

HCM 6th Signalized Intersection Summary  
33: Marlborough Dr & Orange Ave

Existing AM  
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	324	69	63	470	4	94	1	45	1	3	4
Future Volume (veh/h)	3	324	69	63	470	4	94	1	45	1	3	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.91	0.97		0.91	0.95		0.93	0.97		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	4	421	77	79	588	5	113	1	48	1	4	5
Peak Hour Factor	0.77	0.77	0.77	0.80	0.80	0.80	0.83	0.83	0.83	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	457	750	137	510	917	8	362	7	68	148	123	136
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	802	1501	274	869	1835	16	923	45	407	74	743	818
Grp Volume(v), veh/h	4	0	498	79	0	593	162	0	0	10	0	0
Grp Sat Flow(s),veh/h/ln	802	0	1775	869	0	1851	1375	0	0	1636	0	0
Q Serve(g_s), s	0.1	0.0	5.7	2.0	0.0	6.9	3.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.0	0.0	5.7	7.8	0.0	6.9	3.2	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.01	0.70		0.30	0.10		0.50
Lane Grp Cap(c), veh/h	457	0	887	510	0	925	436	0	0	406	0	0
V/C Ratio(X)	0.01	0.00	0.56	0.15	0.00	0.64	0.37	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	1700	0	3637	1856	0	3792	2073	0	0	2291	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.0	0.0	5.1	7.8	0.0	5.4	11.5	0.0	0.0	10.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.1	0.0	0.6	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.1	0.3	0.0	1.4	0.8	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.0	0.0	5.6	7.9	0.0	6.0	11.7	0.0	0.0	10.3	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		502			672			162				10
Approach Delay, s/veh		5.6			6.3			11.7				10.3
Approach LOS		A			A			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.5		9.8		19.5		9.8				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		60.0		40.0		60.0		40.0				
Max Q Clear Time (g_c+I1), s		9.0		2.2		9.8		5.2				
Green Ext Time (p_c), s		3.6		0.0		4.9		0.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				6.7								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary  
34: Fairmount Ave & Orange Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	267	56	57	336	162	82	344	26	14	72	4
Future Volume (veh/h)	85	267	56	57	336	162	82	344	26	14	72	4
Initial Q (Qb), veh	0	0	0	0	30	0	0	40	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	0.98		0.95	0.94		0.90	0.97		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	90	284	49	61	361	152	86	362	22	15	77	4
Peak Hour Factor	0.94	0.94	0.94	0.93	0.93	0.93	0.95	0.95	0.95	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	183	586	101	352	523	109	655	1601	86	382	822	43
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	879	1514	261	1014	1218	513	1231	3354	203	959	1738	90
Grp Volume(v), veh/h	90	0	333	61	0	513	86	189	195	15	0	81
Grp Sat Flow(s),veh/h/ln	879	0	1776	1014	0	1731	1231	1763	1794	959	0	1828
Q Serve(g_s), s	7.0	0.0	9.9	3.4	0.0	18.1	2.9	4.4	4.5	0.7	0.0	1.7
Cycle Q Clear(g_c), s	25.0	0.0	9.9	13.3	0.0	18.1	4.6	4.4	4.5	5.2	0.0	1.7
Prop In Lane	1.00		0.15	1.00		0.30	1.00		0.11	1.00		0.05
Lane Grp Cap(c), veh/h	183	0	687	352	0	692	655	834	852	382	0	865
V/C Ratio(X)	0.49	0.00	0.48	0.17	0.00	0.74	0.13	0.23	0.23	0.04	0.00	0.09
Avail Cap(c_a), veh/h	216	0	687	352	0	670	656	834	849	495	0	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.2	0.0	16.2	21.2	0.0	20.4	11.4	11.8	11.8	18.9	0.0	10.2
Incr Delay (d2), s/veh	7.2	0.0	1.9	0.8	0.0	6.4	0.4	0.6	0.6	0.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	52.4	0.0	5.4	5.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	4.2	0.9	0.0	20.5	0.8	4.2	4.2	0.2	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	0.0	18.1	22.1	0.0	79.2	11.8	17.8	17.6	19.1	0.0	10.4
LnGrp LOS	D	A	B	C	A	E	B	B	B	B	A	B
Approach Vol, veh/h		423			574			470			96	
Approach Delay, s/veh		22.4			73.1			16.6			11.7	
Approach LOS		C			E			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.0		38.0		32.0		38.0				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		27.1		33.1		27.1		33.1				
Max Q Clear Time (g_c+I1), s		27.0		7.2		20.1		6.6				
Green Ext Time (p_c), s		0.0		0.9		3.8		5.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											38.6	
HCM 6th LOS											D	

# HCM 6th Signalized Intersection Summary

## 35: Euclid Ave & Orange Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	188	65	66	276	85	101	327	49	27	176	50
Future Volume (veh/h)	36	188	65	66	276	85	101	327	49	27	176	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.88	0.97		0.93	0.98		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	46	238	69	74	310	85	115	372	50	33	215	55
Peak Hour Factor	0.79	0.79	0.79	0.89	0.89	0.89	0.88	0.88	0.88	0.82	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	65	369	107	95	398	109	191	499	63	112	540	128
Arrive On Green	0.04	0.28	0.28	0.05	0.29	0.29	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1767	1334	387	1767	1357	372	272	1217	153	95	1317	313
Grp Volume(v), veh/h	46	0	307	74	0	395	537	0	0	303	0	0
Grp Sat Flow(s),veh/h/ln	1767	0	1721	1767	0	1729	1642	0	0	1725	0	0
Q Serve(g_s), s	1.4	0.0	8.6	2.3	0.0	11.4	8.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	0.0	8.6	2.3	0.0	11.4	15.2	0.0	0.0	6.7	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.22	0.21		0.09	0.11		0.18
Lane Grp Cap(c), veh/h	65	0	476	95	0	507	753	0	0	780	0	0
V/C Ratio(X)	0.71	0.00	0.64	0.78	0.00	0.78	0.71	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	970	0	1259	970	0	1265	1832	0	0	1885	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.0	0.0	17.4	25.5	0.0	17.7	13.8	0.0	0.0	11.5	0.0	0.0
Incr Delay (d2), s/veh	5.2	0.0	1.3	5.1	0.0	2.4	1.3	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	3.3	1.0	0.0	4.5	5.2	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.2	0.0	18.7	30.7	0.0	20.1	15.0	0.0	0.0	11.8	0.0	0.0
LnGrp LOS	C	A	B	C	A	C	B	A	A	B	A	A
Approach Vol, veh/h		353			469			537			303	
Approach Delay, s/veh		20.4			21.7			15.0			11.8	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	20.0		27.3	6.4	20.9		27.3				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	30.0	40.0		60.0	30.0	40.0		60.0				
Max Q Clear Time (g_c+1/3), s	14.3	10.6		8.7	3.4	13.4		17.2				
Green Ext Time (p_c), s	0.1	2.0		2.3	0.0	2.6		4.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											17.5	
HCM 6th LOS											B	

Intersection

Intersection Delay, s/veh 11.7

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷			↕			↕	
Traffic Vol, veh/h	84	115	113	5	154	5	116	39	5	6	71	158
Future Vol, veh/h	84	115	113	5	154	5	116	39	5	6	71	158
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	91	125	123	5	167	5	126	42	5	7	77	172
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	11.8	11.6	11.5	11.6
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	72%	100%	0%	100%	0%	3%
Vol Thru, %	24%	0%	50%	0%	97%	30%
Vol Right, %	3%	0%	50%	0%	3%	67%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	160	84	228	5	159	235
LT Vol	116	84	0	5	0	6
Through Vol	39	0	115	0	154	71
RT Vol	5	0	113	0	5	158
Lane Flow Rate	174	91	248	5	173	255
Geometry Grp	2	5	5	5	5	2
Degree of Util (X)	0.288	0.167	0.394	0.01	0.301	0.378
Departure Headway (Hd)	5.97	6.58	5.72	6.806	6.275	5.324
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	600	544	627	524	570	674
Service Time	4.032	4.33	3.469	4.566	4.034	3.378
HCM Lane V/C Ratio	0.29	0.167	0.396	0.01	0.304	0.378
HCM Control Delay	11.5	10.7	12.2	9.6	11.7	11.6
HCM Lane LOS	B	B	B	A	B	B
HCM 95th-tile Q	1.2	0.6	1.9	0	1.3	1.8

Intersection												
Intersection Delay, s/veh	10.3											
Intersection LOS	B											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	56	50	39	52	15	62	118	35	19	128	15
Future Vol, veh/h	19	56	50	39	52	15	62	118	35	19	128	15
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.90	0.90	0.90	0.70	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	25	75	67	52	69	20	69	131	39	27	171	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.8	9.9	10.7	10.4
HCM LOS	A	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	29%	15%	37%	12%
Vol Thru, %	55%	45%	49%	79%
Vol Right, %	16%	40%	14%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	215	125	106	162
LT Vol	62	19	39	19
Through Vol	118	56	52	128
RT Vol	35	50	15	15
Lane Flow Rate	239	167	141	218
Geometry Grp	1	1	1	1
Degree of Util (X)	0.338	0.239	0.212	0.31
Departure Headway (Hd)	5.087	5.16	5.394	5.124
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	710	695	666	706
Service Time	3.094	3.195	3.429	3.132
HCM Lane V/C Ratio	0.337	0.24	0.212	0.309
HCM Control Delay	10.7	9.8	9.9	10.4
HCM Lane LOS	B	A	A	B
HCM 95th-tile Q	1.5	0.9	0.8	1.3

Intersection						
Int Delay, s/veh	2.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	149	82	151	183	0	0
Future Vol, veh/h	149	82	151	183	0	0
Conflicting Peds, #/hr	0	100	100	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	75	75	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	186	103	201	244	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	389	0	984
Stage 1	-	-	-	-	338
Stage 2	-	-	-	-	646
Critical Hdwy	-	-	4.13	-	6.43
Critical Hdwy Stg 1	-	-	-	-	5.43
Critical Hdwy Stg 2	-	-	-	-	5.43
Follow-up Hdwy	-	-	2.227	-	3.527
Pot Cap-1 Maneuver	-	-	1164	-	274
Stage 1	-	-	-	-	720
Stage 2	-	-	-	-	520
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1053	-	193
Mov Cap-2 Maneuver	-	-	-	-	193
Stage 1	-	-	-	-	652
Stage 2	-	-	-	-	405

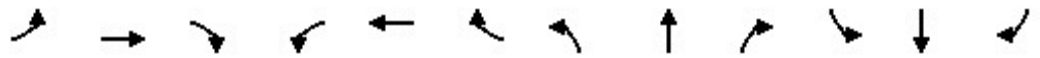
Approach	EB	WB	NB
HCM Control Delay, s	0	4.2	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1053	-
HCM Lane V/C Ratio	-	-	-	0.191	-
HCM Control Delay (s)	0	-	-	9.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.7	-



HCM 6th Signalized Intersection Summary  
 39: I-805 SB Ramps & University Ave

Existing AM  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↑	↗		↔↑			↔↑	↗		↔↑	↗
Traffic Volume (veh/h)	156	389	1	1	609	99	97	5	83	20	68	2
Future Volume (veh/h)	156	389	1	1	609	99	97	5	83	20	68	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	170	423	1	1	761	112	117	6	76	23	78	2
Peak Hour Factor	0.92	0.92	0.92	0.80	0.80	0.80	0.83	0.83	0.83	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	263	698	414	1	849	132	78	2	400	49	133	394
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	976	2594	1537	4	3110	484	0	8	1571	0	521	1550
Grp Volume(v), veh/h	315	278	1	471	0	403	123	0	76	101	0	2
Grp Sat Flow(s),veh/h/ln	1807	1763	1537	1855	0	1743	8	0	1571	521	0	1550
Q Serve(g_s), s	13.9	12.3	0.0	22.3	0.0	19.7	0.0	0.0	3.4	0.0	0.0	0.1
Cycle Q Clear(g_c), s	13.9	12.3	0.0	22.3	0.0	19.7	22.9	0.0	3.4	22.9	0.0	0.1
Prop In Lane	0.54		1.00	0.00		0.28	0.95		1.00	0.23		1.00
Lane Grp Cap(c), veh/h	486	475	414	507	0	476	80	0	400	182	0	394
V/C Ratio(X)	0.65	0.59	0.00	0.93	0.00	0.85	1.53	0.00	0.19	0.56	0.00	0.01
Avail Cap(c_a), veh/h	486	475	414	513	0	482	80	0	400	182	0	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.52	0.00	0.52	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.1	28.5	24.0	31.9	0.0	30.9	44.4	0.0	26.3	28.0	0.0	25.0
Incr Delay (d2), s/veh	6.5	5.2	0.0	14.3	0.0	6.9	293.3	0.0	0.1	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	5.8	0.0	11.8	0.0	9.0	8.3	0.0	1.3	1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.6	33.8	24.1	46.2	0.0	37.8	337.7	0.0	26.4	30.2	0.0	25.0
LnGrp LOS	D	C	C	D	A	D	F	A	C	C	A	C
Approach Vol, veh/h		594			874			199			103	
Approach Delay, s/veh		34.7			42.3			218.8			30.1	
Approach LOS		C			D			F			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		30.3		29.0		30.7		29.0				
Change Period (Y+Rc), s		6.1		6.1		6.1		6.1				
Max Green Setting (Gmax), s		23.9		22.9		24.9		22.9				
Max Q Clear Time (g_c+I1), s		15.9		24.9		24.3		24.9				
Green Ext Time (p_c), s		1.7		0.0		0.3		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				58.9								
HCM 6th LOS				E								
<b>Notes</b>												
User approved pedestrian interval to be less than phase max green.												

HCM 6th Signalized Intersection Summary  
40: I-805 NB Ramps & University Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕	↗		↕↕			↕↕			↕↕	
Traffic Volume (veh/h)	6	177	540	333	218	5	337	220	164	8	48	4
Future Volume (veh/h)	6	177	540	333	218	5	337	220	164	8	48	4
Initial Q (Qb), veh	0	0	0	0	20	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	7	203	0	358	234	5	362	237	154	10	61	5
Peak Hour Factor	0.87	0.87	0.87	0.93	0.93	0.93	0.93	0.93	0.93	0.79	0.79	0.79
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	36	1109		308	650	8	205	252	164	50	233	17
Arrive On Green	0.11	0.11	0.00	0.23	0.23	0.23	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	115	3498	1572	1767	1809	39	470	950	618	18	877	63
Grp Volume(v), veh/h	113	97	0	358	0	239	362	0	391	76	0	0
Grp Sat Flow(s),veh/h/ln	1850	1763	1572	1767	0	1847	470	0	1568	958	0	0
Q Serve(g_s), s	5.0	4.5	0.0	17.6	0.0	10.3	1.4	0.0	22.0	0.5	0.0	0.0
Cycle Q Clear(g_c), s	5.0	4.5	0.0	17.6	0.0	10.3	23.9	0.0	22.0	22.5	0.0	0.0
Prop In Lane	0.06		1.00	1.00		0.02	1.00		0.39	0.13		0.07
Lane Grp Cap(c), veh/h	586	559		432	0	436	205	0	416	300	0	0
V/C Ratio(X)	0.19	0.17		0.83	0.00	0.55	1.77	0.00	0.94	0.25	0.00	0.00
Avail Cap(c_a), veh/h	618	589		469	0	491	205	0	416	300	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.89	0.89	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.8	29.6	0.0	33.3	0.0	31.0	38.5	0.0	32.3	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.6	0.0	10.1	0.0	0.4	364.8	0.0	28.8	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	22.6	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.1	0.0	12.3	0.0	6.6	25.3	0.0	11.5	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	30.2	0.0	65.9	0.0	39.8	403.3	0.0	61.2	26.2	0.0	0.0
LnGrp LOS	C	C		E	A	D	F	A	E	C	A	A
Approach Vol, veh/h		210		597		753		76				
Approach Delay, s/veh		30.3		55.5		225.7		26.2				
Approach LOS		C		E		F		C				
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.2		29.0		25.8		29.0				
Change Period (Y+Rc), s		5.1		5.1		5.1		5.1				
Max Green Setting (Gmax), s		26.9		23.9		23.9		23.9				
Max Q Clear Time (g_c+I1), s		7.0		24.5		19.6		25.9				
Green Ext Time (p_c), s		0.7		0.0		1.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	129.2
HCM 6th LOS	F

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
41: 35th St & University Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	328	15	13	431	23	57	39	6	25	35	35
Future Volume (veh/h)	25	328	15	13	431	23	57	39	6	25	35	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.96		0.91	0.96		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	30	395	12	15	490	20	60	41	6	28	39	33
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88	0.95	0.95	0.95	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	650	1294	39	730	1279	52	178	104	12	106	104	70
Arrive On Green	0.72	0.72	0.72	0.72	0.72	0.72	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	881	1789	54	968	1768	72	718	783	89	288	786	529
Grp Volume(v), veh/h	30	0	407	15	0	510	107	0	0	100	0	0
Grp Sat Flow(s),veh/h/ln	881	0	1844	968	0	1840	1590	0	0	1603	0	0
Q Serve(g_s), s	0.9	0.0	5.3	0.4	0.0	7.2	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.1	0.0	5.3	5.7	0.0	7.2	3.8	0.0	0.0	3.7	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.04	0.56		0.06	0.28		0.33
Lane Grp Cap(c), veh/h	650	0	1334	730	0	1331	294	0	0	280	0	0
V/C Ratio(X)	0.05	0.00	0.31	0.02	0.00	0.38	0.36	0.00	0.00	0.36	0.00	0.00
Avail Cap(c_a), veh/h	650	0	1334	730	0	1331	509	0	0	506	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.2	0.0	3.3	4.4	0.0	3.6	27.2	0.0	0.0	27.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.1	0.0	0.8	0.3	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.2	0.0	0.0	1.6	0.1	0.0	2.1	1.6	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.3	0.0	3.9	4.4	0.0	4.4	27.5	0.0	0.0	27.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		437			525			107			100	
Approach Delay, s/veh		4.0			4.4			27.5			27.5	
Approach LOS		A			A			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		54.1		13.9		54.1		13.9				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		39.1		19.1		39.1		19.1				
Max Q Clear Time (g_c+I1), s		10.1		5.7		9.2		5.8				
Green Ext Time (p_c), s		4.1		0.3		5.8		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				8.4								
HCM 6th LOS				A								

# HCM 6th Signalized Intersection Summary

## 42: University Ave & I-15 SB Ramps

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑	↑	↑↑			↑		↑↑	↑	↑
Traffic Volume (veh/h)	0	353	337	242	375	0	0	0	0	193	101	161
Future Volume (veh/h)	0	353	337	242	375	0	0	0	0	193	101	161
Initial Q (Qb), veh	0	0	0	10	10	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	0.95		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	384	366	272	421	0	0	0	0	203	126	119
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %	0	3	3	3	3	0	3	3	3	3	3	3
Cap, veh/h	0	3089	935	327	2898	0	0	1	0	325	179	144
Arrive On Green	0.00	0.62	0.62	0.33	1.00	0.00	0.00	0.00	0.00	0.10	0.10	0.10
Sat Flow, veh/h	0	5233	1533	1767	3618	0	0	1856	0	3369	1856	1499
Grp Volume(v), veh/h	0	384	366	272	421	0	0	0	0	203	126	119
Grp Sat Flow(s),veh/h/ln	0	1689	1533	1767	1763	0	0	1856	0	1685	1856	1499
Q Serve(g_s), s	0.0	4.1	15.5	19.3	0.0	0.0	0.0	0.0	0.0	7.5	8.6	10.1
Cycle Q Clear(g_c), s	0.0	4.1	15.5	19.3	0.0	0.0	0.0	0.0	0.0	7.5	8.6	10.1
Prop In Lane	0.00		1.00	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	3089	935	327	2898	0	0	1	0	325	179	144
V/C Ratio(X)	0.00	0.12	0.39	0.83	0.15	0.00	0.00	0.00	0.00	0.63	0.70	0.82
Avail Cap(c_a), veh/h	0	3140	950	408	2898	0	0	428	0	389	214	173
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	0.96	0.96	0.00	0.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.7	13.0	40.4	0.0	0.0	0.0	0.0	0.0	56.5	56.9	57.7
Incr Delay (d2), s/veh	0.0	0.1	1.2	9.0	0.1	0.0	0.0	0.0	0.0	1.1	5.6	19.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	39.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0	0.0	1.6	5.8	12.8	0.1	0.0	0.0	0.0	0.0	3.3	4.3	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.8	14.3	89.3	0.2	0.0	0.0	0.0	0.0	57.6	62.6	77.6
LnGrp LOS	A	B	B	F	A	A	A	A	A	E	E	E
Approach Vol, veh/h		750			693			0			448	
Approach Delay, s/veh		12.5			35.2			0.0			64.3	
Approach LOS		B			D						E	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	36.3	86.1		17.6		112.4		0.0				
Change Period (Y+Rc), s	4.7	5.5		5.1		5.5		4.0				
Max Green Setting (Gmax), s	30	35.7		15.0		70.4		30.0				
Max Q Clear Time (g_c+Y), s	1.3	17.5		12.1		2.0		0.0				
Green Ext Time (p_c), s	0.3	2.5		0.4		2.2		0.0				

### Intersection Summary

HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

### Notes

User approved volume balancing among the lanes for turning movement.

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 43: I-15 NB Ramps & University Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑↑	↗	↘↗	↑	↗↘		↑	
Traffic Volume (veh/h)	208	328	0	0	437	739	177	0	330	0	0	0
Future Volume (veh/h)	208	328	0	0	437	739	177	0	330	0	0	0
Initial Q (Qb), veh	10	10	0	0	15	15	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.91	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856	0	1856	0
Adj Flow Rate, veh/h	226	357	0	0	465	626	206	0	297	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.94	0.94	0.94	0.86	0.86	0.86	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3	0	3	0
Cap, veh/h	290	2764	0	0	3040	820	461	249	339	0	1	0
Arrive On Green	0.05	0.26	0.00	0.00	0.60	0.60	0.13	0.00	0.13	0.00	0.00	0.00
Sat Flow, veh/h	1767	3618	0	0	5233	1506	3428	1856	2521	0-74222	0	0
Grp Volume(v), veh/h	226	357	0	0	465	626	206	0	297	0	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1689	1506	1714	1856	1260	0	1856	0
Q Serve(g_s), s	16.5	10.1	0.0	0.0	5.2	36.7	7.2	0.0	15.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	16.5	10.1	0.0	0.0	5.2	36.7	7.2	0.0	15.0	0.0	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	290	2764	0	0	3040	820	461	249	339	0	1	0
V/C Ratio(X)	0.78	0.13	0.00	0.00	0.15	0.76	0.45	0.00	0.88	0.00	0.00	0.00
Avail Cap(c_a), veh/h	445	2764	0	0	3056	908	527	285	388	0	457	0
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.57	0.57	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	60.6	14.7	0.0	0.0	11.9	25.5	51.8	0.0	55.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.1	0.0	0.0	0.1	6.7	0.3	0.0	16.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	38.6	0.1	0.0	0.0	0.2	10.2	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ft	2.5	5.6	0.0	0.0	2.8	21.7	3.1	0.0	5.6	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	100.4	14.9	0.0	0.0	12.2	42.3	52.1	0.0	71.8	0.0	0.0	0.0
LnGrp LOS	F	B	A	A	B	D	D	A	E	A	A	A
Approach Vol, veh/h		583			1091			503				0
Approach Delay, s/veh		48.0			29.5			63.7				0.0
Approach LOS		D			C			E				
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		107.4		0.0	23.5	83.9		22.6				
Change Period (Y+Rc), s		5.5		4.0	* 4.7	5.5		5.1				
Max Green Setting (Gmax), s		52.0		32.0	* 33	26.0		20.0				
Max Q Clear Time (g_c+I1), s		12.1		0.0	18.5	38.7		17.0				
Green Ext Time (p_c), s		1.8		0.0	0.3	0.0		0.4				

### Intersection Summary

HCM 6th Ctrl Delay	42.4
HCM 6th LOS	D

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
44: Marlborough Ave & University Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	669	30	20	668	20	42	70	42	126	40	42
Future Volume (veh/h)	83	669	30	20	668	20	42	70	42	126	40	42
Initial Q (Qb), veh	0	0	0	0	8	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.91	0.99		0.91	0.94		0.84	0.90		0.73
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	98	787	29	21	711	16	50	83	44	158	50	46
Peak Hour Factor	0.85	0.85	0.85	0.94	0.94	0.94	0.84	0.84	0.84	0.80	0.80	0.80
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	83	2304	85	442	1214	26	128	199	94	224	62	51
Arrive On Green	0.67	0.67	0.67	1.00	1.00	1.00	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	703	3453	127	657	1803	41	349	829	390	703	258	212
Grp Volume(v), veh/h	98	402	414	21	0	727	177	0	0	254	0	0
Grp Sat Flow(s),veh/h/ln	703	1763	1818	657	0	1843	1568	0	0	1173	0	0
Q Serve(g_s), s	5.7	10.4	10.4	0.5	0.0	0.0	0.0	0.0	0.0	12.6	0.0	0.0
Cycle Q Clear(g_c), s	5.7	10.4	10.4	10.9	0.0	0.0	9.9	0.0	0.0	22.4	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.02	0.28		0.25	0.62		0.18
Lane Grp Cap(c), veh/h	83	1176	1213	442	0	1230	421	0	0	337	0	0
V/C Ratio(X)	1.19	0.34	0.34	0.05	0.00	0.59	0.42	0.00	0.00	0.75	0.00	0.00
Avail Cap(c_a), veh/h	537	1176	1213	442	0	1230	597	0	0	483	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.93	0.00	0.93	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	52.5	7.6	7.6	0.8	0.0	0.0	34.2	0.0	0.0	39.4	0.0	0.0
Incr Delay (d2), s/veh	157.7	0.8	0.8	0.2	0.0	1.9	0.2	0.0	0.0	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	5.8	4.0	4.1	0.0	0.0	0.9	3.9	0.0	0.0	6.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	210.2	8.4	8.4	1.0	0.0	2.7	34.5	0.0	0.0	41.4	0.0	0.0
LnGrp LOS	F	A	A	A	A	A	C	A	A	D	A	A
Approach Vol, veh/h		914			748			177			254	
Approach Delay, s/veh		30.0			2.6			34.5			41.4	
Approach LOS		C			A			C			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		75.6		30.4		75.6		30.4				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		58.1		38.1		58.1		38.1				
Max Q Clear Time (g_c+I1), s		12.4		24.4		12.9		11.9				
Green Ext Time (p_c), s		5.9		1.0		7.5		0.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											22.0	
HCM 6th LOS											C	

# HCM 6th Signalized Intersection Summary

## 45: University Ave & 42nd St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	476	24	14	493	19	37	63	15	6	32	27
Future Volume (veh/h)	23	476	24	14	493	19	37	63	15	6	32	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.97		0.96	0.98		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	25	523	21	15	519	15	49	84	13	8	43	29
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	639	2625	105	713	1364	39	108	157	21	47	145	88
Arrive On Green	1.00	1.00	1.00	0.76	0.76	0.76	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	860	3448	138	848	1792	52	425	1076	147	69	993	603
Grp Volume(v), veh/h	25	267	277	15	0	534	146	0	0	80	0	0
Grp Sat Flow(s),veh/h/ln	860	1763	1824	848	0	1844	1648	0	0	1665	0	0
Q Serve(g_s), s	0.4	0.0	0.0	0.5	0.0	10.3	4.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.7	0.0	0.0	0.5	0.0	10.3	8.5	0.0	0.0	4.5	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.03	0.34		0.09	0.10		0.36
Lane Grp Cap(c), veh/h	639	1342	1388	713	0	1404	286	0	0	281	0	0
V/C Ratio(X)	0.04	0.20	0.20	0.02	0.00	0.38	0.51	0.00	0.00	0.28	0.00	0.00
Avail Cap(c_a), veh/h	639	1342	1388	713	0	1404	504	0	0	505	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.7	0.0	0.0	3.1	0.0	4.3	42.1	0.0	0.0	40.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.1	0.0	0.8	0.5	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.1	0.0	3.4	3.6	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.8	0.3	0.3	3.1	0.0	5.0	42.6	0.0	0.0	40.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	A
Approach Vol, veh/h		569			549			146			80	
Approach Delay, s/veh		0.3			5.0			42.6			40.7	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		85.6		20.4		85.6		20.4				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		66.1		30.1		66.1		30.1				
Max Q Clear Time (g_c+I1), s		12.7		6.5		12.3		10.5				
Green Ext Time (p_c), s		7.5		0.3		9.1		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				9.2								
HCM 6th LOS				A								

# HCM 6th Signalized Intersection Summary

## 46: University Ave & 43rd St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↔	↑↑						↑↑	
Traffic Volume (veh/h)	0	351	117	72	442	0	0	0	0	53	196	62
Future Volume (veh/h)	0	351	117	72	442	0	0	0	0	53	196	62
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	369	107	81	497	0				58	213	56
Peak Hour Factor	0.95	0.95	0.95	0.89	0.89	0.89				0.92	0.92	0.92
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	1728	494	102	2617	0				100	375	102
Arrive On Green	0.00	0.64	0.64	0.12	1.00	0.00				0.17	0.17	0.17
Sat Flow, veh/h	0	2781	768	1767	3618	0				603	2271	615
Grp Volume(v), veh/h	0	240	236	81	497	0				176	0	151
Grp Sat Flow(s),veh/h/ln	0	1763	1693	1767	1763	0				1825	0	1664
Q Serve(g_s), s	0.0	6.0	6.1	4.7	0.0	0.0				9.4	0.0	8.9
Cycle Q Clear(g_c), s	0.0	6.0	6.1	4.7	0.0	0.0				9.4	0.0	8.9
Prop In Lane	0.00		0.45	1.00		0.00				0.33		0.37
Lane Grp Cap(c), veh/h	0	1133	1089	102	2617	0				301	0	275
V/C Ratio(X)	0.00	0.21	0.22	0.79	0.19	0.00				0.58	0.00	0.55
Avail Cap(c_a), veh/h	0	1133	1089	210	2617	0				897	0	818
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	0.85	0.85	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.8	7.9	46.2	0.0	0.0				40.9	0.0	40.6
Incr Delay (d2), s/veh	0.0	0.4	0.5	4.3	0.1	0.0				0.7	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0		2.3	2.2	2.1	0.0	0.0				4.3	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.2	8.3	50.6	0.1	0.0				41.5	0.0	41.3
LnGrp LOS	A	A	A	D	A	A				D	A	D
Approach Vol, veh/h		476			578						327	
Approach Delay, s/veh		8.3			7.2						41.4	
Approach LOS		A			A						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	73.1			22.4		83.6						
Change Period (Y+Rc), s	4.4	4.9		4.9		4.9						
Max Green Setting (Gmax), s	27.1			52.1		44.1						
Max Q Clear Time (g_c+1/3), s	8.1			11.4		2.0						
Green Ext Time (p_c), s	0.0	1.0		1.3		1.3						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				15.7								
HCM 6th LOS				B								



# HCM 6th Signalized Intersection Summary

## 47: Fairmount Ave & University Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	225	55	55	373	143	105	600	23	56	106	38
Future Volume (veh/h)	114	225	55	55	373	143	105	600	23	56	106	38
Initial Q (Qb), veh	0	0	0	25	25	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.90	1.00		0.85	1.00		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	128	253	51	66	449	154	117	667	20	75	141	44
Peak Hour Factor	0.89	0.89	0.89	0.83	0.83	0.83	0.90	0.90	0.90	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	153	1364	265	160	1191	358	142	784	23	96	257	80
Arrive On Green	0.17	0.99	0.99	0.05	0.46	0.46	0.16	0.45	0.45	0.05	0.20	0.20
Sat Flow, veh/h	1767	2847	554	1767	2509	848	1767	3474	104	1767	1287	402
Grp Volume(v), veh/h	128	153	151	66	314	289	117	338	349	75	0	185
Grp Sat Flow(s),veh/h/ln	1767	1763	1639	1767	1763	1594	1767	1763	1816	1767	0	1689
Q Serve(g_s), s	7.4	0.1	0.1	3.9	12.4	12.8	6.8	18.1	18.2	4.4	0.0	10.4
Cycle Q Clear(g_c), s	7.4	0.1	0.1	3.9	12.4	12.8	6.8	18.1	18.2	4.4	0.0	10.4
Prop In Lane	1.00		0.34	1.00		0.53	1.00		0.06	1.00		0.24
Lane Grp Cap(c), veh/h	153	846	784	160	807	739	142	398	410	96	0	337
V/C Ratio(X)	0.83	0.18	0.19	0.41	0.39	0.39	0.82	0.85	0.85	0.78	0.00	0.55
Avail Cap(c_a), veh/h	160	876	814	160	807	730	160	550	567	160	0	527
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.1	1.2	1.2	48.2	19.9	19.9	43.8	27.5	27.5	49.5	0.0	38.1
Incr Delay (d2), s/veh	26.9	0.5	0.5	0.6	1.4	1.6	22.2	8.8	8.7	5.1	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	297.9	2.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.3	0.3	17.5	7.4	7.1	3.6	6.7	6.9	2.1	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.9	1.6	1.7	346.7	24.2	24.9	66.0	36.3	36.2	54.6	0.0	39.8
LnGrp LOS	E	A	A	F	C	C	E	D	D	D	A	D
Approach Vol, veh/h		432			669			804			260	
Approach Delay, s/veh		21.9			56.3			40.6			44.1	
Approach LOS		C			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	57.6	12.9	26.0	13.6	53.4	10.2	28.8				
Change Period (Y+Rc), s	4.4	4.9	4.4	4.9	4.4	4.9	4.4	4.9				
Max Green Setting (Gmax), s	9.6	35.1	9.6	33.1	9.6	35.1	9.6	33.1				
Max Q Clear Time (g_c+1/3), s	15.9	2.1	8.8	12.4	9.4	14.8	6.4	20.2				
Green Ext Time (p_c), s	0.0	3.0	0.0	1.2	0.0	3.8	0.0	3.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				42.1								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary  
48: Euclid Ave & University Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	63	498	60	230	786	63	104	296	133	47	199	63
Future Volume (veh/h)	63	498	60	230	786	63	104	296	133	47	199	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.90	0.99		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	66	524	52	261	893	61	121	344	138	58	246	66
Peak Hour Factor	0.95	0.95	0.95	0.88	0.88	0.88	0.86	0.86	0.86	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	326	1287	127	180	1041	71	291	427	171	161	481	129
Arrive On Green	0.18	0.40	0.40	0.10	0.31	0.31	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1767	3212	317	1767	3322	227	1045	1235	496	906	1389	373
Grp Volume(v), veh/h	66	287	289	261	474	480	121	0	482	58	0	312
Grp Sat Flow(s),veh/h/ln	1767	1763	1766	1767	1763	1786	1045	0	1731	906	0	1762
Q Serve(g_s), s	3.0	10.9	11.0	9.6	23.7	23.7	9.8	0.0	23.7	5.8	0.0	13.2
Cycle Q Clear(g_c), s	3.0	10.9	11.0	9.6	23.7	23.7	23.0	0.0	23.7	29.6	0.0	13.2
Prop In Lane	1.00		0.18	1.00		0.13	1.00		0.29	1.00		0.21
Lane Grp Cap(c), veh/h	326	707	708	180	552	560	291	0	599	161	0	610
V/C Ratio(X)	0.20	0.41	0.41	1.45	0.86	0.86	0.42	0.00	0.80	0.36	0.00	0.51
Avail Cap(c_a), veh/h	326	707	708	180	658	667	320	0	646	186	0	658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.00	0.86	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.5	20.1	20.2	42.2	30.3	30.3	33.6	0.0	27.9	41.3	0.0	24.4
Incr Delay (d2), s/veh	0.1	1.7	1.7	229.1	15.8	15.6	0.7	0.0	5.9	1.9	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	4.7	4.8	15.6	12.2	12.3	2.5	0.0	10.6	1.4	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	21.9	21.9	271.3	46.1	45.9	34.3	0.0	33.7	43.2	0.0	25.4
LnGrp LOS	C	C	C	F	D	D	C	A	C	D	A	C
Approach Vol, veh/h		642			1215			603				370
Approach Delay, s/veh		23.0			94.4			33.8				28.2
Approach LOS		C			F			C				C
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.0	42.6		37.4	22.2	34.4		37.4				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.9	* 4.9		4.9				
Max Green Setting (Gmax), s	30.6	35.1		35.1	9.6	* 35		35.1				
Max Q Clear Time (g_c+fl), s	11.6	13.0		31.6	5.0	25.7		25.7				
Green Ext Time (p_c), s	0.0	4.4		1.0	0.0	3.7		2.5				

Intersection Summary

HCM 6th Ctrl Delay	56.6
HCM 6th LOS	E

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 49: Winona Ave & University Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	495	43	33	674	25	126	67	12	60	50	78
Future Volume (veh/h)	36	495	43	33	674	25	126	67	12	60	50	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.94	0.97		0.96	0.98		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	38	516	40	35	709	21	150	80	8	80	67	91
Peak Hour Factor	0.96	0.96	0.96	0.95	0.95	0.95	0.84	0.84	0.84	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	54	1568	121	51	848	25	311	150	13	189	158	169
Arrive On Green	0.03	0.48	0.48	0.03	0.47	0.47	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1767	3297	255	1767	1789	53	793	537	46	414	565	606
Grp Volume(v), veh/h	38	275	281	35	0	730	238	0	0	238	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1789	1767	0	1842	1377	0	0	1585	0	0
Q Serve(g_s), s	1.4	6.4	6.4	1.3	0.0	22.7	1.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	6.4	6.4	1.3	0.0	22.7	9.7	0.0	0.0	7.8	0.0	0.0
Prop In Lane	1.00		0.14	1.00		0.03	0.63		0.03	0.34		0.38
Lane Grp Cap(c), veh/h	54	839	851	51	0	873	474	0	0	516	0	0
V/C Ratio(X)	0.71	0.33	0.33	0.69	0.00	0.84	0.50	0.00	0.00	0.46	0.00	0.00
Avail Cap(c_a), veh/h	808	1611	1635	808	0	1683	921	0	0	1003	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	31.5	10.7	10.7	31.6	0.0	15.0	20.4	0.0	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	6.2	0.2	0.2	6.0	0.0	2.3	0.3	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.2	2.3	0.6	0.0	8.7	3.0	0.0	0.0	2.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	10.9	10.9	37.6	0.0	17.3	20.7	0.0	0.0	20.1	0.0	0.0
LnGrp LOS	D	B	B	D	A	B	C	A	A	C	A	A
Approach Vol, veh/h		594			765			238			238	
Approach Delay, s/veh		12.6			18.3			20.7			20.1	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	36.1		23.2	6.4	36.0		23.2				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	30.0	60.0		40.0	30.0	60.0		40.0				
Max Q Clear Time (g_c+1), s	13.3	8.4		9.8	3.4	24.7		11.7				
Green Ext Time (p_c), s	0.0	4.0		1.1	0.0	6.4		1.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											17.0	
HCM 6th LOS											B	

HCM 6th Signalized Intersection Summary  
50: University Ave & 52nd St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	335	50	223	634	223	37	111	111	74	37	112
Future Volume (veh/h)	100	335	50	223	634	223	37	111	111	74	37	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	109	364	49	242	689	215	40	121	105	80	40	106
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	471	1672	223	180	966	301	77	165	129	125	64	121
Arrive On Green	0.27	0.53	0.53	0.10	0.37	0.37	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1767	3126	418	1767	2645	825	168	829	650	370	319	609
Grp Volume(v), veh/h	109	204	209	242	459	445	266	0	0	226	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1780	1767	1763	1707	1647	0	0	1298	0	0
Q Serve(g_s), s	4.5	5.7	5.8	9.6	21.0	21.0	0.0	0.0	0.0	1.8	0.0	0.0
Cycle Q Clear(g_c), s	4.5	5.7	5.8	9.6	21.0	21.0	14.4	0.0	0.0	16.2	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.48	0.15		0.39	0.35		0.47
Lane Grp Cap(c), veh/h	471	943	952	180	644	623	372	0	0	310	0	0
V/C Ratio(X)	0.23	0.22	0.22	1.34	0.71	0.71	0.72	0.00	0.00	0.73	0.00	0.00
Avail Cap(c_a), veh/h	471	943	952	180	846	819	461	0	0	407	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.9	11.5	11.5	42.2	25.6	25.6	35.8	0.0	0.0	36.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.5	0.5	185.8	6.6	6.8	2.6	0.0	0.0	2.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.2	2.3	13.4	9.5	9.3	6.0	0.0	0.0	5.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	12.0	12.0	228.0	32.2	32.5	38.4	0.0	0.0	39.1	0.0	0.0
LnGrp LOS	C	B	B	F	C	C	D	A	A	D	A	A
Approach Vol, veh/h		522			1146			266			226	
Approach Delay, s/veh		15.2			73.7			38.4			39.1	
Approach LOS		B			E			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.0	55.2		24.8	30.0	39.2		24.8				
Change Period (Y+Rc), s	4.4	4.9		* 6.1	4.9	* 4.9		6.1				
Max Green Setting (Gmax), s	9.6	45.1		* 25	9.6	* 45		23.9				
Max Q Clear Time (g_c+I1), s	11.6	7.8		18.2	6.5	23.0		16.4				
Green Ext Time (p_c), s	0.0	5.6		0.5	0.0	11.3		0.7				

Intersection Summary

HCM 6th Ctrl Delay	51.6
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 51: University Ave & 54th St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	227	96	47	350	321	194	696	20	465	756	100
Future Volume (veh/h)	61	227	96	47	350	321	194	696	20	465	756	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	66	247	82	51	380	0	211	757	17	505	822	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	85	631	282	64	590		258	1121	500	627	1252	
Arrive On Green	0.05	0.18	0.18	0.04	0.17	0.00	0.15	0.32	0.32	0.18	0.36	0.00
Sat Flow, veh/h	1767	3526	1572	1767	3526	1572	1767	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	66	247	82	51	380	0	211	757	17	505	822	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1572	1767	1763	1572	1767	1763	1572	1714	1763	1572
Q Serve(g_s), s	2.6	4.3	3.2	2.0	7.0	0.0	8.1	13.0	0.5	9.9	13.7	0.0
Cycle Q Clear(g_c), s	2.6	4.3	3.2	2.0	7.0	0.0	8.1	13.0	0.5	9.9	13.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	85	631	282	64	590		258	1121	500	627	1252	
V/C Ratio(X)	0.78	0.39	0.29	0.79	0.64		0.82	0.68	0.03	0.81	0.66	
Avail Cap(c_a), veh/h	760	3031	1352	760	3031		760	3031	1352	1473	3031	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9	25.3	24.8	33.4	27.1	0.0	28.9	20.7	16.4	27.3	18.9	0.0
Incr Delay (d2), s/veh	5.6	0.5	0.8	7.9	1.2	0.0	2.5	0.8	0.0	0.9	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.7	1.2	0.9	2.8	0.0	3.4	5.0	0.2	3.9	5.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.5	25.8	25.6	41.3	28.4	0.0	31.4	21.5	16.4	28.3	19.6	0.0
LnGrp LOS	D	C	C	D	C		C	C	B	C	B	
Approach Vol, veh/h		395			431			985			1327	
Approach Delay, s/veh		27.9			29.9			23.5			22.9	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.9	17.8	14.6	30.5	7.8	17.0	17.2	27.9				
Change Period (Y+Rc), s	4.4	* 5.3	4.4	5.7	4.4	5.3	4.4	* 5.7				
Max Green Setting (Gmax), s	30.0	* 60	30.0	60.0	30.0	60.0	30.0	* 60				
Max Q Clear Time (g_c+14), s	14.0	6.3	10.1	15.7	4.6	9.0	11.9	15.0				
Green Ext Time (p_c), s	0.0	2.7	0.3	8.2	0.1	2.7	0.9	7.2				

### Intersection Summary

HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	1.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑			↑
Traffic Vol, veh/h	459	7	89	0	0	161
Future Vol, veh/h	459	7	89	0	0	161
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	-	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	499	8	97	0	0	175

Major/Minor	Major1	Minor2		
Conflicting Flow All	0	0	250	-
Stage 1	-	-	0	-
Stage 2	-	-	250	-
Critical Hdwy	-	-	6.86	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.86	-
Follow-up Hdwy	-	-	3.53	-
Pot Cap-1 Maneuver	-	-	714	0
Stage 1	-	-	-	0
Stage 2	-	-	765	0
Platoon blocked, %	-	-		
Mov Cap-1 Maneuver	-	-	714	0
Mov Cap-2 Maneuver	-	-	714	0
Stage 1	-	-	-	0
Stage 2	-	-	765	0

Approach	EB	WB
HCM Control Delay, s	0	10.8
HCM LOS		B

Minor Lane/Major Mvmt	EBT	EBRWBLn1
Capacity (veh/h)	-	- 714
HCM Lane V/C Ratio	-	- 0.135
HCM Control Delay (s)	-	- 10.8
HCM Lane LOS	-	- B
HCM 95th %tile Q(veh)	-	- 0.5

HCM 6th Signalized Intersection Summary  
53: University Ave & College Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	310	102	103	484	379	69	1384	275	205	483	206
Future Volume (veh/h)	138	310	102	103	484	379	69	1384	275	205	483	206
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	150	337	89	112	526	369	75	1504	239	223	525	197
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	170	1135	506	132	595	417	93	1227	547	242	1086	406
Arrive On Green	0.10	0.32	0.32	0.07	0.30	0.30	0.05	0.35	0.35	0.14	0.43	0.43
Sat Flow, veh/h	1767	3526	1572	1767	1980	1388	1767	3526	1572	1767	2511	938
Grp Volume(v), veh/h	150	337	89	112	468	427	75	1504	239	223	368	354
Grp Sat Flow(s),veh/h/ln	1767	1763	1572	1767	1763	1606	1767	1763	1572	1767	1763	1687
Q Serve(g_s), s	14.5	12.4	7.0	10.8	43.6	43.7	7.2	60.0	20.2	21.5	25.8	26.0
Cycle Q Clear(g_c), s	14.5	12.4	7.0	10.8	43.6	43.7	7.2	60.0	20.2	21.5	25.8	26.0
Prop In Lane	1.00		1.00	1.00		0.86	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	170	1135	506	132	530	482	93	1227	547	242	763	730
V/C Ratio(X)	0.88	0.30	0.18	0.85	0.88	0.88	0.81	1.23	0.44	0.92	0.48	0.49
Avail Cap(c_a), veh/h	307	1227	547	307	613	559	307	1227	547	307	763	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	77.0	43.8	42.0	78.8	57.5	57.5	80.8	56.2	43.2	73.5	35.1	35.1
Incr Delay (d2), s/veh	5.7	0.2	0.2	5.7	13.6	14.7	6.1	109.2	0.6	24.9	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	5.5	2.8	5.1	21.4	19.7	3.4	44.8	8.0	11.4	11.2	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.7	44.0	42.2	84.6	71.0	72.2	87.0	165.4	43.8	98.4	35.7	35.8
LnGrp LOS	F	D	D	F	E	E	F	F	D	F	D	D
Approach Vol, veh/h		576			1007			1818			945	
Approach Delay, s/veh		53.8			73.0			146.2			50.5	
Approach LOS		D			E			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.3	60.6	13.5	81.1	21.0	56.9	28.1	66.5				
Change Period (Y+Rc), s	4.4	5.1	4.4	6.5	4.4	* 5.1	4.4	* 6.5				
Max Green Setting (Gmax), s	30.0	60.0	30.0	60.0	30.0	* 60	30.0	* 60				
Max Q Clear Time (g_c+I1), s	12.8	14.4	9.2	28.0	16.5	45.7	23.5	62.0				
Green Ext Time (p_c), s	0.1	3.4	0.1	6.0	0.1	6.1	0.2	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			96.2									
HCM 6th LOS			F									
<b>Notes</b>												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

# HCM 6th Signalized Intersection Summary

## 54: University Ave & Rolando Blvd

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	419	23	16	563	15	61	25	24	25	23	42
Future Volume (veh/h)	19	419	23	16	563	15	61	25	24	25	23	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	517	22	17	593	11	72	29	22	29	27	43
Peak Hour Factor	0.81	0.81	0.81	0.95	0.95	0.95	0.85	0.85	0.85	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	34	2326	99	27	2378	44	184	72	42	98	90	105
Arrive On Green	0.02	0.68	0.68	0.02	0.67	0.67	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1767	3440	146	1767	3538	66	806	479	280	313	602	702
Grp Volume(v), veh/h	23	265	274	17	295	309	123	0	0	99	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1823	1767	1763	1841	1564	0	0	1616	0	0
Q Serve(g_s), s	1.2	5.1	5.2	0.9	5.9	5.9	1.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	5.1	5.2	0.9	5.9	5.9	5.9	0.0	0.0	4.7	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.04	0.59		0.18	0.29		0.43
Lane Grp Cap(c), veh/h	34	1192	1233	27	1185	1237	297	0	0	293	0	0
V/C Ratio(X)	0.67	0.22	0.22	0.63	0.25	0.25	0.41	0.00	0.00	0.34	0.00	0.00
Avail Cap(c_a), veh/h	149	1192	1233	149	1185	1237	676	0	0	695	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.8	5.5	5.6	44.0	5.8	5.8	35.0	0.0	0.0	34.6	0.0	0.0
Incr Delay (d2), s/veh	8.1	0.4	0.4	8.4	0.5	0.5	0.3	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.7	1.8	0.4	2.0	2.1	2.5	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.9	6.0	6.0	52.5	6.3	6.3	35.3	0.0	0.0	34.8	0.0	0.0
LnGrp LOS	D	A	A	D	A	A	D	A	A	C	A	A
Approach Vol, veh/h		562			621			123			99	
Approach Delay, s/veh		7.9			7.6			35.3			34.8	
Approach LOS		A			A			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	65.9		18.4	6.1	65.5		18.4				
Change Period (Y+Rc), s	4.4	5.0		4.9	4.4	5.0		4.9				
Max Green Setting (Gmax), s	7.6	31.0		37.1	7.6	31.0		37.1				
Max Q Clear Time (g_c+1/3), s	7.2	7.2		6.7	3.2	7.9		7.9				
Green Ext Time (p_c), s	0.0	5.5		0.4	0.0	6.0		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											12.0	
HCM 6th LOS											B	



HCM 6th Roundabout  
55: Wightman St & 35th St

Existing AM  
AM Peak Hour

Intersection				
Intersection Delay, s/veh	3.9			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	96	216	47	38
Demand Flow Rate, veh/h	99	222	48	38
Vehicles Circulating, veh/h	27	69	100	198
Vehicles Exiting, veh/h	209	79	26	93
Ped Vol Crossing Leg, #/h	5	4	5	8
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	3.4	4.3	3.3	3.5
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	99	222	48	38
Cap Entry Lane, veh/h	1342	1286	1246	1128
Entry HV Adj Factor	0.970	0.971	0.978	0.989
Flow Entry, veh/h	96	216	47	38
Cap Entry, veh/h	1301	1248	1218	1113
V/C Ratio	0.074	0.173	0.039	0.034
Control Delay, s/veh	3.4	4.3	3.3	3.5
LOS	A	A	A	A
95th %tile Queue, veh	0	1	0	0

# HCM 6th Signalized Intersection Summary

## 56: Wightman St & Central Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	194	120	8	261	16	242	34	48	17	24	21
Future Volume (veh/h)	9	194	120	8	261	16	242	34	48	17	24	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.94	0.98		0.97	0.98		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	12	259	140	10	311	13	285	40	50	19	26	18
Peak Hour Factor	0.75	0.75	0.75	0.84	0.84	0.84	0.85	0.85	0.85	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	489	465	251	420	735	31	547	75	70	253	317	179
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1024	1114	602	960	1763	74	1021	203	188	349	851	480
Grp Volume(v), veh/h	12	0	399	10	0	324	375	0	0	63	0	0
Grp Sat Flow(s),veh/h/ln	1024	0	1717	960	0	1837	1412	0	0	1679	0	0
Q Serve(g_s), s	0.3	0.0	6.7	0.3	0.0	4.7	7.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.1	0.0	6.7	7.0	0.0	4.7	8.5	0.0	0.0	0.9	0.0	0.0
Prop In Lane	1.00		0.35	1.00		0.04	0.76		0.13	0.30		0.29
Lane Grp Cap(c), veh/h	489	0	716	420	0	766	693	0	0	749	0	0
V/C Ratio(X)	0.02	0.00	0.56	0.02	0.00	0.42	0.54	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	1139	0	1806	1029	0	1932	1635	0	0	1794	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.6	0.0	8.4	11.1	0.0	7.8	10.1	0.0	0.0	7.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.3	0.0	0.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.1	0.0	2.1	0.1	0.0	1.5	2.0	0.0	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.7	0.0	9.7	11.1	0.0	8.5	10.3	0.0	0.0	7.8	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		411			334			375				63
Approach Delay, s/veh		9.7			8.6			10.3				7.8
Approach LOS		A			A			B				A
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.2		19.9		18.2		19.9				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		40.0		40.0		40.0		40.0				
Max Q Clear Time (g_c+I1), s		10.5		8.7		2.9		9.0				
Green Ext Time (p_c), s		1.8		5.3		0.2		4.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				9.5								
HCM 6th LOS				A								

<b>Intersection</b>												
Intersection Delay, s/veh	9.8											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	71	103	26	11	202	34	37	49	10	11	15	45
Future Vol, veh/h	71	103	26	11	202	34	37	49	10	11	15	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	77	112	28	12	220	37	40	53	11	12	16	49
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.3	10.8	9.3	8.6
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	39%	100%	0%	100%	0%	15%
Vol Thru, %	51%	0%	80%	0%	86%	21%
Vol Right, %	10%	0%	20%	0%	14%	63%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	71	129	11	236	71
LT Vol	37	71	0	11	0	11
Through Vol	49	0	103	0	202	15
RT Vol	10	0	26	0	34	45
Lane Flow Rate	104	77	140	12	257	77
Geometry Grp	2	5	5	5	5	2
Degree of Util (X)	0.152	0.124	0.2	0.019	0.366	0.106
Departure Headway (Hd)	5.256	5.774	5.128	5.737	5.132	4.943
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	678	618	695	621	698	719
Service Time	3.324	3.536	2.889	3.495	2.89	3.014
HCM Lane V/C Ratio	0.153	0.125	0.201	0.019	0.368	0.107
HCM Control Delay	9.3	9.4	9.2	8.6	10.9	8.6
HCM Lane LOS	A	A	A	A	B	A
HCM 95th-tile Q	0.5	0.4	0.7	0.1	1.7	0.4

HCM 6th Signalized Intersection Summary  
58: Fairmount Ave & Wightman St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	
Traffic Volume (veh/h)	12	90	22	34	140	24	139	385	129	4	79	33
Future Volume (veh/h)	12	90	22	34	140	24	139	385	129	4	79	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.96	1.00		0.98	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	15	114	22	42	173	24	160	443	131	5	105	37
Peak Hour Factor	0.79	0.79	0.79	0.81	0.81	0.81	0.87	0.87	0.87	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	23	174	33	53	219	30	127	1382	405	9	582	205
Arrive On Green	0.13	0.13	0.13	0.17	0.17	0.17	0.07	0.52	0.52	0.01	0.45	0.45
Sat Flow, veh/h	176	1337	258	316	1301	180	1767	2675	783	1767	1292	455
Grp Volume(v), veh/h	151	0	0	239	0	0	160	290	284	5	0	142
Grp Sat Flow(s),veh/h/ln	1770	0	0	1797	0	0	1767	1763	1695	1767	0	1748
Q Serve(g_s), s	8.6	0.0	0.0	13.5	0.0	0.0	7.6	10.1	10.3	0.3	0.0	5.2
Cycle Q Clear(g_c), s	8.6	0.0	0.0	13.5	0.0	0.0	7.6	10.1	10.3	0.3	0.0	5.2
Prop In Lane	0.10		0.15	0.18		0.10	1.00		0.46	1.00		0.26
Lane Grp Cap(c), veh/h	230	0	0	302	0	0	127	911	876	9	0	787
V/C Ratio(X)	0.66	0.00	0.00	0.79	0.00	0.00	1.26	0.32	0.32	0.55	0.00	0.18
Avail Cap(c_a), veh/h	386	0	0	392	0	0	127	911	876	127	0	787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	0.97	0.97	0.97	0.85	0.00	0.85
Uniform Delay (d), s/veh	43.9	0.0	0.0	42.3	0.0	0.0	49.2	14.8	14.9	52.6	0.0	17.4
Incr Delay (d2), s/veh	3.2	0.0	0.0	8.1	0.0	0.0	165.6	0.9	1.0	15.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.0	6.7	0.0	0.0	9.2	4.2	4.1	0.2	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.0	0.0	0.0	50.4	0.0	0.0	214.8	15.7	15.8	67.8	0.0	17.9
LnGrp LOS	D	A	A	D	A	A	F	B	B	E	A	B
Approach Vol, veh/h		151			239			734				147
Approach Delay, s/veh		47.0			50.4			59.1				19.6
Approach LOS		D			D			E				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	59.7		18.7	12.0	52.6		22.7				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	7.6	33.1		23.1	7.6	33.1		23.1				
Max Q Clear Time (g_c+1/3), s	12.3	12.3		10.6	9.6	7.2		15.5				
Green Ext Time (p_c), s	0.0	4.8		0.6	0.0	1.1		0.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay												51.5
HCM 6th LOS												D

# HCM 6th Signalized Intersection Summary

## 59: Euclid Ave & Wightman St

Existing AM  
AM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	47	119	468	282	34
Future Volume (veh/h)	40	47	119	468	282	34
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.91	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	53	56	131	514	324	33
Peak Hour Factor	0.75	0.75	0.91	0.91	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	86	91	271	1036	1285	131
Arrive On Green	0.11	0.11	0.78	0.78	0.78	0.78
Sat Flow, veh/h	760	803	286	1332	1652	168
Grp Volume(v), veh/h	110	0	645	0	0	357
Grp Sat Flow(s),veh/h/ln	1578	0	1618	0	0	1820
Q Serve(g_s), s	6.0	0.0	3.6	0.0	0.0	4.9
Cycle Q Clear(g_c), s	6.0	0.0	11.4	0.0	0.0	4.9
Prop In Lane	0.48	0.51	0.20			0.09
Lane Grp Cap(c), veh/h	178	0	1307	0	0	1416
V/C Ratio(X)	0.62	0.00	0.49	0.00	0.00	0.25
Avail Cap(c_a), veh/h	440	0	1307	0	0	1416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	0.00	0.00	0.77
Uniform Delay (d), s/veh	38.1	0.0	3.4	0.0	0.0	2.8
Incr Delay (d2), s/veh	1.3	0.0	1.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	3.3	0.0	0.0	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.4	0.0	4.8	0.0	0.0	3.1
LnGrp LOS	D	A	A	A	A	A
Approach Vol, veh/h	110			645	357	
Approach Delay, s/veh	39.4			4.8	3.1	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		74.9		15.1		74.9
Change Period (Y+Rc), s		4.9		4.9		4.9
Max Green Setting (Gmax), s		55.1		25.1		55.1
Max Q Clear Time (g_c+I1), s		13.4		8.0		6.9
Green Ext Time (p_c), s		5.5		0.1		2.0
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			7.6			
HCM 6th LOS			A			

### Notes

User approved volume balancing among the lanes for turning movement.

Intersection			
Intersection Delay, s/veh	4.6		
Intersection LOS	A		
Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	86	335	160
Demand Flow Rate, veh/h	89	345	165
Vehicles Circulating, veh/h	304	26	30
Vehicles Exiting, veh/h	67	169	363
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.5	5.0	3.8
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	89	345	165
Cap Entry Lane, veh/h	1012	1344	1338
Entry HV Adj Factor	0.966	0.971	0.969
Flow Entry, veh/h	86	335	160
Cap Entry, veh/h	978	1305	1297
V/C Ratio	0.088	0.257	0.123
Control Delay, s/veh	4.5	5.0	3.8
LOS	A	A	A
95th %tile Queue, veh	0	1	0

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	53	3	4	73	45	2	72	7	13	30	8
Future Vol, veh/h	5	53	3	4	73	45	2	72	7	13	30	8
Conflicting Peds, #/hr	2	0	4	4	0	2	0	0	4	4	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	96	96	96	84	84	84	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	6	62	4	4	76	47	2	86	8	14	33	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	125	0	0	70	0	0	209	213	72	237	192	102
Stage 1	-	-	-	-	-	-	80	80	-	110	110	-
Stage 2	-	-	-	-	-	-	129	133	-	127	82	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1455	-	-	1524	-	-	746	683	987	715	701	950
Stage 1	-	-	-	-	-	-	926	826	-	893	802	-
Stage 2	-	-	-	-	-	-	872	784	-	874	825	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1452	-	-	1518	-	-	706	674	979	633	692	948
Mov Cap-2 Maneuver	-	-	-	-	-	-	706	674	-	633	692	-
Stage 1	-	-	-	-	-	-	919	819	-	888	798	-
Stage 2	-	-	-	-	-	-	826	780	-	770	818	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.2			11			10.5		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	693	1452	-	-	1518	-	-	705
HCM Lane V/C Ratio	0.139	0.004	-	-	0.003	-	-	0.079
HCM Control Delay (s)	11	7.5	0	-	7.4	0	-	10.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.3

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶			↷						↶↷	
Traffic Vol, veh/h	0	26	46	68	53	0	0	0	0	49	270	68
Future Vol, veh/h	0	26	46	68	53	0	0	0	0	49	270	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	28	50	74	58	0	0	0	0	53	293	74
Number of Lanes	0	1	0	0	1	0	0	0	0	0	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	8.3	9.3	9.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	56%	27%	0%
Vol Thru, %	36%	44%	73%	67%
Vol Right, %	64%	0%	0%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	72	121	184	203
LT Vol	0	68	49	0
Through Vol	26	53	135	135
RT Vol	46	0	0	68
Lane Flow Rate	78	132	200	221
Geometry Grp	2	2	5	5
Degree of Util (X)	0.102	0.187	0.289	0.296
Departure Headway (Hd)	4.697	5.112	5.202	4.832
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	761	701	690	744
Service Time	2.735	3.146	2.939	2.57
HCM Lane V/C Ratio	0.102	0.188	0.29	0.297
HCM Control Delay	8.3	9.3	10.1	9.6
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.3	0.7	1.2	1.2



HCM 6th Signalized Intersection Summary  
63: Landis St & Fairmount Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕		↗	↕	↘
Traffic Volume (veh/h)	38	21	17	10	33	19	64	597	20	3	108	25
Future Volume (veh/h)	38	21	17	10	33	19	64	597	20	3	108	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	41	23	13	11	36	21	70	649	17	3	117	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	275	46	26	170	90	51	105	1423	37	6	530	100
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.06	0.41	0.41	0.00	0.35	0.35
Sat Flow, veh/h	859	482	272	252	946	535	1767	3510	92	1767	1519	286
Grp Volume(v), veh/h	77	0	0	68	0	0	70	326	340	3	0	139
Grp Sat Flow(s),veh/h/ln	1613	0	0	1733	0	0	1767	1763	1839	1767	0	1804
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	0.0	1.1	3.9	3.9	0.0	0.0	1.6
Cycle Q Clear(g_c), s	1.2	0.0	0.0	1.0	0.0	0.0	1.1	3.9	3.9	0.0	0.0	1.6
Prop In Lane	0.53		0.17	0.16		0.31	1.00		0.05	1.00		0.16
Lane Grp Cap(c), veh/h	347	0	0	312	0	0	105	715	746	6	0	630
V/C Ratio(X)	0.22	0.00	0.00	0.22	0.00	0.00	0.66	0.46	0.46	0.49	0.00	0.22
Avail Cap(c_a), veh/h	1779	0	0	1896	0	0	1851	3692	3852	1851	0	3779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.2	0.0	0.0	12.2	0.0	0.0	13.2	6.2	6.2	14.3	0.0	6.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	2.7	0.5	0.5	20.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.3	0.0	0.0	0.4	0.8	0.9	0.1	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	0.0	0.0	12.3	0.0	0.0	15.9	6.7	6.7	34.6	0.0	6.8
LnGrp LOS	B	A	A	B	A	A	B	A	A	C	A	A
Approach Vol, veh/h		77			68			736			142	
Approach Delay, s/veh		12.4			12.3			7.6			7.4	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.5	16.5		7.6	6.1	14.9		7.6				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	30.0	60.0		30.1	30.0	60.0		30.0				
Max Q Clear Time (g_c+1), s	12.0	5.9		3.2	3.1	3.6		3.0				
Green Ext Time (p_c), s	0.0	5.4		0.3	0.1	1.0		0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				8.2								
HCM 6th LOS				A								

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	14	31	43	384	256	17
Future Vol, veh/h	14	31	43	384	256	17
Conflicting Peds, #/hr	5	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	86	86	81	81
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	19	41	50	447	316	21

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	886	334	344	0	-	0
Stage 1	334	-	-	-	-	-
Stage 2	552	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	314	706	1209	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	575	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	293	701	1201	-	-	-
Mov Cap-2 Maneuver	293	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	571	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1201	-	489	-	-
HCM Lane V/C Ratio	0.042	-	0.123	-	-
HCM Control Delay (s)	8.1	0	13.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

HCM 6th Signalized Intersection Summary  
65: Fairmount Ave & 43rd St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕↔		↕	↕	
Traffic Volume (veh/h)	54	48	0	29	0	93	0	517	29	73	445	0
Future Volume (veh/h)	54	48	0	29	0	93	0	517	29	73	445	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	0	1856	1856	1856	0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	59	52	0	32	0	90	0	562	27	79	484	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	0	3	3	3	0	3	3	3	3	0
Cap, veh/h	268	76	0	192	0	120	0	1282	62	113	1082	0
Arrive On Green	0.10	0.10	0.00	0.10	0.00	0.10	0.00	0.37	0.37	0.06	0.58	0.00
Sat Flow, veh/h	912	804	0	448	0	1260	0	3517	164	1767	1856	0
Grp Volume(v), veh/h	111	0	0	122	0	0	0	289	300	79	484	0
Grp Sat Flow(s),veh/h/ln	1716	0	0	1708	0	0	0	1763	1826	1767	1856	0
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	3.7	3.7	1.3	4.5	0.0
Cycle Q Clear(g_c), s	1.8	0.0	0.0	2.0	0.0	0.0	0.0	3.7	3.7	1.3	4.5	0.0
Prop In Lane	0.53		0.00	0.26		0.74	0.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	344	0	0	312	0	0	0	660	683	113	1082	0
V/C Ratio(X)	0.32	0.00	0.00	0.39	0.00	0.00	0.00	0.44	0.44	0.70	0.45	0.00
Avail Cap(c_a), veh/h	2184	0	0	2146	0	0	0	3475	3599	1742	5785	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.3	0.0	0.0	13.4	0.0	0.0	0.0	7.1	7.1	14.0	3.6	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.6	0.6	2.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.6	0.0	0.0	0.0	0.9	0.9	0.5	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	0.0	0.0	13.6	0.0	0.0	0.0	7.8	7.7	16.8	3.7	0.0
LnGrp LOS	B	A	A	B	A	A	A	A	A	B	A	A
Approach Vol, veh/h		111			122			589			563	
Approach Delay, s/veh		13.5			13.6			7.8			5.5	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	6.3	16.3		7.8		22.6		7.8				
Change Period (Y+Rc), s	4.4	4.9		4.9		* 4.9		4.9				
Max Green Setting (Gmax), s	30.0	60.0		40.0		* 95		40.0				
Max Q Clear Time (g_c+I1), s	3.3	5.7		3.8		6.5		4.0				
Green Ext Time (p_c), s	0.1	5.6		0.4		2.0		0.5				

Intersection Summary

HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

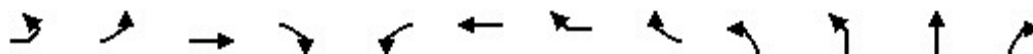
Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM Signalized Intersection Capacity Analysis

## 66: Fairmount Ave & Poplar St

Existing AM  
AM Peak Hour



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations			↕	↗		↕				↕	↖	↗
Traffic Volume (vph)	5	113	15	112	75	11	5	74	5	23	476	21
Future Volume (vph)	5	113	15	112	75	11	5	74	5	23	476	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.9	4.9		4.9				5.1	5.1	5.1
Lane Util. Factor			1.00	1.00		1.00				1.00	1.00	1.00
Frt			1.00	0.85		0.94				1.00	1.00	0.85
Flt Protected			0.96	1.00		0.98				0.95	1.00	1.00
Satd. Flow (prot)			1766	1568		1688				1752	1845	1568
Flt Permitted			0.62	1.00		0.78				0.37	1.00	1.00
Satd. Flow (perm)			1144	1568		1353				687	1845	1568
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	123	16	122	82	12	5	80	5	25	517	23
RTOR Reduction (vph)	0	0	0	98	0	57	0	0	0	0	0	8
Lane Group Flow (vph)	0	0	144	24	0	122	0	0	0	30	517	15
Turn Type	Perm	Perm	NA	Perm	Perm	NA			Perm	Perm	NA	Perm
Protected Phases			4			8					2	
Permitted Phases	4	4		4	8				2	2		2
Actuated Green, G (s)			14.0	14.0		14.0				46.0	46.0	46.0
Effective Green, g (s)			14.0	14.0		14.0				46.0	46.0	46.0
Actuated g/C Ratio			0.20	0.20		0.20				0.66	0.66	0.66
Clearance Time (s)			4.9	4.9		4.9				5.1	5.1	5.1
Vehicle Extension (s)			2.0	2.0		2.0				1.0	1.0	1.0
Lane Grp Cap (vph)			228	313		270				451	1212	1030
v/s Ratio Prot											c0.28	
v/s Ratio Perm			c0.13	0.02		0.09				0.04		0.01
v/c Ratio			0.63	0.08		0.45				0.07	0.43	0.01
Uniform Delay, d1			25.6	22.8		24.6				4.3	5.7	4.2
Progression Factor			1.00	1.00		1.00				1.00	1.00	1.00
Incremental Delay, d2			4.1	0.0		0.4				0.3	1.1	0.0
Delay (s)			29.8	22.8		25.1				4.6	6.8	4.2
Level of Service			C	C		C				A	A	A
Approach Delay (s)			26.6			25.1					6.6	
Approach LOS			C			C					A	

### Intersection Summary

HCM 2000 Control Delay	11.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
66: Fairmount Ave & Poplar St

Existing AM  
AM Peak Hour



Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	14	652	16	5
Future Volume (vph)	14	652	16	5
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1	
Lane Util. Factor	1.00	0.95	1.00	
Frt	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	
Satd. Flow (prot)	1752	3505	1568	
Flt Permitted	0.43	1.00	1.00	
Satd. Flow (perm)	785	3505	1568	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	709	17	5
RTOR Reduction (vph)	0	0	8	0
Lane Group Flow (vph)	15	709	14	0
Turn Type	Perm	NA	Perm	
Protected Phases		2		
Permitted Phases	2		2	
Actuated Green, G (s)	46.0	46.0	46.0	
Effective Green, g (s)	46.0	46.0	46.0	
Actuated g/C Ratio	0.66	0.66	0.66	
Clearance Time (s)	5.1	5.1	5.1	
Vehicle Extension (s)	1.0	1.0	1.0	
Lane Grp Cap (vph)	515	2303	1030	
v/s Ratio Prot		0.20		
v/s Ratio Perm	0.02		0.01	
v/c Ratio	0.03	0.31	0.01	
Uniform Delay, d1	4.2	5.2	4.2	
Progression Factor	1.00	1.00	1.00	
Incremental Delay, d2	0.1	0.3	0.0	
Delay (s)	4.3	5.5	4.2	
Level of Service	A	A	A	
Approach Delay (s)		5.4		
Approach LOS		A		
<b>Intersection Summary</b>				

# HCM 6th Signalized Intersection Summary

## 67: Home Ave & I-805 SB Ramps

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑		↑
Traffic Volume (veh/h)	0	417	159	604	532	0	0	0	0	217	0	148
Future Volume (veh/h)	0	417	159	604	532	0	0	0	0	217	0	148
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	0	1856
Adj Flow Rate, veh/h	0	458	0	694	611	0				265	0	143
Peak Hour Factor	0.91	0.91	0.91	0.87	0.87	0.87				0.82	0.82	0.82
Percent Heavy Veh, %	0	3	3	3	3	0				3	0	3
Cap, veh/h	0	692		672	2286	0				339	0	302
Arrive On Green	0.00	0.20	0.00	0.38	0.65	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	3618	1572	1767	3618	0				1767	0	1572
Grp Volume(v), veh/h	0	458	0	694	611	0				265	0	143
Grp Sat Flow(s),veh/h/ln	0	1763	1572	1767	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	7.9	0.0	25.0	4.8	0.0				9.4	0.0	5.3
Cycle Q Clear(g_c), s	0.0	7.9	0.0	25.0	4.8	0.0				9.4	0.0	5.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	692		672	2286	0				339	0	302
V/C Ratio(X)	0.00	0.66		1.03	0.27	0.00				0.78	0.00	0.47
Avail Cap(c_a), veh/h	0	1878		672	3472	0				807	0	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.4	0.0	20.3	4.9	0.0				25.2	0.0	23.6
Incr Delay (d2), s/veh	0.0	1.1	0.0	43.2	0.1	0.0				4.0	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0		3.1	0.0	16.7	1.2	0.0				4.1	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.5	0.0	63.5	5.0	0.0				29.2	0.0	24.8
LnGrp LOS	A	C		F	A	A				C	A	C
Approach Vol, veh/h		458			1305						408	
Approach Delay, s/veh		25.5			36.1						27.6	
Approach LOS		C			D						C	
Timer - Assigned Phs	1	2			6		8					
Phs Duration (G+Y+Rc), s	29.7	18.3			48.0		17.7					
Change Period (Y+Rc), s	4.7	5.4			5.4		5.1					
Max Green Setting (Gmax), s	25	35.0			64.7		30.0					
Max Q Clear Time (g_c+Q), s	0.0	9.9			6.8		11.4					
Green Ext Time (p_c), s	0.0	2.9			4.4		1.2					

### Intersection Summary

HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

### Notes

User approved pedestrian interval to be less than phase max green.

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

# HCM 6th Signalized Intersection Summary

## 68: I-805 NB Ramps & Home Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↘	↑↑			↕	↗			
Traffic Volume (veh/h)	0	458	178	540	1067	0	64	0	263	0	0	0
Future Volume (veh/h)	0	458	178	540	1067	0	64	0	263	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0	1856	1856	1856			
Adj Flow Rate, veh/h	0	526	0	607	1199	0	72	122	153			
Peak Hour Factor	0.87	0.87	0.87	0.89	0.89	0.89	0.89	0.89	0.89			
Percent Heavy Veh, %	0	3	3	3	3	0	3	3	3			
Cap, veh/h	0	832		653	2409	0	104	175	241			
Arrive On Green	0.00	0.24	0.00	0.37	0.68	0.00	0.15	0.15	0.15			
Sat Flow, veh/h	0	3618	1572	1767	3618	0	676	1146	1572			
Grp Volume(v), veh/h	0	526	0	607	1199	0	194	0	153			
Grp Sat Flow(s),veh/h/ln	0	1763	1572	1767	1763	0	1822	0	1572			
Q Serve(g_s), s	0.0	8.1	0.0	20.0	9.9	0.0	6.1	0.0	5.5			
Cycle Q Clear(g_c), s	0.0	8.1	0.0	20.0	9.9	0.0	6.1	0.0	5.5			
Prop In Lane	0.00		1.00	1.00		0.00	0.37		1.00			
Lane Grp Cap(c), veh/h	0	832		653	2409	0	279	0	241			
V/C Ratio(X)	0.00	0.63		0.93	0.50	0.00	0.70	0.00	0.64			
Avail Cap(c_a), veh/h	0	2040		730	2409	0	542	0	468			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	20.8	0.0	18.3	4.6	0.0	24.3	0.0	24.0			
Incr Delay (d2), s/veh	0.0	0.8	0.0	16.5	0.2	0.0	3.1	0.0	2.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	3.0	0.0	9.7	1.9	0.0	2.8	0.0	2.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.6	0.0	34.8	4.8	0.0	27.4	0.0	26.8			
LnGrp LOS		A	C	C	A	A	C	A	C			
Approach Vol, veh/h		526		1806			347					
Approach Delay, s/veh		21.6		14.8			27.1					
Approach LOS		C		B			C					
Timer - Assigned Phs	1	2		4			6					
Phs Duration (G+Y+Rc), s	37.1	19.7		13.8			46.7					
Change Period (Y+Rc), s	4.7	5.4		4.5			5.4					
Max Green Setting (Gmax), s	25	35.0		18.0			35.0					
Max Q Clear Time (g_c+Q), s	22.6	10.1		8.1			11.9					
Green Ext Time (p_c), s	0.4	3.4		1.2			9.0					

### Intersection Summary

HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B

### Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

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Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



HCM 6th Signalized Intersection Summary  
69: Home Ave & Fairmount Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	296	370	87	73	706	72	253	294	75	64	177	598
Future Volume (veh/h)	296	370	87	73	706	72	253	294	75	64	177	598
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	352	440	92	82	793	70	258	300	67	80	221	598
Peak Hour Factor	0.84	0.84	0.84	0.89	0.89	0.89	0.98	0.98	0.98	0.80	0.80	0.80
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	333	1180	245	101	902	80	279	1009	222	99	463	386
Arrive On Green	0.19	0.41	0.41	0.06	0.28	0.28	0.16	0.35	0.35	0.06	0.25	0.25
Sat Flow, veh/h	1767	2901	602	1767	3270	289	1767	2871	632	1767	1856	1547
Grp Volume(v), veh/h	352	266	266	82	427	436	258	182	185	80	221	598
Grp Sat Flow(s),veh/h/ln	1767	1763	1740	1767	1763	1796	1767	1763	1740	1767	1856	1547
Q Serve(g_s), s	30.0	16.8	17.1	7.3	36.9	37.0	22.9	11.9	12.3	7.1	16.2	39.8
Cycle Q Clear(g_c), s	30.0	16.8	17.1	7.3	36.9	37.0	22.9	11.9	12.3	7.1	16.2	39.8
Prop In Lane	1.00		0.35	1.00		0.16	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	333	717	708	101	486	495	279	619	611	99	463	386
V/C Ratio(X)	1.06	0.37	0.38	0.81	0.88	0.88	0.93	0.29	0.30	0.81	0.48	1.55
Avail Cap(c_a), veh/h	333	717	708	333	553	564	333	619	611	333	463	386
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.7	33.0	33.1	74.2	55.2	55.2	66.2	37.4	37.5	74.4	50.9	59.8
Incr Delay (d2), s/veh	65.5	0.6	0.6	5.7	14.5	14.3	26.4	0.4	0.4	5.7	1.2	259.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	7.3	7.3	3.5	18.2	18.5	12.4	5.3	5.4	3.4	7.7	43.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	130.2	33.6	33.7	79.9	69.7	69.5	92.6	37.8	37.9	80.0	52.1	319.0
LnGrp LOS	F	C	C	E	E	E	F	D	D	F	D	F
Approach Vol, veh/h		884			945			625			899	
Approach Delay, s/veh		72.1			70.5			60.5			232.1	
Approach LOS		E			E			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.5	70.1	29.5	46.2	34.4	49.2	13.3	62.4				
Change Period (Y+Rc), s	4.4	* 5.3	4.4	6.4	4.4	5.3	4.4	* 6.4				
Max Green Setting (Gmax), s	30.0	* 50	30.0	39.8	30.0	50.0	30.0	* 40				
Max Q Clear Time (g_c+1), s	19.3	19.1	24.9	41.8	32.0	39.0	9.1	14.3				
Green Ext Time (p_c), s	0.1	5.7	0.2	0.0	0.0	5.0	0.1	3.1				

Intersection Summary

HCM 6th Ctrl Delay	112.4
HCM 6th LOS	F

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 70: Home Ave & Euclid Ave

Existing AM  
AM Peak Hour



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↶	↶	↑	↷	↶	↑
Traffic Volume (veh/h)	282	417	246	216	126	376
Future Volume (veh/h)	282	417	246	216	126	376
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	324	381	328	228	150	448
Peak Hour Factor	0.87	0.87	0.75	0.75	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	517	460	555	469	196	930
Arrive On Green	0.29	0.29	0.30	0.30	0.11	0.50
Sat Flow, veh/h	1767	1572	1856	1570	1767	1856
Grp Volume(v), veh/h	324	381	328	228	150	448
Grp Sat Flow(s),veh/h/ln	1767	1572	1856	1570	1767	1856
Q Serve(g_s), s	7.6	10.9	7.2	5.7	4.0	7.6
Cycle Q Clear(g_c), s	7.6	10.9	7.2	5.7	4.0	7.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	517	460	555	469	196	930
V/C Ratio(X)	0.63	0.83	0.59	0.49	0.77	0.48
Avail Cap(c_a), veh/h	1103	981	1929	1632	1103	1929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	15.9	14.4	13.8	20.8	7.9
Incr Delay (d2), s/veh	0.5	1.5	1.7	1.3	2.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	3.6	2.7	1.8	1.6	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.2	17.4	16.0	15.1	23.1	8.3
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	705		556			598
Approach Delay, s/veh	16.4		15.6			12.0
Approach LOS	B		B			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.7	19.9			29.6	18.5
Change Period (Y+Rc), s	4.4	* 5.5			5.5	4.4
Max Green Setting (Gmax), s	30.0	* 50			50.0	30.0
Max Q Clear Time (g_c+10), s	10.0	9.2			9.6	12.9
Green Ext Time (p_c), s	0.2	5.1			3.7	1.2

### Intersection Summary

HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

**Intersection**

Intersection Delay, s/veh 16.9

Intersection LOS C





















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	286	129	137	340	24
Future Vol, veh/h	26	286	129	137	340	24
Peak Hour Factor	0.95	0.95	0.84	0.84	0.78	0.78
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	27	301	154	163	436	31
Number of Lanes	1	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	2	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	14.1	14.6	20.4
HCM LOS	B	B	C

Lane	NBLn1	EBLn1	EBLn2	SBLn1
Vol Left, %	48%	100%	0%	0%
Vol Thru, %	52%	0%	0%	93%
Vol Right, %	0%	0%	100%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	266	26	286	364
LT Vol	129	26	0	0
Through Vol	137	0	0	340
RT Vol	0	0	286	24
Lane Flow Rate	317	27	301	467
Geometry Grp	2	5	5	2
Degree of Util (X)	0.507	0.054	0.494	0.703
Departure Headway (Hd)	5.762	7.134	5.912	5.42
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	624	501	608	667
Service Time	3.818	4.892	3.67	3.469
HCM Lane V/C Ratio	0.508	0.054	0.495	0.7
HCM Control Delay	14.6	10.3	14.4	20.4
HCM Lane LOS	B	B	B	C
HCM 95th-tile Q	2.9	0.2	2.7	5.7

HCM Signalized Intersection Capacity Analysis  
72: Federal Blvd & Home Ave

Existing AM  
AM Peak Hour

												
Movement	EBL	EBT	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	48	19	60	3	235	25	87	8	16	285	126	53
Future Volume (vph)	48	19	60	3	235	25	87	8	16	285	126	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7	6.1			5.7	6.1			5.7	7.0		5.7
Lane Util. Factor	1.00	1.00			1.00	1.00			1.00	0.95		1.00
Frbp, ped/bikes	1.00	0.98			1.00	0.99			1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Frt	1.00	0.89			1.00	0.88			1.00	0.95		1.00
Flt Protected	0.95	1.00			0.95	1.00			0.95	1.00		0.95
Satd. Flow (prot)	1752	1597			1752	1613			1752	3343		1752
Flt Permitted	0.95	1.00			0.95	1.00			0.95	1.00		0.95
Satd. Flow (perm)	1752	1597			1752	1613			1752	3343		1752
Peak-hour factor, PHF	0.81	0.81	0.81	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.86	0.87
Adj. Flow (vph)	59	23	74	3	250	27	93	9	19	331	147	61
RTOR Reduction (vph)	0	86	0	0	0	69	0	0	0	37	0	0
Lane Group Flow (vph)	59	11	0	0	253	51	0	0	28	441	0	61
Confl. Peds. (#/hr)							1					
Confl. Bikes (#/hr)			3				1					
Turn Type	Prot	NA		Prot	Prot	NA		Prot	Prot	NA		Prot
Protected Phases	7	4		3	3	8		5	5	2		1
Permitted Phases												
Actuated Green, G (s)	6.1	10.4			18.7	23.0			3.5	29.0		6.2
Effective Green, g (s)	6.1	10.4			18.7	23.0			3.5	29.0		6.2
Actuated g/C Ratio	0.07	0.12			0.21	0.26			0.04	0.33		0.07
Clearance Time (s)	5.7	6.1			5.7	6.1			5.7	7.0		5.7
Vehicle Extension (s)	2.0	2.0			2.0	2.0			2.0	6.0		2.0
Lane Grp Cap (vph)	120	187			368	417			69	1091		122
v/s Ratio Prot	0.03	0.01			c0.14	c0.03			0.02	0.13		c0.03
v/s Ratio Perm												
v/c Ratio	0.49	0.06			0.69	0.12			0.41	0.40		0.50
Uniform Delay, d1	39.9	34.9			32.4	25.2			41.6	23.2		39.8
Progression Factor	1.00	1.00			1.00	1.00			1.00	1.00		1.00
Incremental Delay, d2	1.2	0.0			4.2	0.0			1.4	0.7		1.2
Delay (s)	41.0	34.9			36.6	25.2			43.1	23.9		41.0
Level of Service	D	C			D	C			D	C		D
Approach Delay (s)		37.2				32.9				24.9		
Approach LOS		D				C				C		
<b>Intersection Summary</b>												
HCM 2000 Control Delay			29.1		HCM 2000 Level of Service					C		
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			88.8		Sum of lost time (s)					24.5		
Intersection Capacity Utilization			60.0%		ICU Level of Service					B		
Analysis Period (min)			15									
dr Defacto Right Lane. Recode with 1 though lane as a right lane.												
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis  
72: Federal Blvd & Home Ave

Existing AM  
AM Peak Hour



Movement	SBT	SBR	SBR2
Lane Configurations	↑↑		
Traffic Volume (vph)	4	596	19
Future Volume (vph)	4	596	19
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	7.0		
Lane Util. Factor	0.95		
Frbp, ped/bikes	0.97		
Flpb, ped/bikes	1.00		
Frt	0.85		
Flt Protected	1.00		
Satd. Flow (prot)	2905		
Flt Permitted	1.00		
Satd. Flow (perm)	2905		
Peak-hour factor, PHF	0.87	0.87	0.87
Adj. Flow (vph)	5	685	22
RTOR Reduction (vph)	1	0	0
Lane Group Flow (vph)	711	0	0
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)		3	3
Turn Type	NA		
Protected Phases	6		
Permitted Phases			
Actuated Green, G (s)	31.7		
Effective Green, g (s)	31.7		
Actuated g/C Ratio	0.36		
Clearance Time (s)	7.0		
Vehicle Extension (s)	6.0		
Lane Grp Cap (vph)	1037		
v/s Ratio Prot	c0.24		
v/s Ratio Perm			
v/c Ratio	1.25dr		
Uniform Delay, d1	24.3		
Progression Factor	1.00		
Incremental Delay, d2	2.9		
Delay (s)	27.2		
Level of Service	C		
Approach Delay (s)	28.3		
Approach LOS	C		
<b>Intersection Summary</b>			

HCM 6th Signalized Intersection Summary  
73: Federal Blvd & 47th St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	13	71	118	221	230	298	62	273	118	72	261	32
Future Volume (veh/h)	13	71	118	221	230	298	62	273	118	72	261	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	17	92	134	248	258	301	75	329	124	89	322	34
Peak Hour Factor	0.77	0.77	0.77	0.89	0.89	0.89	0.83	0.83	0.83	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	29	142	206	306	647	566	96	540	199	115	729	76
Arrive On Green	0.02	0.21	0.21	0.17	0.37	0.37	0.05	0.22	0.22	0.07	0.23	0.23
Sat Flow, veh/h	1767	671	978	1767	1763	1541	1767	2499	922	1767	3214	337
Grp Volume(v), veh/h	17	0	226	248	258	301	75	230	223	89	175	181
Grp Sat Flow(s),veh/h/ln	1767	0	1649	1767	1763	1541	1767	1763	1658	1767	1763	1788
Q Serve(g_s), s	0.5	0.0	7.0	7.5	6.0	8.5	2.3	6.5	6.8	2.8	4.7	4.8
Cycle Q Clear(g_c), s	0.5	0.0	7.0	7.5	6.0	8.5	2.3	6.5	6.8	2.8	4.7	4.8
Prop In Lane	1.00		0.59	1.00		1.00	1.00		0.56	1.00		0.19
Lane Grp Cap(c), veh/h	29	0	348	306	647	566	96	381	358	115	400	405
V/C Ratio(X)	0.58	0.00	0.65	0.81	0.40	0.53	0.78	0.60	0.62	0.77	0.44	0.45
Avail Cap(c_a), veh/h	955	0	1783	955	1905	1666	955	1270	1194	955	1270	1288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	0.0	20.0	22.1	13.0	13.8	25.9	19.6	19.7	25.5	18.4	18.5
Incr Delay (d2), s/veh	6.5	0.0	2.5	2.0	0.4	0.8	5.1	1.6	1.9	4.1	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.6	3.0	2.1	2.6	1.0	2.5	2.5	1.2	1.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	0.0	22.5	24.1	13.5	14.7	31.0	21.2	21.6	29.6	19.5	19.6
LnGrp LOS	C	A	C	C	B	B	C	C	C	C	B	B
Approach Vol, veh/h		243			807			528			445	
Approach Delay, s/veh		23.3			17.2			22.8			21.6	
Approach LOS		C			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.0	16.6	7.4	17.5	5.3	25.3	8.0	16.9				
Change Period (Y+Rc), s	4.4	4.9	4.4	4.9	4.4	4.9	4.4	4.9				
Max Green Setting (Gmax), s	30.0	60.0	30.0	40.0	30.0	60.0	30.0	40.0				
Max Q Clear Time (g_c+I), s	19.5	9.0	4.3	6.8	2.5	10.5	4.8	8.8				
Green Ext Time (p_c), s	0.3	1.8	0.1	3.2	0.0	4.3	0.1	3.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				20.3								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary  
74: Federal Blvd & Euclid Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↘		↖↗	↕↕	↖	↖	↕↕	↖	↖	↕↕	↖
Traffic Volume (veh/h)	110	67	51	132	279	130	205	774	148	62	821	216
Future Volume (veh/h)	110	67	51	132	279	130	205	774	148	62	821	216
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	133	81	55	150	317	114	220	832	127	70	933	194
Peak Hour Factor	0.83	0.83	0.83	0.88	0.88	0.88	0.93	0.93	0.93	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	211	171	116	232	614	262	261	1720	744	91	1380	604
Arrive On Green	0.06	0.17	0.17	0.07	0.17	0.17	0.15	0.49	0.49	0.05	0.39	0.39
Sat Flow, veh/h	3428	1018	691	3428	3526	1506	1767	3526	1526	1767	3526	1542
Grp Volume(v), veh/h	133	0	136	150	317	114	220	832	127	70	933	194
Grp Sat Flow(s),veh/h/ln	1714	0	1709	1714	1763	1506	1767	1763	1526	1767	1763	1542
Q Serve(g_s), s	3.1	0.0	5.9	3.5	6.7	5.6	10.0	13.1	3.8	3.2	18.1	7.2
Cycle Q Clear(g_c), s	3.1	0.0	5.9	3.5	6.7	5.6	10.0	13.1	3.8	3.2	18.1	7.2
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	0	287	232	614	262	261	1720	744	91	1380	604
V/C Ratio(X)	0.63	0.00	0.47	0.65	0.52	0.43	0.84	0.48	0.17	0.77	0.68	0.32
Avail Cap(c_a), veh/h	1245	0	828	1245	1708	729	642	2561	1109	642	2561	1121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	0.0	31.1	37.5	31.0	30.5	34.3	14.2	11.8	38.7	20.8	17.5
Incr Delay (d2), s/veh	1.2	0.0	1.4	1.1	0.8	1.3	2.8	0.3	0.1	5.1	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	2.5	1.5	2.8	2.0	4.3	4.8	1.2	1.5	7.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	0.0	32.4	38.7	31.7	31.8	37.1	14.5	12.0	43.8	21.6	17.9
LnGrp LOS	D	A	C	D	C	C	D	B	B	D	C	B
Approach Vol, veh/h		269			581			1179			1197	
Approach Delay, s/veh		35.7			33.5			18.4			22.3	
Approach LOS		D			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.6	45.2	10.0	18.8	16.6	37.2	9.5	19.3				
Change Period (Y+Rc), s	4.4	4.9	4.4	4.9	4.4	4.9	4.4	4.9				
Max Green Setting (Gmax), s	30.0	60.0	30.0	40.0	30.0	60.0	30.0	40.0				
Max Q Clear Time (g_c+1), s	15.2	15.1	5.5	7.9	12.0	20.1	5.1	8.7				
Green Ext Time (p_c), s	0.1	10.3	0.2	0.9	0.3	12.2	0.2	2.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				24.0								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary  
75: Euclid Ave & 54th St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	0	9	842	14	3	0	328	0	0	208	14
Future Volume (veh/h)	25	0	9	842	14	3	0	328	0	0	208	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	0	1856	1856	1856	1856	0	1856	0	0	1856	1856
Adj Flow Rate, veh/h	32	0	12	929	0	0	0	381	0	0	229	10
Peak Hour Factor	0.77	0.77	0.77	0.92	0.92	0.92	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	3	0	3	3	3	3	0	3	0	0	3	3
Cap, veh/h	0	0	0	1339	703	0	0	1077	0	0	1052	46
Arrive On Green	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.31	0.00	0.00	0.31	0.31
Sat Flow, veh/h		0		3534	1856	0	0	3711	0	0	3533	150
Grp Volume(v), veh/h		0.0		929	0	0	0	381	0	0	117	122
Grp Sat Flow(s),veh/h/ln				1767	1856	0	0	1763	0	0	1763	1827
Q Serve(g_s), s				7.4	0.0	0.0	0.0	2.8	0.0	0.0	1.7	1.7
Cycle Q Clear(g_c), s				7.4	0.0	0.0	0.0	2.8	0.0	0.0	1.7	1.7
Prop In Lane				1.00		0.00	0.00		0.00	0.00		0.08
Lane Grp Cap(c), veh/h				1339	703	0	0	1077	0	0	539	559
V/C Ratio(X)				0.69	0.00	0.00	0.00	0.35	0.00	0.00	0.22	0.22
Avail Cap(c_a), veh/h				6315	3315	0	0	4199	0	0	2100	2177
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				8.8	0.0	0.0	0.0	9.1	0.0	0.0	8.7	8.7
Incr Delay (d2), s/veh				0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	0.0	0.0	0.7	0.0	0.0	0.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				9.3	0.0	0.0	0.0	9.2	0.0	0.0	8.8	8.8
LnGrp LOS				A	A	A	A	A	A	A	A	A
Approach Vol, veh/h					929			381			239	
Approach Delay, s/veh					9.3			9.2			8.8	
Approach LOS					A			A			A	
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		15.6				15.6		18.0				
Change Period (Y+Rc), s		* 5.3				5.3		5.3				
Max Green Setting (Gmax), s		* 40				40.0		60.0				
Max Q Clear Time (g_c+I1), s		4.8				3.7		9.4				
Green Ext Time (p_c), s		2.1				1.1		3.1				

Intersection Summary

HCM 6th Ctrl Delay	9.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.  
\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



HCM 6th Signalized Intersection Summary  
76: College Grove Dr & 54th St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔	↔	↔	↔		↔	↔	↔
Traffic Volume (veh/h)	78	51	43	132	109	346	16	639	90	141	721	23
Future Volume (veh/h)	78	51	43	132	109	346	16	639	90	141	721	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	104	68	50	156	162	358	19	752	94	153	784	20
Peak Hour Factor	0.75	0.75	0.75	0.77	0.77	0.77	0.85	0.85	0.85	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	99	65	48	464	487	398	29	1032	129	160	1423	624
Arrive On Green	0.12	0.12	0.12	0.26	0.26	0.26	0.02	0.33	0.33	0.18	0.81	0.81
Sat Flow, veh/h	805	526	387	1767	1856	1517	1767	3135	392	1767	3526	1545
Grp Volume(v), veh/h	222	0	0	156	162	358	19	423	423	153	784	20
Grp Sat Flow(s),veh/h/ln	1717	0	0	1767	1856	1517	1767	1763	1764	1767	1763	1545
Q Serve(g_s), s	13.1	0.0	0.0	7.6	7.5	24.2	1.1	22.4	22.5	9.1	8.2	0.3
Cycle Q Clear(g_c), s	13.1	0.0	0.0	7.6	7.5	24.2	1.1	22.4	22.5	9.1	8.2	0.3
Prop In Lane	0.47		0.23	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	212	0	0	464	487	398	29	580	581	160	1423	624
V/C Ratio(X)	1.05	0.00	0.00	0.34	0.33	0.90	0.66	0.73	0.73	0.96	0.55	0.03
Avail Cap(c_a), veh/h	212	0	0	502	527	431	160	580	581	160	1423	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	46.5	0.0	0.0	31.6	31.6	37.7	51.9	31.4	31.4	43.2	6.9	6.1
Incr Delay (d2), s/veh	74.3	0.0	0.0	0.3	0.3	20.2	9.4	7.8	7.8	55.5	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ft	0.0	0.0	0.0	3.3	3.4	11.1	0.6	10.5	10.5	6.0	2.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	120.8	0.0	0.0	32.0	31.9	57.9	61.3	39.2	39.2	98.7	8.3	6.2
LnGrp LOS	F	A	A	C	C	E	E	D	D	F	A	A
Approach Vol, veh/h		222			676			865			957	
Approach Delay, s/veh		120.8			45.7			39.7			22.7	
Approach LOS		F			D			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.0	40.3		18.0	6.1	48.2		33.7				
Change Period (Y+Rc), s	4.4	5.4		4.9	4.4	5.4		5.9				
Max Green Setting (Gmax), s	9.6	32.6		13.1	9.6	32.6		30.1				
Max Q Clear Time (g_c+fl), s	9.6	24.5		15.1	3.1	10.2		26.2				
Green Ext Time (p_c), s	0.0	4.9		0.0	0.0	8.9		1.0				

Intersection Summary

HCM 6th Ctrl Delay	41.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
77: 54th St & Redwood St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑↑	↕	↕	↑↑	↕
Traffic Volume (veh/h)	18	6	47	163	10	67	43	712	91	44	675	21
Future Volume (veh/h)	18	6	47	163	10	67	43	712	91	44	675	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	20	7	46	177	11	62	47	774	77	48	734	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	107	52	198	257	12	70	60	2228	994	61	2231	995
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.07	1.00	1.00	0.03	0.63	0.63
Sat Flow, veh/h	337	274	1040	1046	65	366	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	73	0	0	250	0	0	47	774	77	48	734	18
Grp Sat Flow(s),veh/h/ln	1651	0	0	1478	0	0	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	0.0	0.0	0.0	13.4	0.0	0.0	2.8	0.0	0.0	2.9	10.2	0.5
Cycle Q Clear(g_c), s	3.9	0.0	0.0	17.3	0.0	0.0	2.8	0.0	0.0	2.9	10.2	0.5
Prop In Lane	0.27		0.63	0.71		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	357	0	0	339	0	0	60	2228	994	61	2231	995
V/C Ratio(X)	0.20	0.00	0.00	0.74	0.00	0.00	0.79	0.35	0.08	0.78	0.33	0.02
Avail Cap(c_a), veh/h	513	0	0	484	0	0	160	2228	994	160	2231	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.57	0.57	0.57	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	0.0	0.0	41.5	0.0	0.0	49.0	0.0	0.0	50.8	9.0	7.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.6	0.0	0.0	4.8	0.2	0.1	7.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	6.5	0.0	0.0	1.2	0.1	0.0	1.4	3.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	0.0	0.0	43.1	0.0	0.0	53.8	0.2	0.1	58.5	9.4	7.3
LnGrp LOS	D	A	A	D	A	A	D	A	A	E	A	A
Approach Vol, veh/h		73		250			898			800		
Approach Delay, s/veh		36.5		43.1			3.0			12.3		
Approach LOS		D		D			A			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	72.9			25.0	8.0	73.0		25.0				
Change Period (Y+Rc), s	4.4	* 5.9		4.9	4.4	5.9		4.9				
Max Green Setting (Gmax), s	2.6	* 51		31.1	9.6	50.1		31.1				
Max Q Clear Time (g_c+14), s	14.9	2.0		5.9	4.8	12.2		19.3				
Green Ext Time (p_c), s	0.0	14.0		0.2	0.0	11.5		0.8				

Intersection Summary

HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
78: Streamview Dr & 54th St

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	10	10	10	20	0	174	0	670	70	104	800	0
Future Volume (veh/h)	10	10	10	20	0	174	0	670	70	104	800	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	11	11	11	22	0	189	0	728	65	113	870	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	67	51	227	109	0	227	2	2035	182	140	2617	0
Arrive On Green	0.14	0.14	0.14	0.14	0.00	0.14	0.00	0.62	0.62	0.08	0.74	0.00
Sat Flow, veh/h	113	354	1572	283	0	1572	1767	3274	292	1767	3618	0
Grp Volume(v), veh/h	22	0	11	22	0	189	0	392	401	113	870	0
Grp Sat Flow(s),veh/h/ln	467	0	1572	283	0	1572	1767	1763	1803	1767	1763	0
Q Serve(g_s), s	0.2	0.0	0.6	1.7	0.0	12.4	0.0	11.5	11.5	6.7	8.9	0.0
Cycle Q Clear(g_c), s	13.1	0.0	0.6	13.8	0.0	12.4	0.0	11.5	11.5	6.7	8.9	0.0
Prop In Lane	0.50		1.00	1.00		1.00	1.00		0.16	1.00		0.00
Lane Grp Cap(c), veh/h	118	0	227	109	0	227	2	1096	1121	140	2617	0
V/C Ratio(X)	0.19	0.00	0.05	0.20	0.00	0.83	0.00	0.36	0.36	0.81	0.33	0.00
Avail Cap(c_a), veh/h	225	0	343	210	0	343	177	1096	1121	177	2617	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.8	0.0	39.1	50.7	0.0	44.1	0.0	9.7	9.8	48.0	4.7	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.1	0.9	0.0	10.3	0.0	0.9	0.9	15.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.3	0.6	0.0	5.5	0.0	4.2	4.3	3.5	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	0.0	39.2	51.6	0.0	54.4	0.0	10.7	10.6	63.6	5.0	0.0
LnGrp LOS	D	A	D	D	A	D	A	B	B	E	A	A
Approach Vol, veh/h		33			211			793			983	
Approach Delay, s/veh		40.1			54.1			10.7			11.7	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.8	71.6		21.7	0.0	84.3		21.7				
Change Period (Y+Rc), s	4.4	6.1		5.9	4.4	* 6.1		5.9				
Max Green Setting (Gmax), s	10.6	55.9		23.1	10.6	* 56		23.1				
Max Q Clear Time (g_c+1/3), s	13.5	13.5		15.1	0.0	10.9		15.8				
Green Ext Time (p_c), s	0.0	6.1		0.0	0.0	8.2		0.4				

Intersection Summary

HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	1.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	90	6	668	130	5	800
Future Vol, veh/h	90	6	668	130	5	800
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	90	90	79	79
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	111	7	742	144	6	1013

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1335	445	0	0	888
Stage 1	816	-	-	-	-
Stage 2	519	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16
Critical Hdwy Stg 1	5.86	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23
Pot Cap-1 Maneuver	144	558	-	-	752
Stage 1	393	-	-	-	-
Stage 2	559	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	141	557	-	-	751
Mov Cap-2 Maneuver	271	-	-	-	-
Stage 1	392	-	-	-	-
Stage 2	549	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.2	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	271	557	751
HCM Lane V/C Ratio	-	-	0.41	0.013	0.008
HCM Control Delay (s)	-	-	27.2	11.6	9.8
HCM Lane LOS	-	-	D	B	A
HCM 95th %tile Q(veh)	-	-	1.9	0	0

HCM 6th Roundabout  
80: Lynn St & Streamview Dr

Existing AM  
AM Peak Hour

Intersection				
Intersection Delay, s/veh	3.2			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	77	50	69	35
Demand Flow Rate, veh/h	79	51	71	35
Vehicles Circulating, veh/h	31	36	86	77
Vehicles Exiting, veh/h	81	121	24	10
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.2	3.1	3.4	3.1
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	79	51	71	35
Cap Entry Lane, veh/h	1337	1330	1264	1276
Entry HV Adj Factor	0.975	0.977	0.970	0.993
Flow Entry, veh/h	77	50	69	35
Cap Entry, veh/h	1303	1299	1226	1267
V/C Ratio	0.059	0.038	0.056	0.027
Control Delay, s/veh	3.2	3.1	3.4	3.1
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	84	0	0	109	73	77
Future Vol, veh/h	84	0	0	109	73	77
Conflicting Peds, #/hr	2	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	77	77	81	81
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	94	0	0	142	90	95

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	286	142	189	0	0
Stage 1	142	-	-	-	-
Stage 2	144	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-
Pot Cap-1 Maneuver	702	903	1379	-	-
Stage 1	883	-	-	-	-
Stage 2	881	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	696	900	1374	-	-
Mov Cap-2 Maneuver	696	-	-	-	-
Stage 1	879	-	-	-	-
Stage 2	877	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1374	-	696	-	-
HCM Lane V/C Ratio	-	-	0.136	-	-
HCM Control Delay (s)	0	-	11	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

HCM 6th Signalized Intersection Summary  
82: College Ave & Streamview Dr

Existing AM  
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	25	149	41	18	41	135	1322	56	28	600	32
Future Volume (veh/h)	86	25	149	41	18	41	135	1322	56	28	600	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	97	28	167	62	27	62	142	1392	59	38	811	43
Peak Hour Factor	0.89	0.89	0.89	0.66	0.66	0.66	0.95	0.95	0.95	0.74	0.74	0.74
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	304	48	288	209	105	241	179	2032	886	50	1776	773
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.10	0.58	0.58	0.03	0.50	0.50
Sat Flow, veh/h	1279	227	1355	1166	493	1133	1767	3526	1537	1767	3526	1535
Grp Volume(v), veh/h	97	0	195	62	0	89	142	1392	59	38	811	43
Grp Sat Flow(s),veh/h/ln	1279	0	1582	1166	0	1627	1767	1763	1537	1767	1763	1535
Q Serve(g_s), s	5.5	0.0	8.8	4.0	0.0	3.6	6.3	22.1	1.4	1.7	11.8	1.1
Cycle Q Clear(g_c), s	9.1	0.0	8.8	12.9	0.0	3.6	6.3	22.1	1.4	1.7	11.8	1.1
Prop In Lane	1.00		0.86	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	0	336	209	0	346	179	2032	886	50	1776	773
V/C Ratio(X)	0.32	0.00	0.58	0.30	0.00	0.26	0.79	0.69	0.07	0.75	0.46	0.06
Avail Cap(c_a), veh/h	674	0	794	546	0	817	666	2657	1159	666	2657	1157
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	28.3	34.0	0.0	26.2	35.1	11.9	7.5	38.5	12.8	10.1
Incr Delay (d2), s/veh	0.6	0.0	1.6	0.8	0.0	0.4	3.0	0.8	0.1	8.2	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	3.4	1.2	0.0	1.4	2.7	7.2	0.4	0.8	4.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.6	0.0	29.8	34.8	0.0	26.6	38.1	12.6	7.5	46.7	13.1	10.2
LnGrp LOS	C	A	C	C	A	C	D	B	A	D	B	B
Approach Vol, veh/h		292			151			1593			892	
Approach Delay, s/veh		30.1			30.0			14.7			14.4	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	51.3		21.9	12.5	45.5		21.9				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	30.1	60.2		40.1	30.1	60.2		40.1				
Max Q Clear Time (g_c+I1), s	3.7	24.1		14.9	8.3	13.8		11.1				
Green Ext Time (p_c), s	0.0	21.9		0.7	0.2	11.9		1.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				16.9								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary  
83: College Grove Dr & College Ave

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	483	179	198	1308	68	126	136	137	108	110	8
Future Volume (veh/h)	11	483	179	198	1308	68	126	136	137	108	110	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	14	596	172	257	1699	69	130	140	110	119	121	9
Peak Hour Factor	0.81	0.81	0.81	0.77	0.77	0.77	0.97	0.97	0.97	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	22	1910	1060	208	2081	921	487	264	311	156	150	11
Arrive On Green	0.01	0.54	0.54	0.06	0.59	0.59	0.14	0.14	0.14	0.09	0.09	0.09
Sat Flow, veh/h	1767	3526	1544	3428	3526	1561	3428	1856	1513	1767	1698	126
Grp Volume(v), veh/h	14	596	172	257	1699	69	130	140	110	119	0	130
Grp Sat Flow(s),veh/h/ln	1767	1763	1544	1714	1763	1561	1714	1856	1513	1767	0	1825
Q Serve(g_s), s	1.0	11.7	5.0	7.6	47.6	2.4	4.2	8.8	7.8	8.2	0.0	8.7
Cycle Q Clear(g_c), s	1.0	11.7	5.0	7.6	47.6	2.4	4.2	8.8	7.8	8.2	0.0	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	22	1910	1060	208	2081	921	487	264	311	156	0	161
V/C Ratio(X)	0.64	0.31	0.16	1.23	0.82	0.07	0.27	0.53	0.35	0.76	0.00	0.81
Avail Cap(c_a), veh/h	107	1910	1060	208	2081	921	990	536	533	213	0	220
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.5	15.8	7.0	58.7	20.2	11.0	47.8	49.8	42.8	55.7	0.0	56.0
Incr Delay (d2), s/veh	11.2	0.4	0.3	139.2	3.7	0.2	0.5	3.1	1.3	6.6	0.0	10.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.6	2.5	7.3	19.0	0.8	1.8	4.3	3.1	4.0	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.6	16.2	7.4	197.9	23.9	11.1	48.4	52.8	44.1	62.3	0.0	66.4
LnGrp LOS	E	B	A	F	C	B	D	D	D	E	A	E
Approach Vol, veh/h		782			2025			380			249	
Approach Delay, s/veh		15.3			45.6			48.8			64.4	
Approach LOS		B			D			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	80.5		22.7	12.0	74.4		15.9				
Change Period (Y+Rc), s	4.4	* 6.7		4.9	4.4	6.7		4.9				
Max Green Setting (Gmax), s	7.6	* 46		36.1	7.6	45.3		15.1				
Max Q Clear Time (g_c+13), s	13.6	49.6		10.8	9.6	13.7		10.7				
Green Ext Time (p_c), s	0.0	0.0		3.1	0.0	5.6		0.3				

Intersection Summary

HCM 6th Ctrl Delay	40.4
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



# HCM 6th Signalized Intersection Summary

## 84: College Ave & SR-94 WB Ramps

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↘		↗		↑↑			↑↑	↗
Traffic Volume (veh/h)	0	0	0	115	0	758	0	1021	0	0	564	317
Future Volume (veh/h)	0	0	0	115	0	758	0	1021	0	0	564	317
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		
Adj Sat Flow, veh/h/ln				1856	0	1856	0	1856	0	0	1856	1856
Adj Flow Rate, veh/h				124	0	815	0	1160	0	0	656	0
Peak Hour Factor				0.93	0.93	0.93	0.88	0.88	0.88	0.86	0.86	0.86
Percent Heavy Veh, %				3	0	3	0	3	0	0	3	3
Cap, veh/h				810	0	720	0	1386	0	0	1386	
Arrive On Green				0.46	0.00	0.46	0.00	0.39	0.00	0.00	0.39	0.00
Sat Flow, veh/h				1767	0	1572	0	3711	0	0	3618	1572
Grp Volume(v), veh/h				124	0	815	0	1160	0	0	656	0
Grp Sat Flow(s),veh/h/ln				1767	0	1572	0	1763	0	0	1763	1572
Q Serve(g_s), s				3.2	0.0	35.4	0.0	23.0	0.0	0.0	10.7	0.0
Cycle Q Clear(g_c), s				3.2	0.0	35.4	0.0	23.0	0.0	0.0	10.7	0.0
Prop In Lane				1.00		1.00	0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				810	0	720	0	1386	0	0	1386	
V/C Ratio(X)				0.15	0.00	1.13	0.00	0.84	0.00	0.00	0.47	
Avail Cap(c_a), veh/h				810	0	720	0	1601	0	0	1601	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				12.2	0.0	20.9	0.0	21.2	0.0	0.0	17.5	0.0
Incr Delay (d2), s/veh				0.1	0.0	75.9	0.0	3.6	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	0.0	27.1	0.0	9.1	0.0	0.0	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				12.3	0.0	96.8	0.0	24.8	0.0	0.0	17.7	0.0
LnGrp LOS				B	A	F	A	C	A	A	B	
Approach Vol, veh/h					939			1160			656	
Approach Delay, s/veh					85.7			24.8			17.7	
Approach LOS					F			C			B	
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		36.3				36.3		41.0				
Change Period (Y+Rc), s		5.9				5.9		5.6				
Max Green Setting (Gmax), s		35.1				35.1		35.4				
Max Q Clear Time (g_c+I1), s		25.0				12.7		37.4				
Green Ext Time (p_c), s		5.4				4.3		0.0				

### Intersection Summary

HCM 6th Ctrl Delay	43.9
HCM 6th LOS	D

### Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
85: College Ave & Federal Blvd

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	332	139	31	17	110	761	17	41	37	395	15	241
Future Volume (veh/h)	332	139	31	17	110	761	17	41	37	395	15	241
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	405	170	34	18	117	0	19	45	34	427	0	203
Peak Hour Factor	0.82	0.82	0.82	0.94	0.94	0.94	0.91	0.91	0.91	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	421	1119	219	30	298		145	153	128	711	0	308
Arrive On Green	0.24	0.38	0.38	0.02	0.16	0.00	0.08	0.08	0.08	0.20	0.00	0.20
Sat Flow, veh/h	1767	2931	572	1767	1856	1572	1767	1856	1556	3534	0	1532
Grp Volume(v), veh/h	405	101	103	18	117	0	19	45	34	427	0	203
Grp Sat Flow(s),veh/h/ln	1767	1763	1740	1767	1856	1572	1767	1856	1556	1767	0	1532
Q Serve(g_s), s	14.3	2.4	2.5	0.6	3.6	0.0	0.6	1.4	1.3	6.9	0.0	7.7
Cycle Q Clear(g_c), s	14.3	2.4	2.5	0.6	3.6	0.0	0.6	1.4	1.3	6.9	0.0	7.7
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	421	673	664	30	298		145	153	128	711	0	308
V/C Ratio(X)	0.96	0.15	0.16	0.59	0.39		0.13	0.29	0.27	0.60	0.00	0.66
Avail Cap(c_a), veh/h	421	699	691	421	736		561	589	494	2244	0	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	12.8	12.8	30.7	23.7	0.0	26.8	27.2	27.1	22.9	0.0	23.2
Incr Delay (d2), s/veh	34.0	0.1	0.1	6.7	0.8	0.0	0.1	0.4	0.4	0.8	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	0.8	0.9	0.3	1.5	0.0	0.3	0.6	0.5	2.7	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.7	12.9	12.9	37.5	24.5	0.0	27.0	27.6	27.5	23.7	0.0	25.6
LnGrp LOS	E	B	B	D	C		C	C	C	C	A	C
Approach Vol, veh/h		609			135			98			630	
Approach Delay, s/veh		42.7			26.2			27.4			24.3	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	16.1		17.7	5.1	30.1		10.2				
Change Period (Y+Rc), s	4.0	6.0		5.0	4.0	6.0		5.0				
Max Green Setting (Gmax), s	15.0	25.0		40.0	15.0	25.0		20.0				
Max Q Clear Time (g_c+11g), s	11.0	5.6		9.7	2.6	4.5		3.4				
Green Ext Time (p_c), s	0.0	0.5		2.3	0.0	1.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- User approved volume balancing among the lanes for turning movement.
- Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
86: College Grove Way & College Grove Dr

Existing AM  
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	65	104	216	32	193	27	110	112	123	266	41
Future Volume (veh/h)	95	65	104	216	32	193	27	110	112	123	266	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	103	71	91	235	35	167	29	120	100	134	289	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	133	175	149	300	351	297	48	810	361	175	1064	474
Arrive On Green	0.08	0.09	0.09	0.17	0.19	0.19	0.03	0.23	0.23	0.10	0.30	0.30
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	103	71	91	235	35	167	29	120	100	134	289	40
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	2.5	1.6	2.4	5.5	0.7	4.2	0.7	1.2	2.3	3.2	2.7	0.8
Cycle Q Clear(g_c), s	2.5	1.6	2.4	5.5	0.7	4.2	0.7	1.2	2.3	3.2	2.7	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	175	149	300	351	297	48	810	361	175	1064	474
V/C Ratio(X)	0.77	0.40	0.61	0.78	0.10	0.56	0.60	0.15	0.28	0.76	0.27	0.08
Avail Cap(c_a), veh/h	1218	1279	1084	1218	1705	1445	1218	4859	2167	1218	4859	2167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	18.6	18.9	17.3	14.6	16.0	20.9	13.4	13.8	19.1	11.6	10.9
Incr Delay (d2), s/veh	3.5	0.6	1.5	1.7	0.0	0.6	4.5	0.1	0.4	2.6	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.6	0.8	2.1	0.3	1.3	0.3	0.4	0.7	1.3	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	19.1	20.5	19.0	14.6	16.6	25.4	13.5	14.2	21.7	11.8	11.0
LnGrp LOS	C	B	C	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		265			437			249			463	
Approach Delay, s/veh		21.2			17.7			15.2			14.6	
Approach LOS		C			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	15.7	11.4	8.1	5.2	18.8	7.3	12.2				
Change Period (Y+Rc), s	4.0	5.7	4.0	4.0	4.0	* 5.7	4.0	4.0				
Max Green Setting (Gmax), s	30.0	60.0	30.0	30.0	30.0	* 60	30.0	40.0				
Max Q Clear Time (g_c+1), s	15.2	4.3	7.5	4.4	2.7	4.7	4.5	6.2				
Green Ext Time (p_c), s	0.2	1.2	0.3	0.4	0.0	3.2	0.1	0.4				

Intersection Summary

HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	5.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	0	121	15	14	2	0	1	0	2	102	19
Future Vol, veh/h	22	0	121	15	14	2	0	1	0	2	102	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	86	86	86	92	92	92	79	79	79
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	25	0	136	17	16	2	0	1	0	3	129	24

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	162	153	146	216	165	1	158	0	0	1	0	0
Stage 1	152	152	-	1	1	-	-	-	-	-	-	-
Stage 2	10	1	-	215	164	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	801	737	898	738	726	1081	1416	-	-	1615	-	-
Stage 1	848	770	-	1019	893	-	-	-	-	-	-	-
Stage 2	1008	893	-	785	761	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	781	732	894	625	721	1081	1409	-	-	1615	-	-
Mov Cap-2 Maneuver	781	732	-	625	721	-	-	-	-	-	-	-
Stage 1	844	765	-	1019	893	-	-	-	-	-	-	-
Stage 2	987	893	-	664	756	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	10.5	0	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1409	-	-	875	685	1615	-	-
HCM Lane V/C Ratio	-	-	-	0.184	0.053	0.002	-	-
HCM Control Delay (s)	0	-	-	10	10.5	7.2	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0	-	-

HCM 6th TWSC  
88: SR-94 On-Ramp & 47th St

Existing AM  
AM Peak Hour

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	3	2	2	0	0	0	0	598	196	99	568	0
Future Vol, veh/h	3	2	2	0	0	0	0	598	196	99	568	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	21	21	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	58	58	58	92	92	92	94	94	94	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	3	3	0	0	0	0	636	209	115	660	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1208	1756	330	-	0	0	866	0	0
Stage 1	890	890	-	-	-	-	-	-	-
Stage 2	318	866	-	-	-	-	-	-	-
Critical Hdwy	6.86	6.56	6.96	-	-	-	4.16	-	-
Critical Hdwy Stg 1	5.86	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	-	-	-	2.23	-	-
Pot Cap-1 Maneuver	174	83	663	0	-	-	767	-	0
Stage 1	359	357	-	0	-	-	-	-	0
Stage 2	707	366	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	133	0	663	-	-	-	767	-	-
Mov Cap-2 Maneuver	133	0	-	-	-	-	-	-	-
Stage 1	359	0	-	-	-	-	-	-	-
Stage 2	539	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.6	0	2.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	196	767	-
HCM Lane V/C Ratio	-	-	0.062	0.15	-
HCM Control Delay (s)	-	-	24.6	10.5	0.9
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0.5	-

HCM 6th TWSC  
2: Adams Ave & W Mountain View Dr

Existing PM  
PM Peak Hour

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	135	742	283	25	19	41
Future Vol, veh/h	135	742	283	25	19	41
Conflicting Peds, #/hr	36	0	0	36	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	84	84	79	79
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	148	815	337	30	24	52

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	403	0	-	0	1499 390
Stage 1	-	-	-	-	388 -
Stage 2	-	-	-	-	1111 -
Critical Hdwy	4.13	-	-	-	6.43 6.23
Critical Hdwy Stg 1	-	-	-	-	5.43 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.227	-	-	-	3.527 3.327
Pot Cap-1 Maneuver	1150	-	-	-	134 656
Stage 1	-	-	-	-	683 -
Stage 2	-	-	-	-	314 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1111	-	-	-	108 632
Mov Cap-2 Maneuver	-	-	-	-	224 -
Stage 1	-	-	-	-	572 -
Stage 2	-	-	-	-	303 -

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	16.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1111	-	-	-	401
HCM Lane V/C Ratio	0.134	-	-	-	0.189
HCM Control Delay (s)	8.7	-	-	-	16.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	0.7

HCM 6th Signalized Intersection Summary  
3: 35th St & Adams Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	441	32	169	287	74	15	11	118	53	5	6
Future Volume (veh/h)	15	441	32	169	287	74	15	11	118	53	5	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	16	479	30	184	312	69	16	12	112	58	5	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	668	943	59	576	803	178	155	21	151	405	15	6
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	994	1728	108	884	1472	325	145	175	1282	1457	130	50
Grp Volume(v), veh/h	16	0	509	184	0	381	140	0	0	65	0	0
Grp Sat Flow(s),veh/h/ln	994	0	1836	884	0	1797	1603	0	0	1638	0	0
Q Serve(g_s), s	0.3	0.0	5.1	4.8	0.0	3.6	1.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	5.1	9.9	0.0	3.6	2.4	0.0	0.0	1.0	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.18	0.11		0.80	0.89		0.03
Lane Grp Cap(c), veh/h	668	0	1002	576	0	981	326	0	0	427	0	0
V/C Ratio(X)	0.02	0.00	0.51	0.32	0.00	0.39	0.43	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	2174	0	3783	1914	0	3702	2299	0	0	2056	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.9	0.0	4.2	7.3	0.0	3.8	12.4	0.0	0.0	11.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.3	0.0	0.3	0.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.5	0.5	0.0	0.3	0.7	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.9	0.0	4.6	7.6	0.0	4.1	12.7	0.0	0.0	11.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		525			565			140			65	
Approach Delay, s/veh		4.6			5.2			12.7			11.8	
Approach LOS		A			A			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.8		8.3		20.8		8.3				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		60.0		40.0		60.0		40.0				
Max Q Clear Time (g_c+I1), s		7.1		3.0		11.9		4.4				
Green Ext Time (p_c), s		3.9		0.3		4.0		0.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				6.1								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary  
4: 40th St & Adams Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	441	171	105	431	0	474	0	401	0	0	2
Future Volume (veh/h)	0	441	171	105	431	0	474	0	401	0	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00	1.00		0.97	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	459	142	108	444	0	504	0	342	0	0	3
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.94	0.94	0.94	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	2	622	962	229	965	0	518	0	652	0	0	6
Arrive On Green	0.00	0.33	0.33	0.13	0.52	0.00	0.29	0.00	0.29	0.00	0.00	0.00
Sat Flow, veh/h	1767	1856	1494	1767	1856	0	1767	0	1527	0	0	1462
Grp Volume(v), veh/h	0	459	142	108	444	0	504	0	342	0	0	3
Grp Sat Flow(s),veh/h/ln	1767	1856	1494	1767	1856	0	1767	0	1527	0	0	1462
Q Serve(g_s), s	0.0	18.6	3.3	4.8	12.9	0.0	24.1	0.0	14.2	0.0	0.0	0.2
Cycle Q Clear(g_c), s	0.0	18.6	3.3	4.8	12.9	0.0	24.1	0.0	14.2	0.0	0.0	0.2
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	2	622	962	229	965	0	518	0	652	0	0	6
V/C Ratio(X)	0.00	0.74	0.15	0.47	0.46	0.00	0.97	0.00	0.52	0.00	0.00	0.51
Avail Cap(c_a), veh/h	104	805	1109	249	965	0	518	0	652	0	0	310
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.1	6.5	34.4	12.9	0.0	29.8	0.0	18.3	0.0	0.0	42.4
Incr Delay (d2), s/veh	0.0	2.6	0.1	0.6	0.1	0.0	32.4	0.0	0.4	0.0	0.0	23.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.2	2.0	2.1	4.9	0.0	14.4	0.0	4.8	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	27.7	6.6	35.0	13.0	0.0	62.2	0.0	18.7	0.0	0.0	65.6
LnGrp LOS	A	C	A	C	B	A	E	A	B	A	A	E
Approach Vol, veh/h		601			552			846				3
Approach Delay, s/veh		22.7			17.3			44.6				65.6
Approach LOS		C			B			D				E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	34.1		5.3	0.0	49.8		30.1				
Change Period (Y+Rc), s	4.7	5.5		5.0	* 4.7	5.5		5.1				
Max Green Setting (Gmax), s	18	37.0		18.1	* 5	18.0		25.0				
Max Q Clear Time (g_c+1/3), s	10	20.6		2.2	0.0	14.9		26.1				
Green Ext Time (p_c), s	0.1	3.0		0.0	0.0	0.6		0.0				

Intersection Summary

HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



HCM 6th Signalized Intersection Summary  
5: I-15 NB Ramps & Adams Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	593	0	0	301	211	234	1	187	0	0	0
Future Volume (veh/h)	250	593	0	0	301	211	234	1	187	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.93	1.00		0.91			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	263	624	0	0	338	237	266	1	167			
Peak Hour Factor	0.95	0.95	0.95	0.89	0.89	0.89	0.88	0.88	0.88			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	324	979	0	0	473	372	458	2	374			
Arrive On Green	0.18	0.53	0.00	0.00	0.25	0.25	0.26	0.26	0.26			
Sat Flow, veh/h	1767	1856	0	0	1856	1459	1761	7	1438			
Grp Volume(v), veh/h	263	624	0	0	338	237	267	0	167			
Grp Sat Flow(s),veh/h/ln	1767	1856	0	0	1856	1459	1767	0	1438			
Q Serve(g_s), s	7.5	12.5	0.0	0.0	8.7	7.6	6.9	0.0	5.1			
Cycle Q Clear(g_c), s	7.5	12.5	0.0	0.0	8.7	7.6	6.9	0.0	5.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	324	979	0	0	473	372	460	0	374			
V/C Ratio(X)	0.81	0.64	0.00	0.00	0.71	0.64	0.58	0.00	0.45			
Avail Cap(c_a), veh/h	844	1063	0	0	1063	836	1013	0	824			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	20.5	8.8	0.0	0.0	17.8	17.4	16.9	0.0	16.2			
Incr Delay (d2), s/veh	1.9	0.8	0.0	0.0	0.8	0.7	0.4	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.9	3.7	0.0	0.0	3.3	2.3	2.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	9.6	0.0	0.0	18.5	18.0	17.3	0.0	16.5			
LnGrp LOS	C	A	A	A	B	B	B	A	B			
Approach Vol, veh/h		887			575			434				
Approach Delay, s/veh		13.4			18.3			17.0				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		33.6		18.7	14.3	19.3						
Change Period (Y+Rc), s		6.0		5.1	* 4.7	6.0						
Max Green Setting (Gmax), s		30.0		30.0	* 25	30.0						
Max Q Clear Time (g_c+l1), s		14.5		8.9	9.5	10.7						
Green Ext Time (p_c), s		2.4		1.4	0.3	1.6						

Intersection Summary

HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.  
\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 6: Marlborough Dr & Adams Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	343	44	13	234	15	76	12	4	93	345	45
Future Volume (veh/h)	90	343	44	13	234	15	76	12	4	93	345	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.90	0.97		0.90	0.98		0.93	0.95		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	99	377	43	17	300	13	89	14	5	103	383	44
Peak Hour Factor	0.91	0.91	0.91	0.78	0.78	0.78	0.85	0.85	0.85	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	392	567	65	314	616	27	463	66	18	202	555	59
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1016	1614	184	930	1756	76	738	159	44	240	1336	143
Grp Volume(v), veh/h	99	0	420	17	0	313	108	0	0	530	0	0
Grp Sat Flow(s),veh/h/ln	1016	0	1798	930	0	1832	940	0	0	1719	0	0
Q Serve(g_s), s	3.5	0.0	8.3	0.7	0.0	5.6	0.0	0.0	0.0	6.1	0.0	0.0
Cycle Q Clear(g_c), s	9.2	0.0	8.3	9.0	0.0	5.6	3.0	0.0	0.0	10.7	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.04	0.82		0.05	0.19		0.08
Lane Grp Cap(c), veh/h	392	0	631	314	0	643	547	0	0	817	0	0
V/C Ratio(X)	0.25	0.00	0.67	0.05	0.00	0.49	0.20	0.00	0.00	0.65	0.00	0.00
Avail Cap(c_a), veh/h	1245	0	2141	1095	0	2181	1093	0	0	1720	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.3	0.0	11.5	15.3	0.0	10.7	7.9	0.0	0.0	10.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.5	0.0	0.0	0.2	0.1	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	2.5	0.1	0.0	1.7	0.5	0.0	0.0	2.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.4	0.0	12.0	15.4	0.0	10.9	8.0	0.0	0.0	10.6	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	A	A	A	B	A	A
Approach Vol, veh/h		519			330			108			530	
Approach Delay, s/veh		12.4			11.1			8.0			10.6	
Approach LOS		B			B			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.6		22.4		19.6		22.4				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		50.0		40.0		50.0		40.0				
Max Q Clear Time (g_c+I1), s		11.2		12.7		11.0		5.0				
Green Ext Time (p_c), s		2.0		2.3		1.3		0.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					11.2							
HCM 6th LOS					B							

Intersection

Intersection Delay, s/veh 10.1

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	208	35	27	1	40	14	17	8	4	7	11	201
Future Vol, veh/h	208	35	27	1	40	14	17	8	4	7	11	201
Peak Hour Factor	0.84	0.84	0.84	0.86	0.86	0.86	0.81	0.81	0.81	0.91	0.91	0.91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	248	42	32	1	47	16	21	10	5	8	12	221
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.3	8.4	8.6	9.3
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	59%	77%	2%	3%
Vol Thru, %	28%	13%	73%	5%
Vol Right, %	14%	10%	25%	92%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	270	55	219
LT Vol	17	208	1	7
Through Vol	8	35	40	11
RT Vol	4	27	14	201
Lane Flow Rate	36	321	64	241
Geometry Grp	1	1	1	1
Degree of Util (X)	0.052	0.424	0.086	0.294
Departure Headway (Hd)	5.219	4.748	4.826	4.392
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	682	755	737	816
Service Time	3.281	2.799	2.892	2.433
HCM Lane V/C Ratio	0.053	0.425	0.087	0.295
HCM Control Delay	8.6	11.3	8.4	9.3
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.2	2.1	0.3	1.2

**Intersection**

Intersection Delay, s/veh 18.7  
Intersection LOS F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑			↑
Traffic Vol, veh/h	731	113	90	0	0	250
Future Vol, veh/h	731	113	90	0	0	250
Peak Hour Factor	0.95	0.95	0.78	0.78	0.87	0.87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	769	119	115	0	0	287
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left NB			WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right SB		WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	165.8	12	15.9
HCM LOS	F	B	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	0%
Vol Thru, %	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	731	113	250
LT Vol	0	731	0	0
Through Vol	90	0	0	250
RT Vol	0	0	113	0
Lane Flow Rate	115	769	119	287
Geometry Grp	2	5	5	2
Degree of Util (X)	0.204	1.355	0.169	0.483
Departure Headway (Hd)	7.161	6.338	5.125	6.764
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	504	577	704	537
Service Time	5.161	4.038	2.825	4.764
HCM Lane V/C Ratio	0.228	1.333	0.169	0.534
HCM Control Delay	12	190.1	8.9	15.9
HCM Lane LOS	B	F	A	C
HCM 95th-tile Q	0.8	33.8	0.6	2.6

Intersection												
Intersection Delay, s/veh	9.4											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	12	38	29	12	29	41	155	30	29	139	38
Future Vol, veh/h	40	12	38	29	12	29	41	155	30	29	139	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	43	13	41	32	13	32	45	168	33	32	151	41
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	8.6	9.7	9.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	44%	41%	14%
Vol Thru, %	69%	13%	17%	67%
Vol Right, %	13%	42%	41%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	226	90	70	206
LT Vol	41	40	29	29
Through Vol	155	12	12	139
RT Vol	30	38	29	38
Lane Flow Rate	246	98	76	224
Geometry Grp	1	1	1	1
Degree of Util (X)	0.314	0.135	0.105	0.285
Departure Headway (Hd)	4.596	4.961	4.991	4.582
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	779	718	713	781
Service Time	2.639	3.021	3.055	2.627
HCM Lane V/C Ratio	0.316	0.136	0.107	0.287
HCM Control Delay	9.7	8.8	8.6	9.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.3	0.5	0.4	1.2

**Intersection**

Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	37	17	36	41	17	43	38	145	43	40	129	36
Future Vol, veh/h	37	17	36	41	17	43	38	145	43	40	129	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	40	18	39	45	18	47	41	158	47	43	140	39
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.9	9	9.9	9.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	41%	41%	20%
Vol Thru, %	64%	19%	17%	63%
Vol Right, %	19%	40%	43%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	226	90	101	205
LT Vol	38	37	41	40
Through Vol	145	17	17	129
RT Vol	43	36	43	36
Lane Flow Rate	246	98	110	223
Geometry Grp	1	1	1	1
Degree of Util (X)	0.317	0.137	0.152	0.29
Departure Headway (Hd)	4.651	5.029	4.995	4.69
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	769	707	712	762
Service Time	2.706	3.098	3.064	2.747
HCM Lane V/C Ratio	0.32	0.139	0.154	0.293
HCM Control Delay	9.9	8.9	9	9.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.4	0.5	0.5	1.2

Intersection												
Intersection Delay, s/veh 26.5												
Intersection LOS D												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↗			↖	↗
Traffic Vol, veh/h	130	294	374	11	158	5	231	32	24	4	29	105
Future Vol, veh/h	130	294	374	11	158	5	231	32	24	4	29	105
Peak Hour Factor	0.94	0.94	0.94	0.75	0.75	0.75	0.85	0.85	0.85	0.99	0.99	0.99
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	138	313	398	15	211	7	272	38	28	4	29	106
Number of Lanes	0	1	1	0	1	1	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	33.2	17.7	21.5	12.4
HCM LOS	D	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	31%	0%	7%	0%	12%	0%
Vol Thru, %	0%	57%	69%	0%	93%	0%	88%	0%
Vol Right, %	0%	43%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	231	56	424	374	169	5	33	105
LT Vol	231	0	130	0	11	0	4	0
Through Vol	0	32	294	0	158	0	29	0
RT Vol	0	24	0	374	0	5	0	105
Lane Flow Rate	272	66	451	398	225	7	33	106
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.625	0.136	0.888	0.687	0.49	0.013	0.078	0.225
Departure Headway (Hd)	8.279	7.458	7.084	6.213	7.821	7.067	8.431	7.644
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	438	481	514	581	462	506	425	469
Service Time	6.023	5.201	4.824	3.952	5.57	4.816	6.184	5.397
HCM Lane V/C Ratio	0.621	0.137	0.877	0.685	0.487	0.014	0.078	0.226
HCM Control Delay	23.9	11.4	43.6	21.5	17.9	9.9	11.9	12.6
HCM Lane LOS	C	B	E	C	C	A	B	B
HCM 95th-tile Q	4.2	0.5	9.9	5.3	2.6	0	0.3	0.9

**Intersection**

Intersection Delay, s/veh 9.8

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	222	50	22	129	12	40	13	85	15	3	5
Future Vol, veh/h	25	222	50	22	129	12	40	13	85	15	3	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	241	54	24	140	13	43	14	92	16	3	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.6	9.2	9.1	8.6
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	29%	8%	13%	65%
Vol Thru, %	9%	75%	79%	13%
Vol Right, %	62%	17%	7%	22%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	138	297	163	23
LT Vol	40	25	22	15
Through Vol	13	222	129	3
RT Vol	85	50	12	5
Lane Flow Rate	150	323	177	25
Geometry Grp	1	1	1	1
Degree of Util (X)	0.2	0.404	0.233	0.037
Departure Headway (Hd)	4.808	4.504	4.726	5.304
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	743	797	757	670
Service Time	2.864	2.546	2.775	3.375
HCM Lane V/C Ratio	0.202	0.405	0.234	0.037
HCM Control Delay	9.1	10.6	9.2	8.6
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.7	2	0.9	0.1



**Intersection**

Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	131	10	19	212	27	77	8	46	1	1	7
Future Vol, veh/h	15	131	10	19	212	27	77	8	46	1	1	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	142	11	21	230	29	84	9	50	1	1	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9	9.9	9.1	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	59%	10%	7%	11%
Vol Thru, %	6%	84%	82%	11%
Vol Right, %	35%	6%	10%	78%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	131	156	258	9
LT Vol	77	15	19	1
Through Vol	8	131	212	1
RT Vol	46	10	27	7
Lane Flow Rate	142	170	280	10
Geometry Grp	1	1	1	1
Degree of Util (X)	0.193	0.218	0.349	0.013
Departure Headway (Hd)	4.887	4.621	4.475	4.726
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	732	775	802	753
Service Time	2.931	2.657	2.507	2.783
HCM Lane V/C Ratio	0.194	0.219	0.349	0.013
HCM Control Delay	9.1	9	9.9	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.8	1.6	0

HCM 6th Signalized Intersection Summary  
14: 35th St & Meade Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	47	28	44	49	29	52	47	126	53	49	113	44
Future Volume (veh/h)	47	28	44	49	29	52	47	126	53	49	113	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	51	30	43	53	32	52	51	137	53	53	123	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	362	159	145	353	151	159	277	273	95	292	273	85
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	429	600	546	411	569	599	247	1068	371	285	1070	331
Grp Volume(v), veh/h	124	0	0	137	0	0	241	0	0	219	0	0
Grp Sat Flow(s),veh/h/ln	1575	0	0	1579	0	0	1686	0	0	1685	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.3	0.0	0.0	2.4	0.0	0.0	2.1	0.0	0.0
Prop In Lane	0.41		0.35	0.39		0.38	0.21		0.22	0.24		0.20
Lane Grp Cap(c), veh/h	666	0	0	662	0	0	644	0	0	650	0	0
V/C Ratio(X)	0.19	0.00	0.00	0.21	0.00	0.00	0.37	0.00	0.00	0.34	0.00	0.00
Avail Cap(c_a), veh/h	4678	0	0	4707	0	0	3387	0	0	3345	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.9	0.0	0.0	6.0	0.0	0.0	6.5	0.0	0.0	6.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.5	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.1	0.0	0.0	6.1	0.0	0.0	6.8	0.0	0.0	6.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		124			137			241			219	
Approach Delay, s/veh		6.1			6.1			6.8			6.7	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		10.3		10.1		10.3		10.1				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		60.0		40.0		60.0		40.0				
Max Q Clear Time (g_c+I1), s		3.1		4.1		3.3		4.4				
Green Ext Time (p_c), s		0.8		1.4		0.9		1.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				6.5								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary  
 15: I-805 SB Ramps & El Cajon Blvd

Existing PM  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑↑	↑↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	772	701	208	875	0	0	0	0	359	18	689
Future Volume (veh/h)	0	772	701	208	875	0	0	0	0	359	18	689
Initial Q (Qb), veh	0	5	5	15	0	0				30	30	30
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	821	597	221	931	0				388	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	2244	464	333	3542	0				567	0	
Arrive On Green	0.00	0.67	0.67	0.16	1.00	0.00				0.13	0.00	0.00
Sat Flow, veh/h	0	3618	1564	3428	5233	0				3534	0	1572
Grp Volume(v), veh/h	0	821	597	221	931	0				388	0	0
Grp Sat Flow(s),veh/h/ln	0	1763	1564	1714	1689	0				1767	0	1572
Q Serve(g_s), s	0.0	13.1	26.6	8.0	0.0	0.0				14.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.1	26.6	8.0	0.0	0.0				14.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2244	464	333	3542	0				567	0	
V/C Ratio(X)	0.00	0.37	1.29	0.66	0.26	0.00				0.68	0.00	
Avail Cap(c_a), veh/h	0	2357	1046	659	3985	0				1373	0	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	0.89	0.89	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.4	45.6	51.4	0.0	0.0				53.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	144.7	2.0	0.2	0.0				0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.1	38.8	43.6	0.0	0.0				63.9	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0	0.0	5.9	38.3	6.1	0.1	0.0				13.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.0	229.1	97.1	0.2	0.0				117.9	0.0	0.0
LnGrp LOS		A	B	F	F	A	A			F	A	
Approach Vol, veh/h		1418			1152					388		
Approach Delay, s/veh		104.0			18.8					117.9		
Approach LOS		F			B					F		
Timer - Assigned Phs	1	2		6			8					
Phs Duration (G+Y+Rc), \$5.4		92.4		107.8			22.2					
Change Period (Y+Rc), \$ 4.7		5.5		5.5			5.5					
Max Green Setting (Gmax)\$25		38.8		68.5			50.5					
Max Q Clear Time (g_c+110, \$		28.6		2.0			16.0					
Green Ext Time (p_c), s	0.6	8.4		16.0			0.8					

Intersection Summary

HCM 6th Ctrl Delay	72.6
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 16: I-805 NB Ramps & El Cajon Blvd

Existing PM  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑↑			↑↑↑		↖	↗	↖			
Traffic Volume (veh/h)	364	791	0	0	596	242	519	1	239	0	0	0
Future Volume (veh/h)	364	791	0	0	596	242	519	1	239	0	0	0
Initial Q (Qb), veh	10	0	0	0	0	0	60	0	15			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	383	833	0	0	627	229	547	0	199			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	478	3550	0	0	1881	673	839	0	322			
Arrive On Green	0.26	1.00	0.00	0.00	0.57	0.57	0.18	0.00	0.18			
Sat Flow, veh/h	3428	5233	0	0	3842	1314	3534	0	1550			
Grp Volume(v), veh/h	383	833	0	0	575	281	547	0	199			
Grp Sat Flow(s),veh/h/ln	1714	1689	0	0	1689	1612	1767	0	1550			
Q Serve(g_s), s	13.8	0.0	0.0	0.0	11.6	11.9	19.6	0.0	15.8			
Cycle Q Clear(g_c), s	13.8	0.0	0.0	0.0	11.6	11.9	19.6	0.0	15.8			
Prop In Lane	1.00		0.00	0.00		0.82	1.00		1.00			
Lane Grp Cap(c), veh/h	478	3550	0	0	1729	825	839	0	322			
V/C Ratio(X)	0.80	0.23	0.00	0.00	0.33	0.34	0.65	0.00	0.62			
Avail Cap(c_a), veh/h	712	3738	0	0	1910	912	1237	0	542			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	0.82	0.82	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	45.9	0.0	0.0	0.0	19.5	19.6	48.6	0.0	49.0			
Incr Delay (d2), s/veh	3.3	0.1	0.0	0.0	0.5	1.1	0.3	0.0	0.7			
Initial Q Delay(d3),s/veh	15.9	0.0	0.0	0.0	0.0	0.0	105.6	0.0	41.0			
%ile BackOfQ(50%),veh/ln	6.9	0.0	0.0	0.0	5.2	5.2	24.9	0.0	20.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.1	0.1	0.0	0.0	20.0	20.7	154.5	0.0	90.7			
LnGrp LOS	E	A	A	A	C	C	F	A	F			
Approach Vol, veh/h		1216			856			746				
Approach Delay, s/veh		20.6			20.2			137.5				
Approach LOS		C			C			F				
Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		101.4		28.6	22.4	79.0						
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5						
Max Green Setting (Gmax), s		73.5		45.5	27.0	41.0						
Max Q Clear Time (g_c+I1), s		2.0		21.6	15.8	13.9						
Green Ext Time (p_c), s		11.2		1.5	1.0	11.9						
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					51.4							
HCM 6th LOS					D							
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												

HCM 6th Signalized Intersection Summary  
 17: 35th St & El Cajon Blvd

Existing PM  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	842	86	90	616	44	65	96	51	44	107	55
Future Volume (veh/h)	85	842	86	90	616	44	65	96	51	44	107	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	0.98		0.94	0.98		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	92	915	71	94	642	36	70	103	50	49	119	55
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.93	0.93	0.93	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	115	2159	918	117	2164	927	111	151	65	86	189	79
Arrive On Green	0.06	0.61	0.61	0.07	0.61	0.61	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1767	3526	1499	1767	3526	1511	352	711	307	248	891	373
Grp Volume(v), veh/h	92	915	71	94	642	36	223	0	0	223	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1499	1767	1763	1511	1370	0	0	1511	0	0
Q Serve(g_s), s	6.7	17.7	2.5	6.8	11.2	1.2	2.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.7	17.7	2.5	6.8	11.2	1.2	20.7	0.0	0.0	17.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.31		0.22	0.22		0.25
Lane Grp Cap(c), veh/h	115	2159	918	117	2164	927	327	0	0	354	0	0
V/C Ratio(X)	0.80	0.42	0.08	0.80	0.30	0.04	0.68	0.00	0.00	0.63	0.00	0.00
Avail Cap(c_a), veh/h	294	2159	918	294	2164	927	356	0	0	385	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.00	0.00	0.93	0.00	0.00
Uniform Delay (d), s/veh	60.0	13.2	10.2	59.9	11.9	9.9	48.1	0.0	0.0	46.9	0.0	0.0
Incr Delay (d2), s/veh	4.8	0.6	0.2	4.8	0.4	0.1	3.6	0.0	0.0	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.9	0.9	3.2	4.4	0.4	7.3	0.0	0.0	6.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.8	13.8	10.4	64.7	12.2	10.0	51.7	0.0	0.0	48.7	0.0	0.0
LnGrp LOS	E	B	B	E	B	B	D	A	A	D	A	A
Approach Vol, veh/h		1078			772			223			223	
Approach Delay, s/veh		17.9			18.5			51.7			48.7	
Approach LOS		B			B			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	3.0	84.5		32.5	12.8	84.7		32.5				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	1.6	64.1		30.1	21.6	64.1		30.1				
Max Q Clear Time (g_c+1/3), s	19.8	19.7		19.8	8.7	13.2		22.7				
Green Ext Time (p_c), s	0.1	4.9		0.7	0.1	3.1		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											24.4	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary  
 18: El Cajon Blvd & I-15 SB Ramps

Existing PM  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗	↘	↑↑↑			↑		↗↘	↗	↘
Traffic Volume (veh/h)	0	618	162	240	430	0	0	0	0	376	239	357
Future Volume (veh/h)	0	618	162	240	430	0	0	0	0	376	239	357
Initial Q (Qb), veh	0	20	5	10	0	0	0	0	0	20	0	20
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0	0	1856	0	1856	1856	1856
Adj Flow Rate, veh/h	0	657	172	242	434	0	0	0	0	432	312	299
Peak Hour Factor	0.94	0.94	0.94	0.99	0.99	0.99	0.92	0.92	0.92	0.87	0.87	0.87
Percent Heavy Veh, %	0	3	3	3	3	0	0	3	0	3	3	3
Cap, veh/h	0	2851	865	295	3799	0	0	1	0	568	298	246
Arrive On Green	0.00	0.56	0.56	0.30	1.00	0.00	0.00	0.00	0.00	0.16	0.16	0.16
Sat Flow, veh/h	0	5233	1536	1767	5233	0	0-74222	0	3534	1856	1531	
Grp Volume(v), veh/h	0	657	172	242	434	0	0	0	0	432	312	299
Grp Sat Flow(s),veh/h/ln	0	1689	1536	1767	1689	0	0	1856	0	1767	1856	1531
Q Serve(g_s), s	0.0	8.4	7.1	17.2	0.0	0.0	0.0	0.0	0.0	15.2	20.9	20.9
Cycle Q Clear(g_c), s	0.0	8.4	7.1	17.2	0.0	0.0	0.0	0.0	0.0	15.2	20.9	20.9
Prop In Lane	0.00		1.00	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2851	865	295	3799	0	0	1	0	568	298	246
V/C Ratio(X)	0.00	0.23	0.20	0.82	0.11	0.00	0.00	0.00	0.00	0.76	1.05	1.21
Avail Cap(c_a), veh/h	0	2861	867	344	3799	0	0	500	0	568	298	246
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	0.98	0.98	0.00	0.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	14.8	14.4	42.8	0.0	0.0	0.0	0.0	0.0	53.6	54.5	54.5
Incr Delay (d2), s/veh	0.0	0.2	0.5	10.9	0.1	0.0	0.0	0.0	0.0	5.4	64.6	127.8
Initial Q Delay(d3),s/veh	0.0	0.5	0.3	46.0	0.0	0.0	0.0	0.0	0.0	37.2	0.0	292.4
%ile BackOfQ(50%),veh/lr0.0	0.0	4.3	3.3	12.0	0.0	0.0	0.0	0.0	0.0	11.7	15.2	36.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.5	15.2	99.7	0.1	0.0	0.0	0.0	0.0	96.1	119.2	474.8
LnGrp LOS	A	B	B	F	A	A	A	A	A	F	F	F
Approach Vol, veh/h		829			676			0			1043	
Approach Delay, s/veh		15.4			35.7			0.0			211.6	
Approach LOS		B			D						F	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	24.1	78.9		27.0		103.0		0.0				
Change Period (Y+Rc), s	4.7	5.5		6.1		5.5		4.0				
Max Green Setting (Gmax), s	25	26.5		20.9		58.5		35.0				
Max Q Clear Time (g_c+119), s	119	10.4		22.9		2.0		0.0				
Green Ext Time (p_c), s	0.2	3.0		0.0		2.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	101.1
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 19: I-15 NB Ramps & El Cajon Blvd

Existing PM  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑			↑↑↑	↗	↘		↗		↑	
Traffic Volume (veh/h)	166	829	0	0	516	174	128	0	478	0	0	0
Future Volume (veh/h)	166	829	0	0	516	174	128	0	478	0	0	0
Initial Q (Qb), veh	5	5	0	0	5	5	10	0	10	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	0	1856	0	1856	0
Adj Flow Rate, veh/h	184	921	0	0	633	153	135	0	398	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3	0	3	0
Cap, veh/h	230	4373	0	0	5225	1089	220	0	0	0	1	0
Arrive On Green	0.04	0.29	0.00	0.00	0.70	0.70	0.05	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1767	5233	0	0	7422	1551	3428	135		0-7422		0
Grp Volume(v), veh/h	184	921	0	0	633	153	135	99.2		0	0	0
Grp Sat Flow(s),veh/h/ln	1767	1689	0	0	1856	1551	1714	F		0	1856	0
Q Serve(g_s), s	13.4	18.0	0.0	0.0	3.6	4.2	5.0			0.0	0.0	0.0
Cycle Q Clear(g_c), s	13.4	18.0	0.0	0.0	3.6	4.2	5.0			0.0	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	230	4373	0	0	5225	1089	220			0	1	0
V/C Ratio(X)	0.80	0.21	0.00	0.00	0.12	0.14	0.61			0.00	0.00	0.00
Avail Cap(c_a), veh/h	272	4375	0	0	5228	1093	419			0	500	0
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(l)	0.86	0.86	0.00	0.00	1.00	1.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	61.3	13.0	0.0	0.0	6.3	6.8	60.0			0.0	0.0	0.0
Incr Delay (d2), s/veh	9.9	0.1	0.0	0.0	0.0	0.3	1.0			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	17.1	0.0	0.0	0.0	0.0	0.2	38.2			0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	8.8	8.4	0.0	0.0	1.5	2.1	4.1			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.2	13.1	0.0	0.0	6.4	7.2	99.2			0.0	0.0	0.0
LnGrp LOS	F	B	A	A	A	A	F			A	A	A
Approach Vol, veh/h		1105			786							0
Approach Delay, s/veh		25.6			6.5							0.0
Approach LOS		C			A							
Timer - Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		117.8	12.2	0.0	20.7	97.1						
Change Period (Y+Rc), s		5.5	5.1	4.0	* 4.7	5.5						
Max Green Setting (Gmax), s		64.5	15.9	35.0	* 20	39.8						
Max Q Clear Time (g_c+l1), s		20.0	7.0	0.0	15.4	6.2						
Green Ext Time (p_c), s		4.8	0.1	0.0	0.1	3.3						

Intersection Summary

HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
20: 43rd St & El Cajon Blvd

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑			↑↓			↑↓	
Traffic Volume (veh/h)	0	1021	112	117	540	0	0	0	0	279	475	51
Future Volume (veh/h)	0	1021	112	117	540	0	0	0	0	279	475	51
Initial Q (Qb), veh	0	0	0	15	0	0	0	0	0	0	40	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	1053	89	124	574	0	0	0	0	297	505	49
Peak Hour Factor	0.97	0.97	0.97	0.94	0.94	0.94	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %	0	3	3	3	3	0	3	3	3	3	3	3
Cap, veh/h	0	1555	674	201	2130	0	0	595	0	276	782	34
Arrive On Green	0.00	0.50	0.50	0.17	1.00	0.00	0.00	0.00	0.00	0.31	0.31	0.31
Sat Flow, veh/h	0	3618	1532	1767	3618	0	0	1856	0	1062	1904	188
Grp Volume(v), veh/h	0	1053	89	124	574	0	0	0	0	424	0	427
Grp Sat Flow(s),veh/h/ln	0	1763	1532	1767	1763	0	0	1856	0	1516	0	1638
Q Serve(g_s), s	0.0	27.7	4.0	8.8	0.0	0.0	0.0	0.0	0.0	34.9	0.0	31.7
Cycle Q Clear(g_c), s	0.0	27.7	4.0	8.8	0.0	0.0	0.0	0.0	0.0	34.9	0.0	31.7
Prop In Lane	0.00		1.00	1.00		0.00	0.00		0.00	0.70		0.11
Lane Grp Cap(c), veh/h	0	1555	674	201	2130	0	0	595	0	560	0	541
V/C Ratio(X)	0.00	0.68	0.13	0.62	0.27	0.00	0.00	0.00	0.00	0.76	0.00	0.79
Avail Cap(c_a), veh/h	0	1761	765	348	2174	0	0	629	0	561	0	556
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	0.95	0.95	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	29.4	21.9	49.6	0.0	0.0	0.0	0.0	0.0	43.5	0.0	42.6
Incr Delay (d2), s/veh	0.0	2.4	0.4	1.1	0.3	0.0	0.0	0.0	0.0	5.9	0.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	104.5	0.0	0.0	0.0	0.0	0.0	38.0	0.0	46.8
%ile BackOfQ(50%),veh/lr0.0		13.3	1.7	10.9	0.1	0.0	0.0	0.0	0.0	22.8	0.0	23.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	31.8	22.3	155.2	0.3	0.0	0.0	0.0	0.0	87.4	0.0	96.8
LnGrp LOS		A	C	C	F	A	A	A	A	A	F	A
Approach Vol, veh/h		1142			698			0			851	
Approach Delay, s/veh		31.1			27.8			0.0			92.1	
Approach LOS		C			C						F	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	5.2	69.8		44.9		85.1		44.9				
Change Period (Y+Rc), s	4.4	4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s	25.6	46.1		44.1		76.1		44.1				
Max Q Clear Time (g_c+110), s	110.8	29.7		36.9		2.0		0.0				
Green Ext Time (p_c), s	0.1	2.8		3.1		1.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay		49.5										
HCM 6th LOS			D									



HCM 6th Signalized Intersection Summary  
21: Fairmount Ave & El Cajon Blvd

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	1113	90	0	578	163	81	388	129	0	0	0
Future Volume (veh/h)	83	1113	90	0	578	163	81	388	129	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.95	0.96		0.95	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	86	1159	73	0	657	145	88	422	124	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.88	0.88	0.88	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	109	2401	988	0	2064	873	135	532	156	0	452	0
Arrive On Green	0.02	0.22	0.22	0.00	0.59	0.59	0.24	0.24	0.24	0.00	0.00	0.00
Sat Flow, veh/h	1767	3526	1451	0	3618	1492	411	2183	639	0	1856	0
Grp Volume(v), veh/h	86	1159	73	0	657	145	337	0	297	0	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1451	0	1763	1492	1702	0	1530	0	1856	0
Q Serve(g_s), s	6.3	37.2	5.2	0.0	12.3	5.8	22.0	0.0	23.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.3	37.2	5.2	0.0	12.3	5.8	24.2	0.0	23.7	0.0	0.0	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.26		0.42	0.00		0.00
Lane Grp Cap(c), veh/h	109	2401	988	0	2064	873	450	0	373	0	452	0
V/C Ratio(X)	0.79	0.48	0.07	0.00	0.32	0.17	0.75	0.00	0.80	0.00	0.00	0.00
Avail Cap(c_a), veh/h	348	2401	988	0	2064	873	507	0	425	0	515	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	0.00	1.00	1.00	0.85	0.00	0.85	0.00	0.00	0.00
Uniform Delay (d), s/veh	62.8	30.5	18.1	0.0	13.7	12.4	46.3	0.0	46.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	3.3	0.5	0.1	0.0	0.4	0.4	3.8	0.0	6.7	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	17.7	1.7	0.0	4.9	2.0	10.7	0.0	9.7	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.2	31.0	18.2	0.0	14.1	12.8	50.0	0.0	52.8	0.0	0.0	0.0
LnGrp LOS	E	C	B	A	B	B	D	A	D	A	A	A
Approach Vol, veh/h		1318			802			634				0
Approach Delay, s/veh		32.6			13.9			51.3				0.0
Approach LOS		C			B			D				
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		93.4		36.6	12.4	81.0		36.6				
Change Period (Y+Rc), s		4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s		84.1		36.1	25.6	54.1		36.1				
Max Q Clear Time (g_c+I1), s		39.2		0.0	8.3	14.3		26.2				
Green Ext Time (p_c), s		6.8		0.0	0.1	3.4		2.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay												31.4
HCM 6th LOS												C

HCM 6th Signalized Intersection Summary  
 22: El Cajon Blvd & Euclid Ave

Existing PM  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	887	135	70	552	63	70	164	47	107	211	34
Future Volume (veh/h)	54	887	135	70	552	63	70	164	47	107	211	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	15	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	0.97		0.93	0.97		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	56	914	124	73	575	56	80	189	48	109	215	30
Peak Hour Factor	0.97	0.97	0.97	0.96	0.96	0.96	0.87	0.87	0.87	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	72	1084	147	435	1809	176	232	306	41	203	327	46
Arrive On Green	0.04	0.35	0.35	0.25	0.57	0.57	0.05	0.19	0.19	0.06	0.20	0.20
Sat Flow, veh/h	1767	3091	419	1767	3230	314	1767	1404	356	1767	1578	220
Grp Volume(v), veh/h	56	521	517	73	313	318	80	0	237	109	0	245
Grp Sat Flow(s),veh/h/ln	1767	1763	1748	1767	1763	1781	1767	0	1760	1767	0	1798
Q Serve(g_s), s	4.1	35.4	35.4	4.2	12.2	12.3	4.7	0.0	16.5	6.4	0.0	16.4
Cycle Q Clear(g_c), s	4.1	35.4	35.4	4.2	12.2	12.3	4.7	0.0	16.5	6.4	0.0	16.4
Prop In Lane	1.00		0.24	1.00		0.18	1.00		0.20	1.00		0.12
Lane Grp Cap(c), veh/h	72	618	613	435	987	998	232	0	347	203	0	373
V/C Ratio(X)	0.78	0.84	0.84	0.17	0.32	0.32	0.35	0.00	0.68	0.54	0.00	0.66
Avail Cap(c_a), veh/h	144	869	862	446	998	1009	282	0	353	265	0	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.8	38.9	38.9	38.5	15.3	15.3	40.0	0.0	50.7	40.2	0.0	47.3
Incr Delay (d2), s/veh	6.6	13.2	13.3	0.1	0.8	0.8	0.3	0.0	5.3	0.8	0.0	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	17.3	17.2	1.8	5.1	5.2	2.1	0.0	14.1	2.9	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.4	52.1	52.2	38.6	16.1	16.2	40.4	0.0	98.5	41.0	0.0	51.7
LnGrp LOS	E	D	D	D	B	B	D	A	F	D	A	D
Approach Vol, veh/h		1094			704			317			354	
Approach Delay, s/veh		53.0			18.5			83.8			48.4	
Approach LOS		D			B			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.7	50.5	10.8	31.0	9.7	78.5	12.7	29.1				
Change Period (Y+Rc), s	4.9	* 4.9	4.4	4.9	4.4	4.9	4.4	4.9				
Max Green Setting (Gmax), s	10.6	* 64	10.6	26.1	10.6	64.1	10.6	26.1				
Max Q Clear Time (g_c+1/2), s	10.6	37.4	6.7	18.4	6.1	14.3	8.4	18.5				
Green Ext Time (p_c), s	0.0	8.2	0.0	0.8	0.0	4.0	0.0	0.9				

Intersection Summary

HCM 6th Ctrl Delay	46.4
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 23: Winona Ave & El Cajon Blvd

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	1000	30	39	550	40	60	130	60	80	180	80
Future Volume (veh/h)	39	1000	30	39	550	40	60	130	60	80	180	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	42	1087	28	42	598	38	65	141	54	87	196	76
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	110	2289	59	54	2072	131	85	156	54	88	149	54
Arrive On Green	0.06	0.65	0.65	0.03	0.62	0.62	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1767	3512	90	1767	3366	214	244	750	261	257	715	261
Grp Volume(v), veh/h	42	546	569	42	313	323	260	0	0	359	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1839	1767	1763	1817	1255	0	0	1233	0	0
Q Serve(g_s), s	3.0	20.3	20.3	3.1	10.8	10.8	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	3.0	20.3	20.3	3.1	10.8	10.8	26.9	0.0	0.0	27.1	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.12	0.25		0.21	0.24		0.21
Lane Grp Cap(c), veh/h	110	1149	1199	54	1085	1118	296	0	0	291	0	0
V/C Ratio(X)	0.38	0.47	0.47	0.78	0.29	0.29	0.88	0.00	0.00	1.23	0.00	0.00
Avail Cap(c_a), veh/h	117	1149	1199	130	1085	1118	296	0	0	291	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.5	11.4	11.4	62.6	11.7	11.7	50.5	0.0	0.0	52.6	0.0	0.0
Incr Delay (d2), s/veh	0.8	1.4	1.4	8.7	0.7	0.7	28.7	0.0	0.0	130.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	7.9	8.2	1.5	4.3	4.4	10.8	0.0	0.0	20.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.4	12.8	12.8	71.3	12.4	12.3	79.1	0.0	0.0	183.3	0.0	0.0
LnGrp LOS	E	B	B	E	B	B	E	A	A	F	A	A
Approach Vol, veh/h		1157			678			260			359	
Approach Delay, s/veh		14.5			16.0			79.1			183.3	
Approach LOS		B			B			E			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	89.6		32.0	13.0	85.0		32.0				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.9	* 5		4.9				
Max Green Setting (Gmax), s	9.6	79.1		27.1	8.6	* 80		27.1				
Max Q Clear Time (g_c+1/5), s	15.6	22.3		29.1	5.0	12.8		28.9				
Green Ext Time (p_c), s	0.0	21.1		0.0	0.0	9.4		0.0				

### Intersection Summary

HCM 6th Ctrl Delay	46.4
HCM 6th LOS	D

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
24: 52nd St & El Cajon Blvd

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	950	39	78	600	40	30	170	30	78	150	39
Future Volume (veh/h)	70	950	39	78	600	40	30	170	30	78	150	39
Initial Q (Qb), veh	0	15	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	76	1033	37	85	652	38	33	185	28	85	163	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	526	2436	85	55	2373	138	63	288	41	114	187	39
Arrive On Green	0.70	0.70	0.70	0.70	0.70	0.70	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	747	3472	124	523	3386	197	139	1288	183	347	833	176
Grp Volume(v), veh/h	76	524	546	85	339	351	246	0	0	285	0	0
Grp Sat Flow(s),veh/h/ln	747	1763	1833	523	1763	1820	1611	0	0	1357	0	0
Q Serve(g_s), s	5.5	16.5	16.5	10.7	9.3	9.3	0.0	0.0	0.0	9.7	0.0	0.0
Cycle Q Clear(g_c), s	14.7	16.5	16.5	27.2	9.3	9.3	17.5	0.0	0.0	27.2	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.11	0.13		0.11	0.30		0.13
Lane Grp Cap(c), veh/h	526	1235	1285	55	1235	1275	392	0	0	340	0	0
V/C Ratio(X)	0.14	0.42	0.42	1.53	0.27	0.28	0.63	0.00	0.00	0.84	0.00	0.00
Avail Cap(c_a), veh/h	526	1235	1285	356	1235	1275	392	0	0	340	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.9	8.8	8.7	65.0	7.2	7.2	45.6	0.0	0.0	50.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	1.1	1.0	312.5	0.6	0.5	2.4	0.0	0.0	16.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.4	7.6	6.6	3.4	3.5	7.6	0.0	0.0	10.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.5	10.3	10.2	377.5	7.8	7.7	48.0	0.0	0.0	66.8	0.0	0.0
LnGrp LOS	B	B	B	F	A	A	D	A	A	E	A	A
Approach Vol, veh/h		1146			775			246			285	
Approach Delay, s/veh		10.3			48.3			48.0			66.8	
Approach LOS		B			D			D			E	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		96.0		34.0		96.0		34.0				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		91.1		29.1		91.1		29.1				
Max Q Clear Time (g_c+I1), s		18.5		29.2		29.2		19.5				
Green Ext Time (p_c), s		2.6		0.0		13.1		0.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				32.6								
HCM 6th LOS				C								

# HCM 6th Signalized Intersection Summary

## 25: 54th St & El Cajon Blvd

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	582	244	172	500	253	145	395	104	223	767	67
Future Volume (veh/h)	101	582	244	172	500	253	145	395	104	223	767	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	102	647	195	191	556	225	167	454	103	248	852	63
Peak Hour Factor	0.99	0.90	0.99	0.90	0.90	0.90	0.87	0.87	0.87	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	454	1255	535	215	762	322	219	632	142	274	1109	484
Arrive On Green	0.26	0.36	0.36	0.12	0.22	0.22	0.06	0.22	0.22	0.16	0.31	0.31
Sat Flow, veh/h	1767	3526	1503	1767	3526	1490	3428	2834	637	1767	3526	1539
Grp Volume(v), veh/h	102	647	195	191	556	225	167	281	276	248	852	63
Grp Sat Flow(s),veh/h/ln	1767	1763	1503	1767	1763	1490	1714	1763	1708	1767	1763	1539
Q Serve(g_s), s	5.9	18.8	12.5	13.8	19.1	12.9	6.2	19.1	19.5	17.9	28.4	2.0
Cycle Q Clear(g_c), s	5.9	18.8	12.5	13.8	19.1	12.9	6.2	19.1	19.5	17.9	28.4	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	454	1255	535	215	762	322	219	393	381	274	1109	484
V/C Ratio(X)	0.22	0.52	0.36	0.89	0.73	0.70	0.76	0.71	0.72	0.90	0.77	0.13
Avail Cap(c_a), veh/h	454	1255	535	226	922	390	332	447	434	416	1386	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	33.0	31.0	56.2	47.4	23.7	59.9	46.7	46.8	54.0	40.3	8.4
Incr Delay (d2), s/veh	0.1	1.5	1.9	29.7	6.1	11.9	2.0	4.3	4.8	12.3	2.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	8.3	4.8	7.9	9.0	5.6	2.8	8.8	8.7	8.8	12.6	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.2	34.5	32.9	85.9	53.5	35.6	61.9	50.9	51.6	66.3	42.9	8.6
LnGrp LOS	D	C	C	F	D	D	E	D	D	E	D	A
Approach Vol, veh/h		944			972			724			1163	
Approach Delay, s/veh		34.6			55.7			53.7			46.0	
Approach LOS		C			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.2	51.2	12.7	45.9	38.3	33.1	24.6	34.0				
Change Period (Y+Rc), s	4.4	4.9	4.4	* 5	4.9	* 5	4.4	5.0				
Max Green Setting (Gmax), s	16.6	31.1	12.6	* 51	13.6	* 34	30.6	33.0				
Max Q Clear Time (g_c+115), s	11.8	20.8	8.2	30.4	7.9	21.1	19.9	21.5				
Green Ext Time (p_c), s	0.0	4.5	0.1	8.9	0.0	4.1	0.3	2.6				

### Intersection Summary

HCM 6th Ctrl Delay	47.1
HCM 6th LOS	D

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		TT			TT
Traffic Vol, veh/h	40	41	239	45	55	283
Future Vol, veh/h	40	41	239	45	55	283
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	45	260	49	60	308

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	713	285	0	0	309
Stage 1	285	-	-	-	-
Stage 2	428	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227
Pot Cap-1 Maneuver	397	752	-	-	1246
Stage 1	761	-	-	-	-
Stage 2	655	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	374	752	-	-	1246
Mov Cap-2 Maneuver	374	-	-	-	-
Stage 1	761	-	-	-	-
Stage 2	617	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	1.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	502	1246
HCM Lane V/C Ratio	-	-	0.175	0.048
HCM Control Delay (s)	-	-	13.7	8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0.2

Intersection	
Intersection Delay, s/veh	11.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	77	97	76	32	16	32	32	141	77	76	141	32
Future Vol, veh/h	77	97	76	32	16	32	32	141	77	76	141	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	84	105	83	35	17	35	35	153	84	83	153	35
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.2	9.7	11.7	12
HCM LOS	B	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	31%	40%	31%
Vol Thru, %	56%	39%	20%	57%
Vol Right, %	31%	30%	40%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	250	250	80	249
LT Vol	32	77	32	76
Through Vol	141	97	16	141
RT Vol	77	76	32	32
Lane Flow Rate	272	272	87	271
Geometry Grp	1	1	1	1
Degree of Util (X)	0.395	0.41	0.139	0.404
Departure Headway (Hd)	5.237	5.426	5.735	5.373
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	685	663	623	669
Service Time	3.282	3.47	3.792	3.417
HCM Lane V/C Ratio	0.397	0.41	0.14	0.405
HCM Control Delay	11.7	12.2	9.7	12
HCM Lane LOS	B	B	A	B
HCM 95th-tile Q	1.9	2	0.5	2

Intersection												
Intersection Delay, s/veh	8.7											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	32	48	40	37	42	41	38	76	35	36	46	39
Future Vol, veh/h	32	48	40	37	42	41	38	76	35	36	46	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	35	52	43	40	46	45	41	83	38	39	50	42
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.6	8.9	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	27%	31%	30%
Vol Thru, %	51%	40%	35%	38%
Vol Right, %	23%	33%	34%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	149	120	120	121
LT Vol	38	32	37	36
Through Vol	76	48	42	46
RT Vol	35	40	41	39
Lane Flow Rate	162	130	130	132
Geometry Grp	1	1	1	1
Degree of Util (X)	0.208	0.168	0.169	0.169
Departure Headway (Hd)	4.631	4.65	4.654	4.624
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	773	770	768	773
Service Time	2.672	2.692	2.695	2.667
HCM Lane V/C Ratio	0.21	0.169	0.169	0.171
HCM Control Delay	8.9	8.6	8.6	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.6	0.6	0.6



HCM 6th Signalized Intersection Summary  
 29: 54th St & Trojan Ave

Existing PM  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	
Traffic Volume (veh/h)	50	60	40	90	30	210	30	723	30	30	966	30
Future Volume (veh/h)	50	60	40	90	30	210	30	723	30	30	966	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	54	65	38	98	33	201	33	786	28	33	1050	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	122	141	71	134	47	217	42	2122	76	42	2143	57
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.61	0.61	0.02	0.61	0.61
Sat Flow, veh/h	341	588	297	394	195	904	1767	3472	124	1767	3508	94
Grp Volume(v), veh/h	157	0	0	332	0	0	33	399	415	33	528	550
Grp Sat Flow(s),veh/h/ln	1225	0	0	1493	0	0	1767	1763	1833	1767	1763	1839
Q Serve(g_s), s	0.0	0.0	0.0	13.6	0.0	0.0	2.2	13.7	13.7	2.2	19.9	19.9
Cycle Q Clear(g_c), s	12.4	0.0	0.0	26.1	0.0	0.0	2.2	13.7	13.7	2.2	19.9	19.9
Prop In Lane	0.34		0.24	0.30		0.61	1.00		0.07	1.00		0.05
Lane Grp Cap(c), veh/h	335	0	0	398	0	0	42	1077	1120	42	1077	1123
V/C Ratio(X)	0.47	0.00	0.00	0.83	0.00	0.00	0.79	0.37	0.37	0.79	0.49	0.49
Avail Cap(c_a), veh/h	399	0	0	463	0	0	171	1077	1120	171	1077	1123
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.63	0.63	0.63
Uniform Delay (d), s/veh	38.7	0.0	0.0	44.4	0.0	0.0	58.3	11.7	11.7	58.3	13.0	13.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	9.7	0.0	0.0	11.7	1.0	0.9	7.7	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.0	10.7	0.0	0.0	1.1	5.4	5.6	1.1	7.7	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.1	0.0	0.0	54.1	0.0	0.0	70.0	12.7	12.7	66.0	14.0	13.9
LnGrp LOS	D	A	A	D	A	A	E	B	B	E	B	B
Approach Vol, veh/h		157			332			847			1111	
Approach Delay, s/veh		39.1			54.1			14.9			15.5	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	79.0		33.8	7.2	79.0		33.8				
Change Period (Y+Rc), s	4.4	* 5.7		4.9	4.4	5.7		4.9				
Max Green Setting (Gmax), s	1.6	* 59		34.1	11.6	59.3		34.1				
Max Q Clear Time (g_c+14), s	14.2	15.7		14.4	4.2	21.9		28.1				
Green Ext Time (p_c), s	0.0	3.4		0.6	0.0	4.9		0.8				

Intersection Summary

HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕		↖	↗	
Traffic Vol, veh/h	111	97	8	13	72	166	5	23	8	45	4	23
Future Vol, veh/h	111	97	8	13	72	166	5	23	8	45	4	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	55	-	-	105	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	121	105	9	14	78	180	5	25	9	49	4	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	258	0	0	114	0	0	563	638	110	565	552	168
Stage 1	-	-	-	-	-	-	352	352	-	196	196	-
Stage 2	-	-	-	-	-	-	211	286	-	369	356	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1301	-	-	1469	-	-	435	393	941	434	440	874
Stage 1	-	-	-	-	-	-	663	630	-	803	737	-
Stage 2	-	-	-	-	-	-	789	673	-	649	627	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1301	-	-	1469	-	-	386	353	941	375	395	874
Mov Cap-2 Maneuver	-	-	-	-	-	-	386	353	-	375	395	-
Stage 1	-	-	-	-	-	-	601	571	-	728	730	-
Stage 2	-	-	-	-	-	-	755	666	-	558	569	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.1			0.4			14.6			13.8		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	416	1301	-	-	1469	-	-	375	741
HCM Lane V/C Ratio	0.094	0.093	-	-	0.01	-	-	0.13	0.04
HCM Control Delay (s)	14.6	8.1	-	-	7.5	-	-	16	10.1
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.3	0.3	-	-	0	-	-	0.4	0.1

# HCM 6th Signalized Intersection Summary

## 31: 35th St & Orange Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	362	45	39	279	79	17	44	19	119	58	104
Future Volume (veh/h)	89	362	45	39	279	79	17	44	19	119	58	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	97	393	44	42	303	75	18	48	16	129	63	102
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	619	993	111	575	870	215	123	273	78	224	95	124
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	997	1639	184	944	1436	355	216	1185	340	597	411	535
Grp Volume(v), veh/h	97	0	437	42	0	378	82	0	0	294	0	0
Grp Sat Flow(s),veh/h/ln	997	0	1823	944	0	1792	1741	0	0	1543	0	0
Q Serve(g_s), s	3.2	0.0	7.5	1.4	0.0	6.3	0.0	0.0	0.0	8.5	0.0	0.0
Cycle Q Clear(g_c), s	9.6	0.0	7.5	8.9	0.0	6.3	2.2	0.0	0.0	10.8	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.20	0.22		0.20	0.44		0.35
Lane Grp Cap(c), veh/h	619	0	1104	575	0	1085	475	0	0	443	0	0
V/C Ratio(X)	0.16	0.00	0.40	0.07	0.00	0.35	0.17	0.00	0.00	0.66	0.00	0.00
Avail Cap(c_a), veh/h	619	0	1104	575	0	1085	938	0	0	874	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.80	0.00	0.00
Uniform Delay (d), s/veh	8.3	0.0	6.1	8.4	0.0	5.9	18.6	0.0	0.0	21.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	1.1	0.2	0.0	0.9	0.1	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	2.6	0.3	0.0	2.1	0.9	0.0	0.0	3.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.8	0.0	7.2	8.7	0.0	6.8	18.7	0.0	0.0	22.3	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	C	A	A
Approach Vol, veh/h		534			420			82			294	
Approach Delay, s/veh		7.5			7.0			18.7			22.3	
Approach LOS		A			A			B			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.2		18.8		41.2		18.8				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		19.1		31.1		19.1		31.1				
Max Q Clear Time (g_c+I1), s		11.6		12.8		10.9		4.2				
Green Ext Time (p_c), s		2.4		1.2		2.0		0.3				

### Intersection Summary

HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

### Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th TWSC  
32: Orange Ave & Central Ave

Existing PM  
PM Peak Hour

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	16	681	32	18	399	9	1	0	1	1	0	1
Future Vol, veh/h	16	681	32	18	399	9	1	0	1	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	105	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	17	740	35	20	434	10	1	0	1	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	444	0	0	775	0	0	1272	1276	758	1271	1288	439
Stage 1	-	-	-	-	-	-	792	792	-	479	479	-
Stage 2	-	-	-	-	-	-	480	484	-	792	809	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1111	-	-	836	-	-	144	166	405	144	163	616
Stage 1	-	-	-	-	-	-	381	399	-	566	553	-
Stage 2	-	-	-	-	-	-	565	550	-	381	392	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1111	-	-	836	-	-	140	160	405	139	157	616
Mov Cap-2 Maneuver	-	-	-	-	-	-	140	160	-	139	157	-
Stage 1	-	-	-	-	-	-	375	393	-	558	540	-
Stage 2	-	-	-	-	-	-	551	537	-	374	386	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.4			22.5			21		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	208	1111	-	-	836	-	-	227
HCM Lane V/C Ratio	0.01	0.016	-	-	0.023	-	-	0.01
HCM Control Delay (s)	22.5	8.3	-	-	9.4	-	-	21
HCM Lane LOS		C	A	-	-	A	-	C
HCM 95th %tile Q(veh)		0	0	-	-	0.1	-	0

HCM 6th Signalized Intersection Summary  
33: Marlborough Dr & Orange Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	531	148	58	338	2	61	0	52	2	2	2
Future Volume (veh/h)	4	531	148	58	338	2	61	0	52	2	2	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.99		0.95	0.96		0.94	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	4	553	138	66	384	2	71	0	54	3	3	3
Peak Hour Factor	0.96	0.96	0.96	0.88	0.88	0.88	0.86	0.86	0.86	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	660	777	194	432	1010	5	288	1	76	203	97	70
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.12	0.00	0.12	0.12	0.12	0.12
Sat Flow, veh/h	978	1418	354	741	1844	10	798	4	610	340	778	559
Grp Volume(v), veh/h	4	0	691	66	0	386	125	0	0	9	0	0
Grp Sat Flow(s),veh/h/ln	978	0	1771	741	0	1853	1413	0	0	1676	0	0
Q Serve(g_s), s	0.1	0.0	8.7	2.2	0.0	3.6	2.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.6	0.0	8.7	10.8	0.0	3.6	2.5	0.0	0.0	0.1	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.01	0.57		0.43	0.33		0.33
Lane Grp Cap(c), veh/h	660	0	971	432	0	1015	365	0	0	370	0	0
V/C Ratio(X)	0.01	0.00	0.71	0.15	0.00	0.38	0.34	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	2083	0	3548	1511	0	3712	2060	0	0	2204	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.9	0.0	5.0	9.0	0.0	3.9	12.6	0.0	0.0	11.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.8	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.5	0.3	0.0	0.6	0.7	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.9	0.0	5.9	9.2	0.0	4.1	12.8	0.0	0.0	11.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		695			452			125				9
Approach Delay, s/veh		5.9			4.8			12.8				11.5
Approach LOS		A			A			B				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.3		8.6		21.3		8.6				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		60.0		40.0		60.0		40.0				
Max Q Clear Time (g_c+I1), s		10.7		2.1		12.8		4.5				
Green Ext Time (p_c), s		5.7		0.0		3.0		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				6.2								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary  
34: Fairmount Ave & Orange Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	482	85	56	236	94	102	410	57	29	107	4
Future Volume (veh/h)	86	482	85	56	236	94	102	410	57	29	107	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.93	1.00		0.96	0.98		0.94	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	110	618	96	63	265	95	128	512	59	35	129	5
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.80	0.80	0.80	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	283	520	81	120	431	155	682	1588	182	454	888	34
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	1003	1551	241	731	1288	462	1216	3165	363	826	1770	69
Grp Volume(v), veh/h	110	0	714	63	0	360	128	284	287	35	0	134
Grp Sat Flow(s),veh/h/ln1003	0	1792	731	0	1750	1216	1763	1765	826	0	1838	
Q Serve(g_s), s	6.2	0.0	20.1	0.0	0.0	10.3	3.8	5.7	5.8	1.6	0.0	2.4
Cycle Q Clear(g_c), s	16.5	0.0	20.1	20.1	0.0	10.3	6.1	5.7	5.8	7.4	0.0	2.4
Prop In Lane	1.00		0.13	1.00		0.26	1.00		0.21	1.00		0.04
Lane Grp Cap(c), veh/h	283	0	600	120	0	586	682	884	885	454	0	922
V/C Ratio(X)	0.39	0.00	1.19	0.52	0.00	0.61	0.19	0.32	0.32	0.08	0.00	0.15
Avail Cap(c_a), veh/h	283	0	600	120	0	586	682	884	885	454	0	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	20.0	30.0	0.0	16.7	9.7	8.9	8.9	11.1	0.0	8.0
Incr Delay (d2), s/veh	3.1	0.0	101.1	12.5	0.0	4.0	0.6	1.0	1.0	0.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln1.6	0.0	0.0	24.4	1.3	0.0	4.5	1.0	2.1	2.1	0.3	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.8	0.0	121.0	42.5	0.0	20.7	10.3	9.8	9.9	11.4	0.0	8.4
LnGrp LOS	C	A	F	D	A	C	B	A	A	B	A	A
Approach Vol, veh/h		824			423			699			169	
Approach Delay, s/veh		108.5			23.9			9.9			9.0	
Approach LOS		F			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.0		35.0		25.0		35.0				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		20.1		30.1		20.1		30.1				
Max Q Clear Time (g_c+I1), s		22.1		9.4		22.1		8.1				
Green Ext Time (p_c), s		0.0		1.6		0.0		7.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				51.0								
HCM 6th LOS				D								

# HCM 6th Signalized Intersection Summary

## 35: Euclid Ave & Orange Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	326	113	58	217	56	85	249	78	55	231	38
Future Volume (veh/h)	40	326	113	58	217	56	85	249	78	55	231	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	0.99		0.94	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	43	347	104	77	289	62	113	332	91	62	260	37
Peak Hour Factor	0.94	0.94	0.94	0.75	0.75	0.75	0.75	0.75	0.75	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	60	426	128	100	497	107	178	428	110	139	507	66
Arrive On Green	0.03	0.32	0.32	0.06	0.34	0.34	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1767	1339	401	1767	1456	312	272	1078	276	179	1279	168
Grp Volume(v), veh/h	43	0	451	77	0	351	536	0	0	359	0	0
Grp Sat Flow(s),veh/h/ln	1767	0	1740	1767	0	1768	1626	0	0	1625	0	0
Q Serve(g_s), s	1.5	0.0	14.8	2.7	0.0	10.1	8.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.5	0.0	14.8	2.7	0.0	10.1	17.9	0.0	0.0	9.6	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.18	0.21		0.17	0.17		0.10
Lane Grp Cap(c), veh/h	60	0	554	100	0	603	715	0	0	713	0	0
V/C Ratio(X)	0.72	0.00	0.81	0.77	0.00	0.58	0.75	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	853	0	1120	853	0	1138	1594	0	0	1600	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.7	0.0	19.5	28.9	0.0	16.8	16.5	0.0	0.0	14.1	0.0	0.0
Incr Delay (d2), s/veh	6.0	0.0	2.7	4.7	0.0	0.8	1.6	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.7	0.0	6.0	1.2	0.0	3.9	6.4	0.0	0.0	3.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	0.0	22.2	33.7	0.0	17.6	18.1	0.0	0.0	14.7	0.0	0.0
LnGrp LOS	D	A	C	C	A	B	B	A	A	B	A	A
Approach Vol, veh/h		494			428			536			359	
Approach Delay, s/veh		23.3			20.5			18.1			14.7	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	24.7		29.5	6.5	26.1		29.5				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	30.0	40.0		60.0	30.0	40.0		60.0				
Max Q Clear Time (g_c+14.7), s	14.7	16.8		11.6	3.5	12.1		19.9				
Green Ext Time (p_c), s	0.1	3.0		2.9	0.0	2.3		4.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				19.4								
HCM 6th LOS				B								

Intersection												
Intersection Delay, s/veh	12.2											
Intersection LOS	B											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	111	130	174	4	82	3	99	41	3	5	97	150
Future Vol, veh/h	111	130	174	4	82	3	99	41	3	5	97	150
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	121	141	189	4	89	3	108	45	3	5	105	163
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	13.1	10.5	11.1	12
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	69%	100%	0%	100%	0%	2%
Vol Thru, %	29%	0%	43%	0%	96%	38%
Vol Right, %	2%	0%	57%	0%	4%	60%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	143	111	304	4	85	252
LT Vol	99	111	0	4	0	5
Through Vol	41	0	130	0	82	97
RT Vol	3	0	174	0	3	150
Lane Flow Rate	155	121	330	4	92	274
Geometry Grp	2	5	5	5	5	2
Degree of Util (X)	0.259	0.216	0.507	0.008	0.165	0.405
Departure Headway (Hd)	5.989	6.442	5.529	6.956	6.421	5.32
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	598	557	651	513	557	674
Service Time	4.041	4.184	3.27	4.715	4.179	3.366
HCM Lane V/C Ratio	0.259	0.217	0.507	0.008	0.165	0.407
HCM Control Delay	11.1	11	13.9	9.8	10.5	12
HCM Lane LOS	B	B	B	A	B	B
HCM 95th-tile Q	1	0.8	2.9	0	0.6	2



Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	82	31	17	48	14	33	110	26	26	82	14
Future Vol, veh/h	25	82	31	17	48	14	33	110	26	26	82	14
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.90	0.90	0.90	0.82	0.82	0.82
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	88	33	19	53	15	37	122	29	32	100	17
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9	8.6	9.2	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	18%	22%	21%
Vol Thru, %	65%	59%	61%	67%
Vol Right, %	15%	22%	18%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	169	138	79	122
LT Vol	33	25	17	26
Through Vol	110	82	48	82
RT Vol	26	31	14	14
Lane Flow Rate	188	148	87	149
Geometry Grp	1	1	1	1
Degree of Util (X)	0.242	0.196	0.117	0.195
Departure Headway (Hd)	4.645	4.755	4.869	4.718
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	770	752	733	759
Service Time	2.689	2.801	2.921	2.762
HCM Lane V/C Ratio	0.244	0.197	0.119	0.196
HCM Control Delay	9.2	9	8.6	8.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.9	0.7	0.4	0.7

Intersection						
Int Delay, s/veh	1.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	93	148	52	81	0	0
Future Vol, veh/h	93	148	52	81	0	0
Conflicting Peds, #/hr	0	12	12	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	88	88	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	107	170	59	92	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	289	0	414
Stage 1	-	-	-	-	204
Stage 2	-	-	-	-	210
Critical Hdwy	-	-	4.13	-	6.43
Critical Hdwy Stg 1	-	-	-	-	5.43
Critical Hdwy Stg 2	-	-	-	-	5.43
Follow-up Hdwy	-	-	2.227	-	3.527
Pot Cap-1 Maneuver	-	-	1267	-	593
Stage 1	-	-	-	-	828
Stage 2	-	-	-	-	823
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1253	-	557
Mov Cap-2 Maneuver	-	-	-	-	557
Stage 1	-	-	-	-	819
Stage 2	-	-	-	-	782

Approach	EB	WB	NB
HCM Control Delay, s	0	3.1	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1253	-
HCM Lane V/C Ratio	-	-	-	0.047	-
HCM Control Delay (s)	0	-	-	8	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.1	-

HCM 6th Signalized Intersection Summary  
 39: I-805 SB Ramps & University Ave

Existing PM  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↑	↗		↔↑			↖	↗		↖	↗
Traffic Volume (veh/h)	211	366	5	4	767	175	39	11	105	19	87	2
Future Volume (veh/h)	211	366	5	4	767	175	39	11	105	19	87	2
Initial Q (Qb), veh	0	15	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	243	421	6	4	807	163	42	12	92	25	116	3
Peak Hour Factor	0.87	0.87	0.87	0.95	0.95	0.95	0.92	0.92	0.92	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	419	743	400	4	805	173	71	12	399	47	171	393
Arrive On Green	0.27	0.27	0.27	0.28	0.28	0.28	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1767	1763	1507	14	2910	625	0	46	1567	0	671	1544
Grp Volume(v), veh/h	243	421	6	532	0	442	54	0	92	141	0	3
Grp Sat Flow(s),veh/h/ln	1767	1763	1507	1855	0	1694	46	0	1567	671	0	1544
Q Serve(g_s), s	10.5	20.7	0.3	24.9	0.0	23.0	0.0	0.0	4.2	0.0	0.0	0.1
Cycle Q Clear(g_c), s	10.5	20.7	0.3	24.9	0.0	23.0	22.9	0.0	4.2	22.9	0.0	0.1
Prop In Lane	1.00		1.00	0.01		0.37	0.78		1.00	0.18		1.00
Lane Grp Cap(c), veh/h	472	468	400	513	0	469	83	0	399	218	0	393
V/C Ratio(X)	0.52	0.90	0.01	1.04	0.00	0.94	0.65	0.00	0.23	0.65	0.00	0.01
Avail Cap(c_a), veh/h	469	468	400	513	0	469	83	0	399	218	0	393
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.59	0.00	0.59	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.7	32.6	24.4	32.6	0.0	31.9	40.1	0.0	26.6	28.3	0.0	25.1
Incr Delay (d2), s/veh	4.0	22.8	0.1	40.4	0.0	19.3	13.4	0.0	0.1	5.1	0.0	0.0
Initial Q Delay(d3),s/veh	3.8	18.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	14.9	0.1	16.7	0.0	11.7	1.5	0.0	1.6	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	73.8	24.4	72.9	0.0	51.1	53.5	0.0	26.7	33.4	0.0	25.1
LnGrp LOS	D	E	C	F	A	D	D	A	C	C	A	C
Approach Vol, veh/h		670			974			146				144
Approach Delay, s/veh		59.8			63.0			36.6				33.2
Approach LOS		E			E			D				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		30.0		29.0		31.0		29.0				
Change Period (Y+Rc), s		6.1		6.1		6.1		6.1				
Max Green Setting (Gmax), s		23.9		22.9		24.9		22.9				
Max Q Clear Time (g_c+I1), s		22.7		24.9		26.9		24.9				
Green Ext Time (p_c), s		0.4		0.0		0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	57.7
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

# HCM 6th Signalized Intersection Summary

## 40: I-805 NB Ramps & University Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕	↗		↕↕			↕↕			↕↕	
Traffic Volume (veh/h)	9	314	551	230	242	4	341	198	254	26	70	24
Future Volume (veh/h)	9	314	551	230	242	4	341	198	254	26	70	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	15	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	10	345	0	242	255	4	359	208	241	104	100	27
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.95	0.95	0.95	0.25	0.70	0.70
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	37	1332		308	358	6	249	604	53	58	43	6
Arrive On Green	0.12	0.12	0.00	0.19	0.19	0.19	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	97	3516	1572	1661	1930	30	851	707	819	0	164	22
Grp Volume(v), veh/h	190	165	0	258	0	243	359	0	449	231	0	0
Grp Sat Flow(s),veh/h/ln	1851	1763	1572	1772	0	1849	851	0	1526	185	0	0
Q Serve(g_s), s	8.4	7.6	0.0	12.5	0.0	11.1	0.0	0.0	23.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.4	7.6	0.0	12.5	0.0	11.1	23.9	0.0	23.9	23.9	0.0	0.0
Prop In Lane	0.05		1.00	0.94		0.02	1.00		0.54	0.45		0.12
Lane Grp Cap(c), veh/h	701	668		329	0	343	352	0	438	107	0	0
V/C Ratio(X)	0.27	0.25		0.78	0.00	0.71	1.02	0.00	1.03	2.16	0.00	0.00
Avail Cap(c_a), veh/h	701	668		471	0	491	306	0	405	107	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.86	0.86	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.1	27.8	0.0	34.9	0.0	34.3	35.6	0.0	33.1	34.6	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.8	0.0	3.3	0.0	1.0	53.3	0.0	49.6	549.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	76.8	0.0	61.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.6	0.0	5.6	0.0	5.0	20.5	0.0	22.9	18.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	28.5	0.0	38.2	0.0	35.4	165.7	0.0	144.4	584.1	0.0	0.0
LnGrp LOS	C	C		D	A	D	F	A	F	F	A	A
Approach Vol, veh/h		355			501			808			231	
Approach Delay, s/veh		28.8			36.8			153.8			584.1	
Approach LOS		C			D			F			F	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.2		29.0		21.8		29.0				
Change Period (Y+Rc), s		5.1		5.1		5.1		5.1				
Max Green Setting (Gmax), s		26.9		23.9		23.9		23.9				
Max Q Clear Time (g_c+I1), s		10.4		25.9		14.5		25.9				
Green Ext Time (p_c), s		1.3		0.0		1.5		0.0				

### Intersection Summary

HCM 6th Ctrl Delay	151.9
HCM 6th LOS	F

### Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
41: 35th St & University Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	481	29	25	446	18	45	39	8	39	64	39
Future Volume (veh/h)	23	481	29	25	446	18	45	39	8	39	64	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.95		0.89	0.94		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	25	529	27	26	460	14	60	52	4	48	79	42
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.75	0.75	0.75	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	627	1209	62	566	1239	38	190	145	9	118	157	71
Arrive On Green	0.69	0.69	0.69	0.69	0.69	0.69	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	908	1746	89	843	1789	54	660	814	53	321	880	397
Grp Volume(v), veh/h	25	0	556	26	0	474	116	0	0	169	0	0
Grp Sat Flow(s),veh/h/ln	908	0	1835	843	0	1843	1526	0	0	1599	0	0
Q Serve(g_s), s	0.9	0.0	10.2	1.1	0.0	8.1	0.0	0.0	0.0	2.3	0.0	0.0
Cycle Q Clear(g_c), s	9.0	0.0	10.2	11.2	0.0	8.1	4.7	0.0	0.0	7.1	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.03	0.52		0.03	0.28		0.25
Lane Grp Cap(c), veh/h	627	0	1271	566	0	1276	344	0	0	346	0	0
V/C Ratio(X)	0.04	0.00	0.44	0.05	0.00	0.37	0.34	0.00	0.00	0.49	0.00	0.00
Avail Cap(c_a), veh/h	627	0	1271	566	0	1276	449	0	0	457	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.7	0.0	5.2	7.6	0.0	4.8	27.5	0.0	0.0	28.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.1	0.2	0.0	0.8	0.2	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.2	0.0	0.0	3.4	0.2	0.0	2.7	1.9	0.0	0.0	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.8	0.0	6.2	7.8	0.0	5.7	27.7	0.0	0.0	28.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		581			500			116			169	
Approach Delay, s/veh		6.3			5.8			27.7			28.9	
Approach LOS		A			A			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		57.5		18.5		57.5		18.5				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		47.1		19.1		47.1		19.1				
Max Q Clear Time (g_c+I1), s		12.2		9.1		13.2		6.7				
Green Ext Time (p_c), s		6.2		0.4		5.6		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											10.7	
HCM 6th LOS											B	

# HCM 6th Signalized Intersection Summary

## 42: University Ave & I-15 SB Ramps

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑	↑	↑↑			↑		↑↑	↑	↑
Traffic Volume (veh/h)	0	384	183	213	349	0	0	0	0	462	353	393
Future Volume (veh/h)	0	384	183	213	349	0	0	0	0	462	353	393
Initial Q (Qb), veh	0	0	0	10	10	0	0	0	0	15	0	15
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		1.00	0.97		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	417	199	239	392	0	0	0	0	481	368	326
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.92	0.92	0.92	0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	3	3	0	3	3	3	3	3	3
Cap, veh/h	0	811	240	885	2479	0	0	1	0	737	400	323
Arrive On Green	0.00	0.16	0.16	1.00	1.00	0.00	0.00	0.00	0.00	0.22	0.22	0.22
Sat Flow, veh/h	0	5233	1502	1767	3618	0	0	1856	0	3421	1856	1501
Grp Volume(v), veh/h	0	417	199	239	392	0	0	0	0	481	368	326
Grp Sat Flow(s),veh/h/ln	0	1689	1502	1767	1763	0	0	1856	0	1711	1856	1501
Q Serve(g_s), s	0.0	9.8	16.7	0.0	0.0	0.0	0.0	0.0	0.0	16.7	25.2	28.0
Cycle Q Clear(g_c), s	0.0	9.8	16.7	0.0	0.0	0.0	0.0	0.0	0.0	16.7	25.2	28.0
Prop In Lane	0.00		1.00	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	811	240	885	2479	0	0	1	0	737	400	323
V/C Ratio(X)	0.00	0.51	0.83	0.27	0.16	0.00	0.00	0.00	0.00	0.65	0.92	1.01
Avail Cap(c_a), veh/h	0	1274	378	885	2479	0	0	428	0	737	400	323
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	0.97	0.97	0.00	0.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	50.0	52.9	0.0	0.0	0.0	0.0	0.0	0.0	47.6	49.9	51.0
Incr Delay (d2), s/veh	0.0	2.3	26.8	0.1	0.1	0.0	0.0	0.0	0.0	1.6	25.9	52.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	1.3	0.1	0.0	0.0	0.0	0.0	8.6	0.0	167.0
%ile BackOfQ(50%),veh/lr0.0	0.0	4.4	8.1	0.3	0.1	0.0	0.0	0.0	0.0	9.4	14.7	30.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	52.3	79.7	1.3	0.3	0.0	0.0	0.0	0.0	57.8	75.8	270.2
LnGrp LOS	A	D	E	A	A	A	A	A	A	E	E	F
Approach Vol, veh/h		616		631		0				1175		
Approach Delay, s/veh		61.1		0.7		0.0				122.4		
Approach LOS		E		A						F		
Timer - Assigned Phs	1	2	4	6	8							
Phs Duration (G+Y+Rc), s	30.6	26.3		33.1	96.9			0.0				
Change Period (Y+Rc), s	5.5	* 5.5		5.1	5.5			4.0				
Max Green Setting (Gmax), s	20.0	* 33		28.0	57.4			30.0				
Max Q Clear Time (g_c+I), s	12.0	18.7		30.0	2.0			0.0				
Green Ext Time (p_c), s	0.3	2.1		0.0	2.0			0.0				

### Intersection Summary

HCM 6th Ctrl Delay	75.1
HCM 6th LOS	E

### Notes

User approved volume balancing among the lanes for turning movement.

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
43: I-15 NB Ramps & University Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑↑	↗	↘↗	↑	↗↘		↑	
Traffic Volume (veh/h)	146	706	0	0	377	418	179	0	523	0	0	0
Future Volume (veh/h)	146	706	0	0	377	418	179	0	523	0	0	0
Initial Q (Qb), veh	10	10	0	0	10	0	10	0	10	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.95	1.00		0.93	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856	0	1856	0
Adj Flow Rate, veh/h	157	759	0	0	419	370	192	0	438	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.93	0.93	0.93	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3	0	3	0
Cap, veh/h	216	2581	0	0	2998	860	642	350	497	0	1	0
Arrive On Green	0.20	1.00	0.00	0.00	0.59	0.59	0.19	0.00	0.19	0.00	0.00	0.00
Sat Flow, veh/h	1767	3618	0	0	5233	1496	3428	1856	2569	0-74222	0	0
Grp Volume(v), veh/h	157	759	0	0	419	370	192	0	438	0	0	0
Grp Sat Flow(s),veh/h/ln	1767	3618	0	0	5233	1496	3428	1856	2569	0	1856	0
Q Serve(g_s), s	11.2	0.0	0.0	0.0	4.8	17.4	6.3	0.0	21.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.2	0.0	0.0	0.0	4.8	17.4	6.3	0.0	21.7	0.0	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	216	2581	0	0	2998	860	642	350	497	0	1	0
V/C Ratio(X)	0.73	0.29	0.00	0.00	0.14	0.43	0.30	0.00	0.88	0.00	0.00	0.00
Avail Cap(c_a), veh/h	344	2582	0	0	3008	888	683	370	512	0	457	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.09	0.09	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	48.5	0.0	0.0	0.0	12.1	15.7	46.1	0.0	52.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.1	1.6	0.1	0.0	15.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	57.0	0.2	0.0	0.0	0.1	0.0	2.5	0.0	24.6	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	9.0	0.1	0.0	0.0	2.3	6.6	3.6	0.0	10.5	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.6	0.2	0.0	0.0	12.3	17.3	48.7	0.0	91.9	0.0	0.0	0.0
LnGrp LOS	F	A	A	A	B	B	D	A	F	A	A	A
Approach Vol, veh/h		916			789			630				0
Approach Delay, s/veh		18.3			14.6			78.7				0.0
Approach LOS		B			B			E				
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		100.7		0.0	18.0	82.7		29.3				
Change Period (Y+Rc), s		5.5		4.0	* 4.7	5.5		5.1				
Max Green Setting (Gmax), s		57.5		32.0	* 25	27.5		25.9				
Max Q Clear Time (g_c+I1), s		2.0		0.0	13.2	19.4		23.7				
Green Ext Time (p_c), s		4.3		0.0	0.2	2.0		0.5				

Intersection Summary

HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 44: Marlborough Ave & University Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	1048	292	0	839	0	42	0	42	0	84	42
Future Volume (veh/h)	42	1048	292	0	839	0	42	0	42	0	84	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.93	1.00		1.00	0.88		0.88	1.00		0.80
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	47	1178	294	0	865	0	46	0	41	0	97	42
Peak Hour Factor	0.89	0.89	0.89	0.97	0.97	0.97	0.92	0.92	0.92	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	496	1895	465	67	1275	0	147	14	98	0	252	109
Arrive On Green	0.69	0.69	0.69	0.00	1.00	0.00	0.22	0.00	0.22	0.00	0.22	0.22
Sat Flow, veh/h	626	2759	677	357	1856	0	432	63	441	0	1132	490
Grp Volume(v), veh/h	47	745	727	0	865	0	87	0	0	0	0	139
Grp Sat Flow(s),veh/h/ln	626	1763	1674	357	1856	0	935	0	0	0	0	1622
Q Serve(g_s), s	2.7	24.8	25.9	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	7.9
Cycle Q Clear(g_c), s	2.7	24.8	25.9	0.0	0.0	0.0	12.4	0.0	0.0	0.0	0.0	7.9
Prop In Lane	1.00		0.40	1.00		0.00	0.53		0.47	0.00		0.30
Lane Grp Cap(c), veh/h	496	1211	1150	67	1275	0	259	0	0	0	0	361
V/C Ratio(X)	0.09	0.62	0.63	0.00	0.68	0.00	0.34	0.00	0.00	0.00	0.00	0.39
Avail Cap(c_a), veh/h	496	1211	1150	67	1275	0	271	0	0	0	0	377
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.94	0.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	5.7	9.2	9.4	0.0	0.0	0.0	38.2	0.0	0.0	0.0	0.0	35.7
Incr Delay (d2), s/veh	0.4	2.3	2.6	0.0	2.8	0.0	0.3	0.0	0.0	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	9.5	9.5	0.0	1.0	0.0	2.1	0.0	0.0	0.0	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.1	11.5	12.0	0.0	2.8	0.0	38.5	0.0	0.0	0.0	0.0	36.0
LnGrp LOS	A	B	B	A	A	A	D	A	A	A	A	D
Approach Vol, veh/h		1519			865			87				139
Approach Delay, s/veh		11.6			2.8			38.5				36.0
Approach LOS		B			A			D				D
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		79.1		28.9		79.1		28.9				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		73.1		25.1		73.1		25.1				
Max Q Clear Time (g_c+I1), s		27.9		9.9		2.0		14.4				
Green Ext Time (p_c), s		13.8		0.4		10.1		0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					10.9							
HCM 6th LOS					B							



# HCM 6th Signalized Intersection Summary

## 45: University Ave & 42nd St

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	740	79	21	433	25	30	40	29	13	83	25
Future Volume (veh/h)	36	740	79	21	433	25	30	40	29	13	83	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	0.99		0.94	0.96		0.95	0.97		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	37	763	71	24	487	22	35	47	28	17	111	26
Peak Hour Factor	0.97	0.97	0.97	0.89	0.89	0.89	0.85	0.85	0.85	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	653	2466	229	558	1336	60	99	123	61	52	197	43
Arrive On Green	1.00	1.00	1.00	0.76	0.76	0.76	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	877	3241	301	645	1756	79	371	831	410	103	1329	291
Grp Volume(v), veh/h	37	415	419	24	0	509	110	0	0	154	0	0
Grp Sat Flow(s),veh/h/ln	877	1763	1779	645	0	1835	1613	0	0	1723	0	0
Q Serve(g_s), s	0.6	0.0	0.0	1.0	0.0	9.9	0.0	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	10.5	0.0	0.0	1.0	0.0	9.9	6.3	0.0	0.0	8.9	0.0	0.0
Prop In Lane	1.00		0.17	1.00		0.04	0.32		0.25	0.11		0.17
Lane Grp Cap(c), veh/h	653	1341	1354	558	0	1396	283	0	0	293	0	0
V/C Ratio(X)	0.06	0.31	0.31	0.04	0.00	0.36	0.39	0.00	0.00	0.53	0.00	0.00
Avail Cap(c_a), veh/h	653	1341	1354	558	0	1396	409	0	0	435	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.78	0.78	0.78	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.6	0.0	0.0	3.2	0.0	4.3	41.8	0.0	0.0	42.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.1	0.0	0.7	0.3	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.0	0.2	0.2	0.1	0.0	3.3	2.7	0.0	0.0	3.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.8	0.5	0.5	3.4	0.0	5.0	42.1	0.0	0.0	43.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	A
Approach Vol, veh/h		871			533			110			154	
Approach Delay, s/veh		0.5			4.9			42.1			43.5	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		87.1		20.9		87.1		20.9				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s		73.1		25.1		73.1		25.1				
Max Q Clear Time (g_c+I1), s		12.5		10.9		11.9		8.3				
Green Ext Time (p_c), s		13.6		0.5		9.0		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				8.6								
HCM 6th LOS				A								

# HCM 6th Signalized Intersection Summary

## 46: University Ave & 43rd St

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↔	↑↑						↑↑	
Traffic Volume (veh/h)	0	578	128	32	377	0	0	0	0	93	415	87
Future Volume (veh/h)	0	578	128	32	377	0	0	0	0	93	415	87
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00				1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	596	117	34	405	0				96	428	80
Peak Hour Factor	0.97	0.97	0.97	0.93	0.93	0.93				0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	3	3	0				3	3	3
Cap, veh/h	0	1862	364	43	2482	0				111	518	101
Arrive On Green	0.00	0.64	0.64	0.03	0.94	0.00				0.21	0.21	0.21
Sat Flow, veh/h	0	3008	571	1767	3618	0				542	2521	493
Grp Volume(v), veh/h	0	360	353	34	405	0				324	0	280
Grp Sat Flow(s),veh/h/ln	0	1763	1723	1767	1763	0				1828	0	1728
Q Serve(g_s), s	0.0	10.0	10.1	2.1	0.9	0.0				18.5	0.0	16.6
Cycle Q Clear(g_c), s	0.0	10.0	10.1	2.1	0.9	0.0				18.5	0.0	16.6
Prop In Lane	0.00		0.33	1.00		0.00				0.30		0.29
Lane Grp Cap(c), veh/h	0	1126	1101	43	2482	0				376	0	355
V/C Ratio(X)	0.00	0.32	0.32	0.79	0.16	0.00				0.86	0.00	0.79
Avail Cap(c_a), veh/h	0	1126	1101	779	2482	0				493	0	466
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.95	0.95	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.8	8.9	52.0	1.1	0.0				41.4	0.0	40.7
Incr Delay (d2), s/veh	0.0	0.7	0.8	10.9	0.1	0.0				9.5	0.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.8	3.8	1.0	0.3	0.0				9.2	0.0	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.6	9.6	62.9	1.2	0.0				51.0	0.0	45.6
LnGrp LOS	A	A	A	E	A	A				D	A	D
Approach Vol, veh/h		713			439						604	
Approach Delay, s/veh		9.6			6.0						48.5	
Approach LOS		A			A						D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	7.0	73.9		27.1		80.9						
Change Period (Y+Rc), s	4.4	4.9		4.9		4.9						
Max Green Setting (Gmax), s	47.6	17.1		29.1		69.1						
Max Q Clear Time (g_c+14), s	14.1	12.1		20.5		2.9						
Green Ext Time (p_c), s	0.0	0.9		1.7		1.1						

### Intersection Summary

HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C

### Notes

User approved pedestrian interval to be less than phase max green.

# HCM 6th Signalized Intersection Summary

## 47: Fairmount Ave & University Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	451	100	67	252	77	115	403	31	98	151	42
Future Volume (veh/h)	112	451	100	67	252	77	115	403	31	98	151	42
Initial Q (Qb), veh	0	5	0	5	5	0	5	10	0	5	10	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.91	1.00		0.82	1.00		0.80
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	117	470	94	72	271	72	124	433	28	103	159	39
Peak Hour Factor	0.96	0.96	0.96	0.93	0.93	0.93	0.93	0.93	0.93	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	142	1410	273	107	1269	320	155	711	42	139	308	59
Arrive On Green	0.16	0.99	0.99	0.05	0.47	0.47	0.03	0.07	0.07	0.07	0.19	0.19
Sat Flow, veh/h	1767	2854	564	1767	2711	698	1767	3314	213	1767	1364	335
Grp Volume(v), veh/h	117	288	276	72	173	170	124	229	232	103	0	198
Grp Sat Flow(s),veh/h/ln	1767	1763	1655	1767	1763	1646	1767	1763	1764	1767	0	1698
Q Serve(g_s), s	6.9	0.2	0.2	4.3	6.3	6.6	7.5	13.6	13.8	6.2	0.0	11.5
Cycle Q Clear(g_c), s	6.9	0.2	0.2	4.3	6.3	6.6	7.5	13.6	13.8	6.2	0.0	11.5
Prop In Lane	1.00		0.34	1.00		0.42	1.00		0.12	1.00		0.20
Lane Grp Cap(c), veh/h	142	866	816	107	821	768	155	376	377	139	0	354
V/C Ratio(X)	0.83	0.33	0.34	0.67	0.21	0.22	0.80	0.61	0.62	0.74	0.00	0.56
Avail Cap(c_a), veh/h	157	875	822	157	826	771	157	540	541	157	0	521
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	0.7	0.7	50.3	17.3	17.4	52.1	46.4	46.5	49.3	0.0	39.5
Incr Delay (d2), s/veh	23.3	1.0	1.1	2.7	0.6	0.7	21.7	1.6	1.7	12.3	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.1	0.1	47.3	0.1	0.1	37.2	3.3	3.3	36.0	0.0	13.1
%ile BackOfQ(50%),veh/ln	3.7	0.5	0.5	3.9	3.0	2.9	6.6	7.6	7.7	5.1	0.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	1.8	1.8	100.2	18.0	18.2	110.9	51.3	51.5	97.6	0.0	54.2
LnGrp LOS	E	A	A	F	B	B	F	D	D	F	A	D
Approach Vol, veh/h		681			415			585			301	
Approach Delay, s/veh		13.2			32.3			64.0			69.1	
Approach LOS		B			C			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	0.0	58.5	13.7	25.8	13.1	55.5	12.2	27.2				
Change Period (Y+Rc), s	4.4	4.9	4.4	4.9	4.4	4.9	4.4	4.9				
Max Green Setting (Gmax), s	0.0	37.1	9.6	33.1	9.6	37.1	9.6	33.1				
Max Q Clear Time (g_c+1/3), s	0.0	2.2	9.5	13.5	8.9	8.6	8.2	15.8				
Green Ext Time (p_c), s	0.0	6.1	0.0	1.2	0.0	2.2	0.0	2.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											40.7	
HCM 6th LOS											D	

# HCM 6th Signalized Intersection Summary

## 48: Euclid Ave & University Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	136	743	94	121	573	40	72	281	164	98	362	93
Future Volume (veh/h)	136	743	94	121	573	40	72	281	164	98	362	93
Initial Q (Qb), veh	0	0	0	5	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.82	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	148	808	91	142	674	41	79	309	158	118	436	100
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	463	1055	119	184	619	38	206	470	240	246	599	137
Arrive On Green	0.26	0.36	0.36	0.10	0.19	0.19	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1767	3160	356	1767	3327	202	862	1130	578	919	1441	330
Grp Volume(v), veh/h	148	451	448	142	357	358	79	0	467	118	0	536
Grp Sat Flow(s),veh/h/ln	1767	1763	1753	1767	1763	1766	862	0	1707	919	0	1771
Q Serve(g_s), s	7.3	23.9	23.9	8.5	20.1	20.1	9.1	0.0	23.8	12.8	0.0	27.4
Cycle Q Clear(g_c), s	7.3	23.9	23.9	8.5	20.1	20.1	36.5	0.0	23.8	36.6	0.0	27.4
Prop In Lane	1.00		0.20	1.00		0.11	1.00		0.34	1.00		0.19
Lane Grp Cap(c), veh/h	463	589	585	184	328	329	206	0	710	246	0	736
V/C Ratio(X)	0.32	0.76	0.77	0.77	1.09	1.09	0.38	0.00	0.66	0.48	0.00	0.73
Avail Cap(c_a), veh/h	463	628	625	223	328	329	328	0	950	376	0	985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	0.85	0.00	0.85	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.1	32.2	32.2	47.7	44.0	44.0	41.7	0.0	25.4	40.1	0.0	26.4
Incr Delay (d2), s/veh	0.1	9.1	9.3	10.2	74.9	76.1	0.8	0.0	0.8	2.0	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	11.9	11.8	6.0	15.5	15.6	2.0	0.0	9.7	3.0	0.0	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	41.3	41.4	81.6	118.9	120.1	42.6	0.0	26.1	42.1	0.0	28.8
LnGrp LOS	C	D	D	F	F	F	D	A	C	D	A	C
Approach Vol, veh/h		1047			857			546			654	
Approach Delay, s/veh		40.1			113.2			28.5			31.2	
Approach LOS		D			F			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	43.4		49.8	33.2	25.0		49.8				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.9	* 4.9		4.9				
Max Green Setting (Gmax), s	13.6	20.1		60.1	13.6	* 20		60.1				
Max Q Clear Time (g_c+110), s	110.5	25.9		38.6	9.3	22.1		38.5				
Green Ext Time (p_c), s	0.1	0.0		6.3	0.1	0.0		3.4				

### Intersection Summary

HCM 6th Ctrl Delay	56.4
HCM 6th LOS	E

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 49: Winona Ave & University Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	792	60	33	752	36	94	59	24	112	87	75
Future Volume (veh/h)	59	792	60	33	752	36	94	59	24	112	87	75
Initial Q (Qb), veh	0	0	0	0	10	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	0.93		0.90	0.95		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	61	825	52	39	885	36	125	79	25	127	99	74
Peak Hour Factor	0.96	0.96	0.96	0.85	0.85	0.85	0.75	0.75	0.75	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	79	1908	120	49	983	34	205	121	33	191	133	89
Arrive On Green	0.04	0.56	0.56	0.03	0.54	0.54	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1767	3353	211	1767	1767	72	576	469	128	535	516	344
Grp Volume(v), veh/h	61	434	443	39	0	921	229	0	0	300	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1802	1767	0	1839	1173	0	0	1396	0	0
Q Serve(g_s), s	3.3	13.8	13.8	2.1	0.0	44.1	0.0	0.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	3.3	13.8	13.8	2.1	0.0	44.1	18.0	0.0	0.0	19.5	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.04	0.55		0.11	0.42		0.25
Lane Grp Cap(c), veh/h	79	1003	1025	49	0	1017	358	0	0	412	0	0
V/C Ratio(X)	0.77	0.43	0.43	0.79	0.00	0.91	0.64	0.00	0.00	0.73	0.00	0.00
Avail Cap(c_a), veh/h	550	1098	1122	550	0	1146	569	0	0	635	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.7	12.1	12.1	47.7	0.0	20.7	33.6	0.0	0.0	34.5	0.0	0.0
Incr Delay (d2), s/veh	5.9	0.3	0.3	9.9	0.0	9.6	0.7	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	5.2	5.3	1.1	0.0	23.9	5.1	0.0	0.0	6.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.5	12.4	12.4	57.6	0.0	37.7	34.3	0.0	0.0	35.4	0.0	0.0
LnGrp LOS	D	B	B	E	A	D	C	A	A	D	A	A
Approach Vol, veh/h		938			960			229			300	
Approach Delay, s/veh		15.1			38.5			34.3			35.4	
Approach LOS		B			D			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	58.9		30.3	8.7	57.3		30.3				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	30.0	60.0		40.0	30.0	60.0		40.0				
Max Q Clear Time (g_c+14), s	14.1	15.8		21.5	5.3	46.1		20.0				
Green Ext Time (p_c), s	0.0	7.1		1.3	0.1	6.3		1.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				28.7								
HCM 6th LOS				C								

# HCM 6th Signalized Intersection Summary

## 50: University Ave & 52nd St

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	783	20	50	598	111	37	37	37	37	50	74
Future Volume (veh/h)	74	783	20	50	598	111	37	37	37	37	50	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	80	851	17	54	650	105	40	40	35	40	54	69
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	102	2456	49	69	2055	332	94	80	56	81	77	84
Arrive On Green	0.06	0.69	0.69	0.04	0.68	0.68	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1767	3535	71	1767	3040	490	404	682	475	317	654	713
Grp Volume(v), veh/h	80	424	444	54	377	378	115	0	0	163	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1843	1767	1763	1767	1561	0	0	1684	0	0
Q Serve(g_s), s	4.6	10.1	10.1	3.1	9.1	9.2	0.0	0.0	0.0	2.5	0.0	0.0
Cycle Q Clear(g_c), s	4.6	10.1	10.1	3.1	9.1	9.2	7.1	0.0	0.0	9.6	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.28	0.35		0.30	0.25		0.42
Lane Grp Cap(c), veh/h	102	1225	1280	69	1192	1195	231	0	0	242	0	0
V/C Ratio(X)	0.78	0.35	0.35	0.78	0.32	0.32	0.50	0.00	0.00	0.67	0.00	0.00
Avail Cap(c_a), veh/h	163	1225	1280	163	1192	1195	547	0	0	588	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	48.4	6.4	6.4	49.5	6.9	6.9	43.5	0.0	0.0	44.6	0.0	0.0
Incr Delay (d2), s/veh	4.9	0.8	0.7	6.9	0.7	0.7	0.6	0.0	0.0	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	3.5	3.6	1.5	3.2	3.2	2.9	0.0	0.0	4.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.2	7.2	7.1	56.4	7.6	7.6	44.1	0.0	0.0	45.8	0.0	0.0
LnGrp LOS	D	A	A	E	A	A	D	A	A	D	A	A
Approach Vol, veh/h		948			809			115			163	
Approach Delay, s/veh		11.0			10.9			44.1			45.8	
Approach LOS		B			B			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	77.1		18.4	10.4	75.2		18.4				
Change Period (Y+Rc), s	4.4	4.9		* 6.1	4.4	4.9		6.1				
Max Green Setting (Gmax), s	9.6	45.1		* 35	9.6	45.1		33.9				
Max Q Clear Time (g_c+1/3), s	11.5	12.1		11.6	6.6	11.2		9.1				
Green Ext Time (p_c), s	0.0	13.1		0.6	0.0	11.3		0.4				

### Intersection Summary

HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 51: University Ave & 54th St

Existing PM  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	460	168	90	369	276	230	408	50	465	756	100
Future Volume (veh/h)	126	460	168	90	369	276	230	408	50	465	756	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	137	500	145	98	401	0	250	443	43	505	822	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	171	769	343	126	679		289	1091	487	601	1132	
Arrive On Green	0.10	0.22	0.22	0.07	0.19	0.00	0.16	0.31	0.31	0.18	0.32	0.00
Sat Flow, veh/h	1767	3526	1572	1767	3526	1572	1767	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	137	500	145	98	401	0	250	443	43	505	822	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1572	1767	1763	1572	1767	1763	1572	1714	1763	1572
Q Serve(g_s), s	6.7	11.3	7.0	4.8	9.1	0.0	12.1	8.7	1.7	12.5	18.1	0.0
Cycle Q Clear(g_c), s	6.7	11.3	7.0	4.8	9.1	0.0	12.1	8.7	1.7	12.5	18.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	769	343	126	679		289	1091	487	601	1132	
V/C Ratio(X)	0.80	0.65	0.42	0.78	0.59		0.86	0.41	0.09	0.84	0.73	
Avail Cap(c_a), veh/h	604	2410	1075	604	2410		604	2410	1075	1172	2410	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.8	31.3	29.5	40.1	32.3	0.0	35.7	23.9	21.5	35.0	26.4	0.0
Incr Delay (d2), s/veh	3.2	1.2	1.1	3.9	0.9	0.0	3.0	0.3	0.1	1.2	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	4.8	2.7	2.1	3.8	0.0	5.3	3.5	0.6	5.1	7.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.0	32.5	30.7	43.9	33.1	0.0	38.8	24.2	21.6	36.2	27.5	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		782			499			736			1327	
Approach Delay, s/veh		33.8			35.3			29.0			30.8	
Approach LOS		C			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.7	24.4	18.8	33.9	12.9	22.2	19.8	32.9				
Change Period (Y+Rc), s	4.4	* 5.3	4.4	5.7	4.4	5.3	4.4	* 5.7				
Max Green Setting (Gmax), s	30.0	* 60	30.0	60.0	30.0	60.0	30.0	* 60				
Max Q Clear Time (g_c+I), s	10.8	13.3	14.1	20.1	8.7	11.1	14.5	10.7				
Green Ext Time (p_c), s	0.1	5.8	0.3	8.1	0.2	2.8	0.9	3.9				

Intersection Summary

HCM 6th Ctrl Delay	31.8
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
 Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	2.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑			↑
Traffic Vol, veh/h	1118	9	159	0	0	291
Future Vol, veh/h	1118	9	159	0	0	291
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	-	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1215	10	173	0	0	316

Major/Minor	Major1	Minor2		
Conflicting Flow All	0	0	608	-
Stage 1	-	-	0	-
Stage 2	-	-	608	-
Critical Hdwy	-	-	6.86	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.86	-
Follow-up Hdwy	-	-	3.53	-
Pot Cap-1 Maneuver	-	-	425	0
Stage 1	-	-	-	0
Stage 2	-	-	503	0
Platoon blocked, %	-	-		
Mov Cap-1 Maneuver	-	-	425	0
Mov Cap-2 Maneuver	-	-	425	0
Stage 1	-	-	-	0
Stage 2	-	-	503	0
























Approach	EB	WB
HCM Control Delay, s	0	19.2
HCM LOS		C

Minor Lane/Major Mvmt	EBT	EBRWBLn1
Capacity (veh/h)	-	- 425
HCM Lane V/C Ratio	-	- 0.407
HCM Control Delay (s)	-	- 19.2
HCM Lane LOS	-	- C
HCM 95th %tile Q(veh)	-	- 1.9



HCM 6th Signalized Intersection Summary  
53: University Ave & College Ave

Existing PM  
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	726	276	171	206	34	310	518	310	206	1210	171
Future Volume (veh/h)	241	726	276	171	206	34	310	518	310	206	1210	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	262	789	235	186	224	32	337	563	266	224	1315	164
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	170	1019	454	170	897	126	170	970	432	240	994	123
Arrive On Green	0.10	0.29	0.29	0.10	0.29	0.29	0.10	0.28	0.28	0.14	0.31	0.31
Sat Flow, veh/h	1767	3526	1572	1767	3102	437	1767	3526	1572	1767	3156	391
Grp Volume(v), veh/h	262	789	235	186	126	130	337	563	266	224	731	748
Grp Sat Flow(s),veh/h/ln	1767	1763	1572	1767	1763	1777	1767	1763	1572	1767	1763	1785
Q Serve(g_s), s	9.6	20.5	12.5	9.6	5.5	5.6	9.6	13.8	14.8	12.5	31.5	31.5
Cycle Q Clear(g_c), s	9.6	20.5	12.5	9.6	5.5	5.6	9.6	13.8	14.8	12.5	31.5	31.5
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	170	1019	454	170	509	513	170	970	432	240	555	562
V/C Ratio(X)	1.54	0.77	0.52	1.10	0.25	0.25	1.99	0.58	0.62	0.93	1.32	1.33
Avail Cap(c_a), veh/h	170	1019	454	170	513	517	170	1015	453	240	555	562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	32.6	29.7	45.2	27.2	27.3	45.2	31.3	31.6	42.7	34.3	34.3
Incr Delay (d2), s/veh	272.1	5.7	4.2	97.2	1.2	1.2	464.3	0.8	2.4	39.3	154.8	160.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.9	9.2	5.1	8.7	2.4	2.5	26.0	5.7	5.7	7.9	36.6	37.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	317.3	38.3	33.9	142.4	28.4	28.5	509.5	32.1	34.0	82.1	189.1	194.8
LnGrp LOS	F	D	C	F	C	C	F	C	C	F	F	F
Approach Vol, veh/h		1286			442			1166			1703	
Approach Delay, s/veh		94.3			76.4			170.5			177.5	
Approach LOS		F			E			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	34.0	14.0	38.0	14.0	34.0	18.0	34.0				
Change Period (Y+Rc), s	4.4	5.1	4.4	6.5	4.4	* 5.1	4.4	* 6.5				
Max Green Setting (Gmax), s	9.6	28.9	9.6	31.5	9.6	* 29	13.6	* 29				
Max Q Clear Time (g_c+I1), s	11.6	22.5	11.6	33.5	11.6	7.6	14.5	16.8				
Green Ext Time (p_c), s	0.0	3.6	0.0	0.0	0.0	1.7	0.0	3.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	142.7											
HCM 6th LOS	F											
<b>Notes</b>												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary  
54: University Ave & Rolando Blvd

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	892	34	17	556	22	59	24	30	45	35	37
Future Volume (veh/h)	46	892	34	17	556	22	59	24	30	45	35	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	48	939	31	18	598	19	68	28	28	52	40	37
Peak Hour Factor	0.95	0.95	0.95	0.93	0.93	0.93	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	61	2522	83	28	2460	78	140	52	40	113	73	54
Arrive On Green	0.03	0.72	0.72	0.02	0.71	0.71	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1767	3481	115	1767	3486	111	722	444	340	536	622	466
Grp Volume(v), veh/h	48	476	494	18	302	315	124	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1833	1767	1763	1834	1506	0	0	1624	0	0
Q Serve(g_s), s	2.7	10.2	10.2	1.0	6.1	6.1	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.7	10.2	10.2	1.0	6.1	6.1	7.8	0.0	0.0	7.4	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.06	0.55		0.23	0.40		0.29
Lane Grp Cap(c), veh/h	61	1277	1328	28	1244	1294	232	0	0	240	0	0
V/C Ratio(X)	0.78	0.37	0.37	0.65	0.24	0.24	0.54	0.00	0.00	0.54	0.00	0.00
Avail Cap(c_a), veh/h	134	1277	1328	134	1244	1294	603	0	0	630	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.9	5.2	5.2	48.9	5.2	5.2	42.3	0.0	0.0	42.2	0.0	0.0
Incr Delay (d2), s/veh	7.9	0.8	0.8	9.0	0.5	0.4	0.7	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.3	3.4	0.5	2.0	2.1	3.0	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	6.0	6.0	58.0	5.7	5.7	43.1	0.0	0.0	42.9	0.0	0.0
LnGrp LOS	E	A	A	E	A	A	D	A	A	D	A	A
Approach Vol, veh/h		1018			635			124			129	
Approach Delay, s/veh		8.4			7.2			43.1			42.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	77.4		16.6	7.9	75.6		16.6				
Change Period (Y+Rc), s	4.4	5.0		4.9	4.4	5.0		4.9				
Max Green Setting (Gmax), s	7.6	41.0		37.1	7.6	41.0		37.1				
Max Q Clear Time (g_c+I), s	13.0	12.2		9.4	4.7	8.1		9.8				
Green Ext Time (p_c), s	0.0	11.9		0.5	0.0	6.9		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											12.6	
HCM 6th LOS											B	

HCM 6th Roundabout  
55: Wightman St & 35th St

Existing PM  
PM Peak Hour

Intersection				
Intersection Delay, s/veh	4.0			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	187	184	26	67
Demand Flow Rate, veh/h	193	189	27	70
Vehicles Circulating, veh/h	53	49	196	145
Vehicles Exiting, veh/h	162	174	50	93
Ped Vol Crossing Leg, #/h	4	1	4	3
Ped Cap Adj	0.999	1.000	0.999	1.000
Approach Delay, s/veh	4.1	4.0	3.5	3.6
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	193	189	27	70
Cap Entry Lane, veh/h	1307	1313	1130	1190
Entry HV Adj Factor	0.968	0.974	0.981	0.962
Flow Entry, veh/h	187	184	26	67
Cap Entry, veh/h	1264	1279	1107	1145
V/C Ratio	0.148	0.144	0.024	0.059
Control Delay, s/veh	4.1	4.0	3.5	3.6
LOS	A	A	A	A
95th %tile Queue, veh	1	1	0	0

# HCM 6th Signalized Intersection Summary

## 56: Wightman St & Central Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	296	307	20	169	11	68	12	22	23	32	13
Future Volume (veh/h)	7	296	307	20	169	11	68	12	22	23	32	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	0.97		0.94	0.97		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	7	312	286	24	199	7	80	14	20	30	42	11
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.85	0.85	0.77	0.77	0.77
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	736	466	428	410	949	33	391	73	65	228	268	56
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1155	874	801	810	1779	63	897	282	251	387	1036	217
Grp Volume(v), veh/h	7	0	598	24	0	206	114	0	0	83	0	0
Grp Sat Flow(s),veh/h/ln	1155	0	1675	810	0	1841	1430	0	0	1641	0	0
Q Serve(g_s), s	0.1	0.0	10.0	0.9	0.0	2.3	0.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	10.0	10.8	0.0	2.3	2.1	0.0	0.0	1.4	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.03	0.70		0.18	0.36		0.13
Lane Grp Cap(c), veh/h	736	0	894	410	0	982	529	0	0	551	0	0
V/C Ratio(X)	0.01	0.00	0.67	0.06	0.00	0.21	0.22	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	1321	0	1743	820	0	1915	1605	0	0	1779	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.3	0.0	6.5	10.4	0.0	4.7	11.3	0.0	0.0	11.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.6	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.0	0.0	2.6	0.1	0.0	0.6	0.7	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.3	0.0	8.1	10.5	0.0	4.9	11.4	0.0	0.0	11.1	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		605			230			114			83	
Approach Delay, s/veh		8.1			5.5			11.4			11.1	
Approach LOS		A			A			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.9		24.5		13.9		24.5				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		40.0		40.0		40.0		40.0				
Max Q Clear Time (g_c+I1), s		4.1		12.0		3.4		12.8				
Green Ext Time (p_c), s		0.5		8.6		0.3		2.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				8.1								
HCM 6th LOS				A								

Intersection												
Intersection Delay, s/veh	10.3											
Intersection LOS	B											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	108	174	33	10	88	31	7	25	6	56	68	104
Future Vol, veh/h	108	174	33	10	88	31	7	25	6	56	68	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	117	189	36	11	96	34	8	27	7	61	74	113
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.6	9.7	8.9	10.6
HCM LOS	B	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	18%	100%	0%	100%	0%	25%
Vol Thru, %	66%	0%	84%	0%	74%	30%
Vol Right, %	16%	0%	16%	0%	26%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	108	207	10	119	228
LT Vol	7	108	0	10	0	56
Through Vol	25	0	174	0	88	68
RT Vol	6	0	33	0	31	104
Lane Flow Rate	41	117	225	11	129	248
Geometry Grp	2	5	5	5	5	2
Degree of Util (X)	0.064	0.193	0.332	0.019	0.201	0.341
Departure Headway (Hd)	5.542	5.933	5.316	6.279	5.588	4.959
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	649	599	668	573	645	719
Service Time	3.55	3.729	3.111	3.983	3.292	3.037
HCM Lane V/C Ratio	0.063	0.195	0.337	0.019	0.2	0.345
HCM Control Delay	8.9	10.2	10.8	9.1	9.7	10.6
HCM Lane LOS	A	B	B	A	A	B
HCM 95th-tile Q	0.2	0.7	1.5	0.1	0.7	1.5

# HCM 6th Signalized Intersection Summary

## 58: Fairmount Ave & Wightman St

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	
Traffic Volume (veh/h)	30	168	38	36	91	51	36	440	31	28	358	11
Future Volume (veh/h)	30	168	38	36	91	51	36	440	31	28	358	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.91	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	187	36	42	107	54	41	506	30	30	385	7
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.87	0.87	0.87	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	42	240	46	61	155	78	52	1486	88	39	786	14
Arrive On Green	0.19	0.19	0.19	0.17	0.17	0.17	0.03	0.44	0.44	0.02	0.43	0.43
Sat Flow, veh/h	226	1281	247	353	899	454	1767	3371	199	1767	1815	33
Grp Volume(v), veh/h	256	0	0	203	0	0	41	264	272	30	0	392
Grp Sat Flow(s),veh/h/ln	1754	0	0	1705	0	0	1767	1763	1807	1767	0	1848
Q Serve(g_s), s	15.0	0.0	0.0	12.1	0.0	0.0	2.5	10.6	10.7	1.8	0.0	16.5
Cycle Q Clear(g_c), s	15.0	0.0	0.0	12.1	0.0	0.0	2.5	10.6	10.7	1.8	0.0	16.5
Prop In Lane	0.13		0.14	0.21		0.27	1.00		0.11	1.00		0.02
Lane Grp Cap(c), veh/h	329	0	0	295	0	0	52	777	797	39	0	801
V/C Ratio(X)	0.78	0.00	0.00	0.69	0.00	0.00	0.79	0.34	0.34	0.77	0.00	0.49
Avail Cap(c_a), veh/h	375	0	0	365	0	0	124	777	797	124	0	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	0.98	0.98	0.98	0.74	0.00	0.74
Uniform Delay (d), s/veh	41.8	0.0	0.0	41.9	0.0	0.0	52.1	19.9	19.9	52.5	0.0	22.0
Incr Delay (d2), s/veh	8.9	0.0	0.0	4.0	0.0	0.0	9.2	1.2	1.1	8.6	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	0.0	5.4	0.0	0.0	1.2	4.6	4.7	0.9	0.0	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.6	0.0	0.0	45.9	0.0	0.0	61.3	21.0	21.0	61.2	0.0	23.6
LnGrp LOS	D	A	A	D	A	A	E	C	C	E	A	C
Approach Vol, veh/h		256			203			577			422	
Approach Delay, s/veh		50.6			45.9			23.9			26.3	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	52.5		25.1	7.6	51.7		23.6				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	7.6	35.1		23.1	7.6	35.1		23.1				
Max Q Clear Time (g_c+1/3), s	13.8	12.7		17.0	4.5	18.5		14.1				
Green Ext Time (p_c), s	0.0	4.5		0.8	0.0	2.9		0.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay											32.3	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary  
59: Euclid Ave & Wightman St

Existing PM  
PM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	82	63	441	416	72
Future Volume (veh/h)	80	82	63	441	416	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.95	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	105	95	71	496	433	65
Peak Hour Factor	0.76	0.76	0.89	0.89	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	164	149	159	977	970	146
Arrive On Green	0.19	0.19	0.62	0.62	0.62	0.62
Sat Flow, veh/h	850	769	132	1580	1569	235
Grp Volume(v), veh/h	201	0	567	0	0	498
Grp Sat Flow(s),veh/h/ln	1628	0	1712	0	0	1804
Q Serve(g_s), s	5.9	0.0	0.0	0.0	0.0	7.6
Cycle Q Clear(g_c), s	5.9	0.0	8.7	0.0	0.0	7.6
Prop In Lane	0.52	0.47	0.13			0.13
Lane Grp Cap(c), veh/h	314	0	1137	0	0	1116
V/C Ratio(X)	0.64	0.00	0.50	0.00	0.00	0.45
Avail Cap(c_a), veh/h	473	0	1137	0	0	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	0.00	0.00	0.56
Uniform Delay (d), s/veh	19.3	0.0	5.5	0.0	0.0	5.2
Incr Delay (d2), s/veh	0.8	0.0	1.6	0.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	2.8	0.0	0.0	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.1	0.0	7.0	0.0	0.0	6.0
LnGrp LOS	C	A	A	A	A	A
Approach Vol, veh/h	201			567	498	
Approach Delay, s/veh	20.1			7.0	6.0	
Approach LOS	C			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		37.1		14.9		37.1
Change Period (Y+Rc), s		4.9		4.9		4.9
Max Green Setting (Gmax), s		27.1		15.1		27.1
Max Q Clear Time (g_c+I1), s		10.7		7.9		9.6
Green Ext Time (p_c), s		3.6		0.2		2.6
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			8.7			
HCM 6th LOS			A			

Notes

User approved volume balancing among the lanes for turning movement.

Intersection			
Intersection Delay, s/veh	5.0		
Intersection LOS	A		
Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	78	112	405
Demand Flow Rate, veh/h	80	115	417
Vehicles Circulating, veh/h	81	66	49
Vehicles Exiting, veh/h	100	400	112
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.4	3.6	5.7
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	80	115	417
Cap Entry Lane, veh/h	1270	1290	1313
Entry HV Adj Factor	0.975	0.971	0.971
Flow Entry, veh/h	78	112	405
Cap Entry, veh/h	1239	1252	1274
V/C Ratio	0.063	0.089	0.318
Control Delay, s/veh	3.4	3.6	5.7
LOS	A	A	A
95th %tile Queue, veh	0	0	1



Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	81	8	7	51	8	2	30	8	36	62	13
Future Vol, veh/h	4	81	8	7	51	8	2	30	8	36	62	13
Conflicting Peds, #/hr	2	0	1	1	0	2	4	0	6	6	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	95	95	95	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	92	9	8	58	9	2	32	8	40	69	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	69	0	0	102	0	0	232	193	104	214	193	69
Stage 1	-	-	-	-	-	-	108	108	-	81	81	-
Stage 2	-	-	-	-	-	-	124	85	-	133	112	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1526	-	-	1484	-	-	721	700	948	741	700	991
Stage 1	-	-	-	-	-	-	895	804	-	925	826	-
Stage 2	-	-	-	-	-	-	878	822	-	868	801	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1523	-	-	1483	-	-	649	692	942	699	692	985
Mov Cap-2 Maneuver	-	-	-	-	-	-	649	692	-	699	692	-
Stage 1	-	-	-	-	-	-	891	801	-	920	819	-
Stage 2	-	-	-	-	-	-	785	815	-	819	798	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.8			10.2			11		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	728	1523	-	-	1483	-	-	719
HCM Lane V/C Ratio	0.058	0.003	-	-	0.005	-	-	0.172
HCM Control Delay (s)	10.2	7.4	0	-	7.4	0	-	11
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.6

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	42	81	47	17	0	0	0	0	72	447	49
Future Vol, veh/h	0	42	81	47	17	0	0	0	0	72	447	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	46	88	51	18	0	0	0	0	78	486	53
Number of Lanes	0	1	0	0	1	0	0	0	0	0	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	9.1	9.3	11.7
HCM LOS	A	A	B

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	73%	24%	0%
Vol Thru, %	34%	27%	76%	82%
Vol Right, %	66%	0%	0%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	123	64	296	273
LT Vol	0	47	72	0
Through Vol	42	17	224	224
RT Vol	81	0	0	49
Lane Flow Rate	134	70	321	296
Geometry Grp	2	2	5	5
Degree of Util (X)	0.184	0.108	0.463	0.406
Departure Headway (Hd)	4.959	5.587	5.188	4.939
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	722	640	694	726
Service Time	3.001	3.637	2.933	2.684
HCM Lane V/C Ratio	0.186	0.109	0.463	0.408
HCM Control Delay	9.1	9.3	12.4	11
HCM Lane LOS	A	A	B	B
HCM 95th-tile Q	0.7	0.4	2.5	2

HCM 6th Signalized Intersection Summary  
63: Landis St & Fairmount Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕		↗	↕	
Traffic Volume (veh/h)	39	46	30	37	29	48	17	420	32	12	365	20
Future Volume (veh/h)	39	46	30	37	29	48	17	420	32	12	365	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	42	50	28	40	32	52	18	457	30	13	397	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	233	100	51	223	64	90	33	1247	82	24	647	28
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.37	0.37	0.01	0.37	0.37
Sat Flow, veh/h	519	775	394	467	498	697	1767	3359	220	1767	1766	76
Grp Volume(v), veh/h	120	0	0	124	0	0	18	239	248	13	0	414
Grp Sat Flow(s),veh/h/ln	1687	0	0	1661	0	0	1767	1763	1816	1767	0	1842
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.3	2.9	2.9	0.2	0.0	5.4
Cycle Q Clear(g_c), s	1.8	0.0	0.0	1.9	0.0	0.0	0.3	2.9	2.9	0.2	0.0	5.4
Prop In Lane	0.35		0.23	0.32		0.42	1.00		0.12	1.00		0.04
Lane Grp Cap(c), veh/h	384	0	0	377	0	0	33	654	674	24	0	675
V/C Ratio(X)	0.31	0.00	0.00	0.33	0.00	0.00	0.55	0.37	0.37	0.54	0.00	0.61
Avail Cap(c_a), veh/h	1784	0	0	1755	0	0	1815	3621	3730	1815	0	3783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.9	0.0	0.0	11.9	0.0	0.0	14.2	6.7	6.7	14.3	0.0	7.6
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	5.2	0.4	0.4	6.7	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.6	0.0	0.0	0.1	0.7	0.7	0.1	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	0.0	12.1	0.0	0.0	19.4	7.1	7.1	21.0	0.0	8.6
LnGrp LOS	B	A	A	B	A	A	B	A	A	C	A	A
Approach Vol, veh/h		120			124			505			427	
Approach Delay, s/veh		12.0			12.1			7.5			9.0	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	15.7		8.7	4.9	15.6		8.7				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	30.0	60.0		30.0	30.0	60.0		30.0				
Max Q Clear Time (g_c+1), s	12.2	4.9		3.8	2.3	7.4		3.9				
Green Ext Time (p_c), s	0.0	3.7		0.4	0.0	3.3		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				9.0								
HCM 6th LOS				A								

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	30	60	63	397	475	61
Future Vol, veh/h	30	60	63	397	475	61
Conflicting Peds, #/hr	7	0	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	92	92	99	99
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	34	67	68	432	480	62



















Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1096	521	552	0	-	0
Stage 1	521	-	-	-	-	-
Stage 2	575	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	235	553	1013	-	-	-
Stage 1	594	-	-	-	-	-
Stage 2	561	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	210	548	1003	-	-	-
Mov Cap-2 Maneuver	210	-	-	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	555	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19	1.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1003	-	357	-	-
HCM Lane V/C Ratio	0.068	-	0.283	-	-
HCM Control Delay (s)	8.9	0	19	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.1	-	-

HCM 6th Signalized Intersection Summary  
65: Fairmount Ave & 43rd St

Existing PM  
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	37	0	40	0	85	0	533	29	84	739	0
Future Volume (veh/h)	43	37	0	40	0	85	0	533	29	84	739	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	0	1856	1856	1856	0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	47	40	0	43	0	81	0	579	27	91	803	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	0	3	3	3	0	3	3	3	3	0
Cap, veh/h	299	211	0	201	48	232	0	1159	54	116	960	0
Arrive On Green	0.23	0.23	0.00	0.23	0.00	0.23	0.00	0.34	0.34	0.07	0.52	0.00
Sat Flow, veh/h	678	924	0	330	208	1014	0	3523	160	1767	1856	0
Grp Volume(v), veh/h	87	0	0	124	0	0	0	297	309	91	803	0
Grp Sat Flow(s),veh/h/ln	1602	0	0	1552	0	0	0	1763	1827	1767	1856	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	5.2	2.0	14.2	0.0
Cycle Q Clear(g_c), s	1.5	0.0	0.0	2.4	0.0	0.0	0.0	5.2	5.2	2.0	14.2	0.0
Prop In Lane	0.54		0.00	0.35		0.65	0.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	510	0	0	480	0	0	0	596	617	116	960	0
V/C Ratio(X)	0.17	0.00	0.00	0.26	0.00	0.00	0.00	0.50	0.50	0.79	0.84	0.00
Avail Cap(c_a), veh/h	1732	0	0	950	0	0	0	2740	2840	1374	1442	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.0	0.0	0.0	12.4	0.0	0.0	0.0	10.2	10.2	17.8	7.9	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.9	0.9	4.4	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.7	0.0	0.0	0.0	1.6	1.6	0.8	3.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.1	0.0	0.0	12.5	0.0	0.0	0.0	11.1	11.0	22.1	9.7	0.0
LnGrp LOS	B	A	A	B	A	A	A	B	B	C	A	A
Approach Vol, veh/h		87			124			606			894	
Approach Delay, s/veh		12.1			12.5			11.1			10.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	6.9	17.9		13.7		24.9		13.7				
Change Period (Y+Rc), s	4.4	4.9		4.9		* 4.9		* 4.9				
Max Green Setting (Gmax), s	30.0	60.0		40.0		* 30		* 21				
Max Q Clear Time (g_c+l1), s	4.0	7.2		3.5		16.2		4.4				
Green Ext Time (p_c), s	0.1	5.8		0.3		3.2		0.2				

Intersection Summary

HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B



















Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM Signalized Intersection Capacity Analysis

## 66: Fairmount Ave & Poplar St

Existing PM  
PM Peak Hour

												
Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	5	31	12	17	16	16	5	29	121	5	600	81
Future Volume (vph)	5	31	12	17	16	16	5	29	121	5	600	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.9	4.9		4.9				5.1	5.1	5.1
Lane Util. Factor			1.00	1.00		1.00				1.00	1.00	1.00
Frt			1.00	0.85		0.93				1.00	1.00	0.85
Flt Protected			0.96	1.00		0.99				0.95	1.00	1.00
Satd. Flow (prot)			1778	1568		1695				1752	1845	1568
Flt Permitted			0.81	1.00		0.91				0.25	1.00	1.00
Satd. Flow (perm)			1501	1568		1568				453	1845	1568
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	34	13	18	17	17	5	32	132	5	652	88
RTOR Reduction (vph)	0	0	0	16	0	28	0	0	0	0	0	8
Lane Group Flow (vph)	0	0	52	2	0	43	0	0	0	137	652	80
Turn Type	Perm	Perm	NA	Perm	Perm	NA			Perm	Perm	NA	Perm
Protected Phases			4			8					2	
Permitted Phases	4	4		4	8				2	2		2
Actuated Green, G (s)			9.3	9.3		9.3				50.7	50.7	50.7
Effective Green, g (s)			9.3	9.3		9.3				50.7	50.7	50.7
Actuated g/C Ratio			0.13	0.13		0.13				0.72	0.72	0.72
Clearance Time (s)			4.9	4.9		4.9				5.1	5.1	5.1
Vehicle Extension (s)			2.0	2.0		2.0				1.0	1.0	1.0
Lane Grp Cap (vph)			199	208		208				328	1336	1135
v/s Ratio Prot											c0.35	
v/s Ratio Perm			c0.03	0.00		0.03				0.30		0.05
v/c Ratio			0.26	0.01		0.21				0.42	0.49	0.07
Uniform Delay, d1			27.3	26.4		27.1				3.8	4.1	2.8
Progression Factor			1.00	1.00		1.00				1.00	1.00	1.00
Incremental Delay, d2			0.3	0.0		0.2				3.9	1.3	0.1
Delay (s)			27.5	26.4		27.2				7.7	5.4	2.9
Level of Service			C	C		C				A	A	A
Approach Delay (s)			27.2			27.2					5.5	
Approach LOS			C			C					A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			6.0			HCM 2000 Level of Service				A		
HCM 2000 Volume to Capacity ratio			0.45									
Actuated Cycle Length (s)			70.0			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			60.6%			ICU Level of Service				B		
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
66: Fairmount Ave & Poplar St

Existing PM  
PM Peak Hour



Movement	SBL	SBT	SBR	SBR2
Lane Configurations				
Traffic Volume (vph)	107	991	163	5
Future Volume (vph)	107	991	163	5
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1	
Lane Util. Factor	1.00	0.95	1.00	
Frt	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	
Satd. Flow (prot)	1752	3505	1568	
Flt Permitted	0.37	1.00	1.00	
Satd. Flow (perm)	681	3505	1568	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	116	1077	177	5
RTOR Reduction (vph)	0	0	8	0
Lane Group Flow (vph)	116	1077	174	0
Turn Type	Perm	NA	Perm	
Protected Phases		2		
Permitted Phases	2		2	
Actuated Green, G (s)	50.7	50.7	50.7	
Effective Green, g (s)	50.7	50.7	50.7	
Actuated g/C Ratio	0.72	0.72	0.72	
Clearance Time (s)	5.1	5.1	5.1	
Vehicle Extension (s)	1.0	1.0	1.0	
Lane Grp Cap (vph)	493	2538	1135	
v/s Ratio Prot		0.31		
v/s Ratio Perm	0.17		0.11	
v/c Ratio	0.24	0.42	0.15	
Uniform Delay, d1	3.2	3.8	3.0	
Progression Factor	1.00	1.00	1.00	
Incremental Delay, d2	1.1	0.5	0.3	
Delay (s)	4.3	4.4	3.3	
Level of Service	A	A	A	
Approach Delay (s)		4.2		
Approach LOS		A		
<b>Intersection Summary</b>				

# HCM 6th Signalized Intersection Summary

## 67: Home Ave & I-805 SB Ramps

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↘	↑↑					↘		↗
Traffic Volume (veh/h)	0	792	1394	697	456	0	0	0	0	182	0	146
Future Volume (veh/h)	0	792	1394	697	456	0	0	0	0	182	0	146
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0				1856	0	1856
Adj Flow Rate, veh/h	0	843	0	766	501	0				217	0	138
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91				0.84	0.84	0.84
Percent Heavy Veh, %	0	3	3	3	3	0				3	0	3
Cap, veh/h	0	1095		584	2479	0				280	0	249
Arrive On Green	0.00	0.31	0.00	0.33	0.70	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3618	1572	1767	3618	0				1767	0	1572
Grp Volume(v), veh/h	0	843	0	766	501	0				217	0	138
Grp Sat Flow(s),veh/h/ln	0	1763	1572	1767	1763	0				1767	0	1572
Q Serve(g_s), s	0.0	16.4	0.0	25.0	3.7	0.0				8.9	0.0	6.1
Cycle Q Clear(g_c), s	0.0	16.4	0.0	25.0	3.7	0.0				8.9	0.0	6.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1095		584	2479	0				280	0	249
V/C Ratio(X)	0.00	0.77		1.31	0.20	0.00				0.78	0.00	0.55
Avail Cap(c_a), veh/h	0	1630		584	3014	0				701	0	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.6	0.0	25.3	3.9	0.0				30.6	0.0	29.4
Incr Delay (d2), s/veh	0.0	1.3	0.0	152.4	0.0	0.0				4.6	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0	0.0	6.4	0.0	34.1	0.9	0.0				4.1	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.0	0.0	177.8	3.9	0.0				35.2	0.0	31.3
LnGrp LOS	A	C		F	A	A				D	A	C
Approach Vol, veh/h		843			1267						355	
Approach Delay, s/veh		25.0			109.0						33.7	
Approach LOS		C			F						C	
Timer - Assigned Phs	1	2			6		8					
Phs Duration (G+Y+Rc), s	29.7	28.9			58.6		17.1					
Change Period (Y+Rc), s	4.7	5.4			5.4		5.1					
Max Green Setting (Gmax), s	25	35.0			64.7		30.0					
Max Q Clear Time (g_c+Q), s	18.4	18.4			5.7		10.9					
Green Ext Time (p_c), s	0.0	5.1			3.5		1.1					

### Intersection Summary

HCM 6th Ctrl Delay	69.4
HCM 6th LOS	E

### Notes

User approved pedestrian interval to be less than phase max green.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.  
 Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



# HCM 6th Signalized Intersection Summary

## 68: I-805 NB Ramps & Home Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↘	↑↑			↕	↗			
Traffic Volume (veh/h)	0	606	124	266	1008	0	152	0	542	0	0	0
Future Volume (veh/h)	0	606	124	266	1008	0	152	0	542	0	0	0
Initial Q (Qb), veh	0	0	0	15	30	0	0	0	15			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	1856	1856	1856	0	1856	1856	1856			
Adj Flow Rate, veh/h	0	666	0	274	1039	0	171	236	328			
Peak Hour Factor	0.91	0.91	0.91	0.97	0.97	0.97	0.89	0.89	0.89			
Percent Heavy Veh, %	0	3	3	3	3	0	3	3	3			
Cap, veh/h	0	951		371	1911	0	230	317	471			
Arrive On Green	0.00	0.28	0.00	0.19	0.54	0.00	0.29	0.29	0.29			
Sat Flow, veh/h	0	3618	1572	1767	3618	0	764	1054	1552			
Grp Volume(v), veh/h	0	666	0	274	1039	0	407	0	328			
Grp Sat Flow(s),veh/h/ln	0	1763	1572	1767	1763	0	1817	0	1552			
Q Serve(g_s), s	0.0	10.5	0.0	9.3	12.0	0.0	12.7	0.0	11.8			
Cycle Q Clear(g_c), s	0.0	10.5	0.0	9.3	12.0	0.0	12.7	0.0	11.8			
Prop In Lane	0.00		1.00	1.00		0.00	0.42		1.00			
Lane Grp Cap(c), veh/h	0	951		371	1911	0	546	0	471			
V/C Ratio(X)	0.00	0.70		0.74	0.54	0.00	0.74	0.00	0.70			
Avail Cap(c_a), veh/h	0	1978		708	1978	0	874	0	747			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(l)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	23.3	0.0	27.3	10.8	0.0	22.0	0.0	23.8			
Incr Delay (d2), s/veh	0.0	1.0	0.0	1.1	0.3	0.0	2.0	0.0	1.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	44.9	3.9	0.0	0.0	0.0	24.1			
%ile BackOfQ(50%),veh/lr0.0	0.0	4.6	0.0	10.2	6.4	0.0	6.0	0.0	9.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	24.2	0.0	73.3	15.0	0.0	24.0	0.0	49.8			
LnGrp LOS		A	C	E	B	A	C	A	D			
Approach Vol, veh/h		666			1313				735			
Approach Delay, s/veh		24.2			27.1				35.5			
Approach LOS		C			C				D			
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	6.2	22.8		23.4		39.0						
Change Period (Y+Rc), s	4.7	5.4		5.1		5.4						
Max Green Setting (Gmax), s	25	35.0		30.0		35.0						
Max Q Clear Time (g_c+fl), s	11.3	12.5		14.7		14.0						
Green Ext Time (p_c), s	0.3	4.3		3.6		7.2						

### Intersection Summary

HCM 6th Ctrl Delay	28.7
HCM 6th LOS	C

### Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

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Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
69: Home Ave & Fairmount Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	463	591	180	81	514	48	88	150	68	67	344	613
Future Volume (veh/h)	463	591	180	81	514	48	88	150	68	67	344	613
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	514	657	178	96	612	51	105	179	69	73	374	530
Peak Hour Factor	0.90	0.90	0.90	0.84	0.84	0.84	0.84	0.84	0.84	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	407	1082	293	119	768	64	129	819	304	93	567	478
Arrive On Green	0.23	0.40	0.40	0.07	0.23	0.23	0.07	0.33	0.33	0.05	0.31	0.31
Sat Flow, veh/h	1767	2729	739	1767	3289	274	1767	2512	933	1767	1856	1563
Grp Volume(v), veh/h	514	424	411	96	328	335	105	124	124	73	374	530
Grp Sat Flow(s),veh/h/ln	1767	1763	1705	1767	1763	1800	1767	1763	1682	1767	1856	1563
Q Serve(g_s), s	30.0	24.9	25.0	7.0	22.8	22.9	7.6	6.6	7.0	5.3	22.8	39.8
Cycle Q Clear(g_c), s	30.0	24.9	25.0	7.0	22.8	22.9	7.6	6.6	7.0	5.3	22.8	39.8
Prop In Lane	1.00		0.43	1.00		0.15	1.00		0.55	1.00		1.00
Lane Grp Cap(c), veh/h	407	699	676	119	412	420	129	575	548	93	567	478
V/C Ratio(X)	1.26	0.61	0.61	0.80	0.80	0.80	0.81	0.22	0.23	0.78	0.66	1.11
Avail Cap(c_a), veh/h	407	699	676	407	677	691	407	575	548	407	567	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	31.2	31.3	59.9	47.0	47.0	59.5	31.8	31.9	61.0	39.3	45.2
Incr Delay (d2), s/veh	136.6	2.0	2.1	4.7	4.8	4.8	4.6	0.3	0.3	5.3	3.3	74.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	28.4	10.7	10.4	3.2	10.4	10.6	3.6	2.9	2.9	2.5	10.8	25.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	186.8	33.3	33.4	64.6	51.8	51.8	64.1	32.1	32.3	66.3	42.7	119.7
LnGrp LOS	F	C	C	E	D	D	E	C	C	E	D	F
Approach Vol, veh/h		1349			759			353			977	
Approach Delay, s/veh		91.8			53.4			41.7			86.2	
Approach LOS		F			D			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.2	56.9	13.9	46.2	34.4	35.7	11.3	48.9				
Change Period (Y+Rc), s	4.4	* 5.3	4.4	6.4	4.4	5.3	4.4	* 6.4				
Max Green Setting (Gmax), s	30.0	* 50	30.0	39.8	30.0	50.0	30.0	* 40				
Max Q Clear Time (g_c+19.0), s	19.0	27.0	9.6	41.8	32.0	24.9	7.3	9.0				
Green Ext Time (p_c), s	0.1	8.9	0.1	0.0	0.0	5.6	0.1	2.1				

Intersection Summary

HCM 6th Ctrl Delay	76.6
HCM 6th LOS	E

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
70: Home Ave & Euclid Ave

Existing PM  
PM Peak Hour



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	172	178	344	253	277	409
Future Volume (veh/h)	172	178	344	253	277	409
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	212	171	391	231	301	445
Peak Hour Factor	0.81	0.81	0.88	0.88	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	292	260	630	530	368	1180
Arrive On Green	0.17	0.17	0.34	0.34	0.21	0.64
Sat Flow, veh/h	1767	1572	1856	1563	1767	1856
Grp Volume(v), veh/h	212	171	391	231	301	445
Grp Sat Flow(s),veh/h/ln	1767	1572	1856	1563	1767	1856
Q Serve(g_s), s	5.7	5.1	8.8	5.7	8.1	5.7
Cycle Q Clear(g_c), s	5.7	5.1	8.8	5.7	8.1	5.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	292	260	630	530	368	1180
V/C Ratio(X)	0.73	0.66	0.62	0.44	0.82	0.38
Avail Cap(c_a), veh/h	1065	948	1864	1570	1065	1864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	19.5	13.8	12.8	18.8	4.3
Incr Delay (d2), s/veh	1.3	1.1	1.7	0.9	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	1.8	3.2	1.7	3.2	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.0	20.5	15.4	13.7	20.5	4.6
LnGrp LOS	C	C	B	B	C	A
Approach Vol, veh/h	383		622			746
Approach Delay, s/veh	20.8		14.8			11.0
Approach LOS	C		B			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	4.8	22.4			37.2	12.6
Change Period (Y+Rc), s	4.4	* 5.5			5.5	4.4
Max Green Setting (Gmax), s	30.0	* 50			50.0	30.0
Max Q Clear Time (g_c+110, s)	11.0	10.8			7.7	7.7
Green Ext Time (p_c), s	0.4	5.9			3.6	0.6

Intersection Summary

HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

**Intersection**

Intersection Delay, s/veh 14.4  
Intersection LOS B




















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	164	204	259	170	28
Future Vol, veh/h	24	164	204	259	170	28
Peak Hour Factor	0.84	0.84	0.95	0.95	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	29	195	215	273	185	30
Number of Lanes	1	1	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	2	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	10.7	17.9	10.5
HCM LOS	B	C	B

Lane	NBLn1	EBLn1	EBLn2	SBLn1
Vol Left, %	44%	100%	0%	0%
Vol Thru, %	56%	0%	0%	86%
Vol Right, %	0%	0%	100%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	463	24	164	198
LT Vol	204	24	0	0
Through Vol	259	0	0	170
RT Vol	0	0	164	28
Lane Flow Rate	487	29	195	215
Geometry Grp	2	5	5	2
Degree of Util (X)	0.678	0.054	0.304	0.309
Departure Headway (Hd)	5.011	6.821	5.603	5.173
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	726	526	642	695
Service Time	3.011	4.553	3.335	3.2
HCM Lane V/C Ratio	0.671	0.055	0.304	0.309
HCM Control Delay	17.9	9.9	10.8	10.5
HCM Lane LOS	C	A	B	B
HCM 95th-tile Q	5.3	0.2	1.3	1.3

HCM Signalized Intersection Capacity Analysis  
72: Federal Blvd & Home Ave

Existing PM  
PM Peak Hour

												
Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	29	15	1	37	1	48	12	73	9	22	653	277
Future Volume (vph)	29	15	1	37	1	48	12	73	9	22	653	277
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7	6.1				5.7	6.1			5.7	7.0	
Lane Util. Factor	1.00	1.00				1.00	1.00			1.00	0.95	
Frbp, ped/bikes	1.00	1.00				1.00	1.00			1.00	0.99	
Flpb, ped/bikes	1.00	1.00				1.00	1.00			1.00	1.00	
Frt	1.00	0.89				1.00	0.87			1.00	0.96	
Flt Protected	0.95	1.00				0.95	1.00			0.95	1.00	
Satd. Flow (prot)	1752	1645				1752	1608			1752	3328	
Flt Permitted	0.95	1.00				0.95	1.00			0.95	1.00	
Satd. Flow (perm)	1752	1645				1752	1608			1752	3328	
Peak-hour factor, PHF	0.64	0.64	0.64	0.64	0.88	0.88	0.88	0.88	0.90	0.90	0.90	0.90
Adj. Flow (vph)	45	23	2	58	1	55	14	83	10	24	726	308
RTOR Reduction (vph)	0	50	0	0	0	0	71	0	0	0	28	0
Lane Group Flow (vph)	45	33	0	0	0	56	26	0	0	34	1006	0
Confl. Bikes (#/hr)												1
Turn Type	Prot	NA			Prot	Prot	NA		Prot	Prot	NA	
Protected Phases	7	4			3	3	8		5	5	2	
Permitted Phases												
Actuated Green, G (s)	4.4	12.0				6.0	13.6			4.0	42.5	
Effective Green, g (s)	4.4	12.0				6.0	13.6			4.0	42.5	
Actuated g/C Ratio	0.05	0.13				0.07	0.15			0.04	0.46	
Clearance Time (s)	5.7	6.1				5.7	6.1			5.7	7.0	
Vehicle Extension (s)	2.0	2.0				2.0	2.0			2.0	6.0	
Lane Grp Cap (vph)	84	215				114	239			76	1545	
v/s Ratio Prot	0.03	c0.02				c0.03	0.02			0.02	c0.30	
v/s Ratio Perm												
v/c Ratio	0.54	0.15				0.49	0.11			0.45	0.65	
Uniform Delay, d1	42.6	35.2				41.3	33.7			42.7	18.8	
Progression Factor	1.00	1.00				1.00	1.00			1.00	1.00	
Incremental Delay, d2	3.3	0.1				1.2	0.1			1.5	1.6	
Delay (s)	45.8	35.4				42.5	33.8			44.2	20.4	
Level of Service	D	D				D	C			D	C	
Approach Delay (s)		39.0					37.0				21.2	
Approach LOS		D					D				C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			22.7			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.54									
Actuated Cycle Length (s)			91.5			Sum of lost time (s)			24.5			
Intersection Capacity Utilization			56.1%			ICU Level of Service			B			
Analysis Period (min)			15									
c	Critical Lane Group											

HCM Signalized Intersection Capacity Analysis  
72: Federal Blvd & Home Ave

Existing PM  
PM Peak Hour



Movement	SBL	SBT	SBR	SBR2
Lane Configurations	↙	↑↑		
Traffic Volume (vph)	65	1	466	24
Future Volume (vph)	65	1	466	24
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	5.7	7.0		
Lane Util. Factor	1.00	0.95		
Frbp, ped/bikes	1.00	0.98		
Flpb, ped/bikes	1.00	1.00		
Frt	1.00	0.85		
Flt Protected	0.95	1.00		
Satd. Flow (prot)	1752	2916		
Flt Permitted	0.95	1.00		
Satd. Flow (perm)	1752	2916		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95
Adj. Flow (vph)	68	1	491	25
RTOR Reduction (vph)	0	2	0	0
Lane Group Flow (vph)	68	515	0	0
Confl. Bikes (#/hr)			1	1
Turn Type	Prot	NA		
Protected Phases	1	6		
Permitted Phases				
Actuated Green, G (s)	6.5	45.0		
Effective Green, g (s)	6.5	45.0		
Actuated g/C Ratio	0.07	0.49		
Clearance Time (s)	5.7	7.0		
Vehicle Extension (s)	2.0	6.0		
Lane Grp Cap (vph)	124	1434		
v/s Ratio Prot	c0.04	0.18		
v/s Ratio Perm				
v/c Ratio	0.55	0.36		
Uniform Delay, d1	41.1	14.3		
Progression Factor	1.00	1.00		
Incremental Delay, d2	2.6	0.4		
Delay (s)	43.7	14.8		
Level of Service	D	B		
Approach Delay (s)		18.1		
Approach LOS		B		
<b>Intersection Summary</b>				

HCM 6th Signalized Intersection Summary  
73: Federal Blvd & 47th St

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	34	153	177	198	78	127	30	167	150	127	360	38
Future Volume (veh/h)	34	153	177	198	78	127	30	167	150	127	360	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.95	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	40	182	187	213	84	121	36	199	161	138	391	36
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.84	0.84	0.84	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	56	239	245	262	710	620	52	346	261	177	835	76
Arrive On Green	0.03	0.29	0.29	0.15	0.40	0.40	0.03	0.18	0.18	0.10	0.26	0.26
Sat Flow, veh/h	1767	833	856	1767	1763	1539	1767	1872	1412	1767	3262	299
Grp Volume(v), veh/h	40	0	369	213	84	121	36	187	173	138	210	217
Grp Sat Flow(s),veh/h/ln	1767	0	1689	1767	1763	1539	1767	1763	1521	1767	1763	1798
Q Serve(g_s), s	1.5	0.0	13.2	7.7	2.0	3.4	1.3	6.4	7.0	5.1	6.7	6.8
Cycle Q Clear(g_c), s	1.5	0.0	13.2	7.7	2.0	3.4	1.3	6.4	7.0	5.1	6.7	6.8
Prop In Lane	1.00		0.51	1.00		1.00	1.00		0.93	1.00		0.17
Lane Grp Cap(c), veh/h	56	0	484	262	710	620	52	326	281	177	451	460
V/C Ratio(X)	0.72	0.00	0.76	0.81	0.12	0.20	0.70	0.57	0.62	0.78	0.47	0.47
Avail Cap(c_a), veh/h	799	0	1528	799	1595	1392	799	1063	918	799	1063	1085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	0.0	21.6	27.4	12.4	12.8	31.9	24.6	24.9	29.1	20.8	20.9
Incr Delay (d2), s/veh	6.4	0.0	3.0	2.4	0.1	0.2	6.1	1.7	2.3	2.8	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	5.2	3.2	0.7	1.1	0.6	2.6	2.5	2.2	2.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.2	0.0	24.6	29.7	12.5	13.0	38.0	26.3	27.2	31.9	22.0	22.0
LnGrp LOS	D	A	C	C	B	B	D	C	C	C	C	C
Approach Vol, veh/h		409			418			396			565	
Approach Delay, s/veh		26.0			21.4			27.7			24.4	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.2	23.9	6.3	21.9	6.5	31.6	11.1	17.2				
Change Period (Y+Rc), s	4.4	4.9	4.4	4.9	4.4	4.9	4.4	4.9				
Max Green Setting (Gmax), s	30.0	60.0	30.0	40.0	30.0	60.0	30.0	40.0				
Max Q Clear Time (g_c+1), s	19.7	15.2	3.3	8.8	3.5	5.4	7.1	9.0				
Green Ext Time (p_c), s	0.3	3.2	0.0	3.9	0.0	1.4	0.2	2.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				24.8								
HCM 6th LOS				C								



HCM 6th Signalized Intersection Summary  
74: Federal Blvd & Euclid Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↘		↖↗	↖↗	↖	↖	↖↗	↖	↖	↖↗	↖
Traffic Volume (veh/h)	174	126	75	202	164	91	106	776	73	91	926	175
Future Volume (veh/h)	174	126	75	202	164	91	106	776	73	91	926	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	183	133	68	238	193	83	112	817	61	100	1018	154
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.95	0.95	0.95	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	270	203	104	330	688	299	144	1508	658	129	1479	651
Arrive On Green	0.08	0.18	0.18	0.10	0.20	0.20	0.08	0.43	0.43	0.07	0.42	0.42
Sat Flow, veh/h	3428	1145	586	3428	3526	1534	1767	3526	1539	1767	3526	1552
Grp Volume(v), veh/h	183	0	201	238	193	83	112	817	61	100	1018	154
Grp Sat Flow(s),veh/h/ln	1714	0	1731	1714	1763	1534	1767	1763	1539	1767	1763	1552
Q Serve(g_s), s	4.3	0.0	8.9	5.6	3.8	3.8	5.1	14.2	1.9	4.6	19.4	5.3
Cycle Q Clear(g_c), s	4.3	0.0	8.9	5.6	3.8	3.8	5.1	14.2	1.9	4.6	19.4	5.3
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	0	307	330	688	299	144	1508	658	129	1479	651
V/C Ratio(X)	0.68	0.00	0.65	0.72	0.28	0.28	0.78	0.54	0.09	0.78	0.69	0.24
Avail Cap(c_a), veh/h	1247	0	839	1247	1710	744	643	2565	1120	643	2565	1129
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	31.6	36.2	28.3	28.2	37.2	17.6	14.1	37.6	19.5	15.4
Incr Delay (d2), s/veh	1.1	0.0	2.6	1.1	0.2	0.6	3.5	0.4	0.1	3.7	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	3.8	2.3	1.6	1.4	2.3	5.4	0.6	2.1	7.4	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	0.0	34.2	37.3	28.5	28.8	40.6	18.0	14.1	41.3	20.3	15.7
LnGrp LOS	D	A	C	D	C	C	D	B	B	D	C	B
Approach Vol, veh/h		384		514		990		1272				
Approach Delay, s/veh		36.1		32.6		20.3		21.4				
Approach LOS		D		C		C		C				
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	40.4	40.2	12.3	19.5	11.1	39.5	10.9	21.0				
Change Period (Y+Rc), s	4.4	4.9	4.4	4.9	4.4	4.9	4.4	4.9				
Max Green Setting (Gmax), s	30.0	60.0	30.0	40.0	30.0	60.0	30.0	40.0				
Max Q Clear Time (g_c+10), s	16.6	16.2	7.6	10.9	7.1	21.4	6.3	5.8				
Green Ext Time (p_c), s	0.1	9.5	0.4	1.3	0.1	13.2	0.3	1.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			24.7									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary  
75: Euclid Ave & 54th St

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	0	18	866	12	1	0	207	0	0	239	29
Future Volume (veh/h)	31	0	18	866	12	1	0	207	0	0	239	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	0	1856	1856	1856	1856	0	1856	0	0	1856	1856
Adj Flow Rate, veh/h	41	0	17	931	0	0	0	223	0	0	288	29
Peak Hour Factor	0.75	0.75	0.75	0.94	0.94	0.94	0.93	0.93	0.93	0.83	0.83	0.83
Percent Heavy Veh, %	3	0	3	3	3	3	0	3	0	0	3	3
Cap, veh/h	0	0	0	1337	702	0	0	1089	0	0	998	100
Arrive On Green	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.31	0.00	0.00	0.31	0.31
Sat Flow, veh/h		0		3534	1856	0	0	3711	0	0	3326	323
Grp Volume(v), veh/h		0.0		931	0	0	0	223	0	0	156	161
Grp Sat Flow(s),veh/h/ln				1767	1856	0	0	1763	0	0	1763	1793
Q Serve(g_s), s				7.5	0.0	0.0	0.0	1.6	0.0	0.0	2.3	2.3
Cycle Q Clear(g_c), s				7.5	0.0	0.0	0.0	1.6	0.0	0.0	2.3	2.3
Prop In Lane				1.00		0.00	0.00		0.00	0.00		0.18
Lane Grp Cap(c), veh/h				1337	702	0	0	1089	0	0	544	554
V/C Ratio(X)				0.70	0.00	0.00	0.00	0.20	0.00	0.00	0.29	0.29
Avail Cap(c_a), veh/h				6259	3286	0	0	4162	0	0	2081	2117
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				8.9	0.0	0.0	0.0	8.6	0.0	0.0	8.9	8.9
Incr Delay (d2), s/veh				0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	0.0	0.0	0.4	0.0	0.0	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				9.4	0.0	0.0	0.0	8.7	0.0	0.0	9.1	9.1
LnGrp LOS				A	A	A	A	A	A	A	A	A
Approach Vol, veh/h					931			223			317	
Approach Delay, s/veh					9.4			8.7			9.1	
Approach LOS					A			A			A	
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		15.8				15.8		18.1				
Change Period (Y+Rc), s		* 5.3				5.3		5.3				
Max Green Setting (Gmax), s		* 40				40.0		60.0				
Max Q Clear Time (g_c+I1), s		3.6				4.3		9.5				
Green Ext Time (p_c), s		1.2				1.5		3.1				

Intersection Summary

HCM 6th Ctrl Delay	9.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.  
\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
76: College Grove Dr & 54th St

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↗	↖	↗	↖	↕		↖	↕	↗
Traffic Volume (veh/h)	37	81	27	111	83	261	18	527	127	215	874	38
Future Volume (veh/h)	37	81	27	111	83	261	18	527	127	215	874	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	42	92	25	117	124	248	19	561	119	222	901	34
Peak Hour Factor	0.88	0.88	0.88	0.83	0.83	0.83	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	50	110	30	356	374	311	28	1187	251	157	1708	748
Arrive On Green	0.11	0.11	0.11	0.20	0.20	0.20	0.02	0.41	0.41	0.09	0.48	0.48
Sat Flow, veh/h	467	1023	278	1767	1856	1540	1767	2884	609	1767	3526	1545
Grp Volume(v), veh/h	159	0	0	117	124	248	19	342	338	222	901	34
Grp Sat Flow(s),veh/h/ln	1769	0	0	1767	1856	1540	1767	1763	1731	1767	1763	1545
Q Serve(g_s), s	9.5	0.0	0.0	6.1	6.2	16.6	1.2	15.3	15.4	9.6	19.1	1.3
Cycle Q Clear(g_c), s	9.5	0.0	0.0	6.1	6.2	16.6	1.2	15.3	15.4	9.6	19.1	1.3
Prop In Lane	0.26		0.16	1.00		1.00	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	189	0	0	356	374	311	28	726	712	157	1708	748
V/C Ratio(X)	0.84	0.00	0.00	0.33	0.33	0.80	0.67	0.47	0.47	1.41	0.53	0.05
Avail Cap(c_a), veh/h	215	0	0	493	517	429	157	726	712	157	1708	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	47.3	0.0	0.0	36.9	36.9	41.0	52.8	23.2	23.2	49.2	19.3	14.7
Incr Delay (d2), s/veh	23.3	0.0	0.0	0.4	0.4	6.5	9.6	2.2	2.3	215.7	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	5.4	0.0	0.0	2.7	2.8	6.8	0.6	6.6	6.6	13.5	7.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.6	0.0	0.0	37.3	37.3	47.5	62.5	25.4	25.5	264.9	20.3	14.8
LnGrp LOS	E	A	A	D	D	D	E	C	C	F	C	B
Approach Vol, veh/h		159			489			699			1157	
Approach Delay, s/veh		70.6			42.5			26.4			67.1	
Approach LOS		E			D			C			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.0	49.9		16.5	6.1	57.7		27.7				
Change Period (Y+Rc), s	4.4	5.4		4.9	4.4	5.4		5.9				
Max Green Setting (Gmax), s	30.6	34.6		13.1	9.6	34.6		30.1				
Max Q Clear Time (g_c+fl), s	11.6	17.4		11.5	3.2	21.1		18.6				
Green Ext Time (p_c), s	0.0	6.8		0.1	0.0	7.5		1.3				

Intersection Summary

HCM 6th Ctrl Delay	51.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary  
77: 54th St & Redwood St

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕	↙	↙	↕	↙
Traffic Volume (veh/h)	28	8	43	148	7	92	32	749	105	99	936	31
Future Volume (veh/h)	28	8	43	148	7	92	32	749	105	99	936	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	30	9	42	161	8	89	35	814	92	108	1017	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	138	54	157	235	10	100	44	2066	922	134	2246	1002
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.59	0.59	0.08	0.64	0.64
Sat Flow, veh/h	472	275	804	922	51	513	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	81	0	0	258	0	0	35	814	92	108	1017	23
Grp Sat Flow(s),veh/h/ln	1551	0	0	1486	0	0	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	0.0	0.0	0.0	13.4	0.0	0.0	2.1	13.2	2.7	6.4	15.6	0.6
Cycle Q Clear(g_c), s	4.4	0.0	0.0	17.8	0.0	0.0	2.1	13.2	2.7	6.4	15.6	0.6
Prop In Lane	0.37		0.52	0.62		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	348	0	0	344	0	0	44	2066	922	134	2246	1002
V/C Ratio(X)	0.23	0.00	0.00	0.75	0.00	0.00	0.80	0.39	0.10	0.81	0.45	0.02
Avail Cap(c_a), veh/h	494	0	0	485	0	0	160	2066	922	160	2246	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	0.74	0.74	0.74	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	0.0	0.0	41.3	0.0	0.0	51.4	11.8	9.6	48.2	9.8	7.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.1	0.0	0.0	8.7	0.4	0.2	18.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	6.8	0.0	0.0	1.0	4.8	0.9	3.4	5.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	0.0	0.0	43.4	0.0	0.0	60.1	12.2	9.8	66.7	10.5	7.1
LnGrp LOS	D	A	A	D	A	A	E	B	A	E	B	A
Approach Vol, veh/h		81		258			941			1148		
Approach Delay, s/veh		36.2		43.4			13.8			15.7		
Approach LOS		D		D			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.4	68.0		25.5	7.0	73.4		25.5				
Change Period (Y+Rc), s	4.4	* 5.9		4.9	4.4	5.9		4.9				
Max Green Setting (Gmax), s	2.6	* 51		31.1	9.6	50.1		31.1				
Max Q Clear Time (g_c+1/3), s	1.4	15.2		6.4	4.1	17.6		19.8				
Green Ext Time (p_c), s	0.0	13.6		0.3	0.0	16.1		0.8				

Intersection Summary

HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 6th Signalized Intersection Summary

## 78: Streamview Dr & 54th St

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	10	10	10	35	0	70	0	799	70	139	940	0
Future Volume (veh/h)	10	10	10	35	0	70	0	799	70	139	940	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	11	11	11	38	0	76	0	868	65	151	1022	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	52	36	342	71	0	342	2	1755	131	177	2360	0
Arrive On Green	0.22	0.22	0.22	0.22	0.00	0.22	0.00	0.53	0.53	0.10	0.67	0.00
Sat Flow, veh/h	5	166	1572	13	0	1572	1767	3325	249	1767	3618	0
Grp Volume(v), veh/h	22	0	11	38	0	76	0	460	473	151	1022	0
Grp Sat Flow(s),veh/h/ln	170	0	1572	13	0	1572	1767	1763	1811	1767	1763	0
Q Serve(g_s), s	0.1	0.0	0.6	0.2	0.0	4.2	0.0	17.7	17.7	8.9	14.3	0.0
Cycle Q Clear(g_c), s	23.0	0.0	0.6	23.0	0.0	4.2	0.0	17.7	17.7	8.9	14.3	0.0
Prop In Lane	0.50		1.00	1.00		1.00	1.00		0.14	1.00		0.00
Lane Grp Cap(c), veh/h	88	0	342	71	0	342	2	930	956	177	2360	0
V/C Ratio(X)	0.25	0.00	0.03	0.54	0.00	0.22	0.00	0.49	0.49	0.85	0.43	0.00
Avail Cap(c_a), veh/h	89	0	343	71	0	343	177	930	956	177	2360	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.9	0.0	32.7	53.0	0.0	34.1	0.0	16.0	16.0	46.9	8.2	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	7.6	0.0	0.3	0.0	1.9	1.8	30.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.5	0.0	0.2	1.2	0.0	1.7	0.0	7.1	7.2	5.3	5.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	0.0	32.7	60.6	0.0	34.4	0.0	17.9	17.8	77.0	8.7	0.0
LnGrp LOS	D	A	C	E	A	C	A	B	B	E	A	A
Approach Vol, veh/h		33			114			933			1173	
Approach Delay, s/veh		35.2			43.1			17.8			17.5	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.0	62.0		29.0	0.0	77.0		29.0				
Change Period (Y+Rc), s	4.4	6.1		5.9	4.4	* 6.1		5.9				
Max Green Setting (Gmax), s	10.6	55.9		23.1	10.6	* 56		23.1				
Max Q Clear Time (g_c+110), s	19.7	19.7		25.0	0.0	16.3		25.0				
Green Ext Time (p_c), s	0.0	7.4		0.0	0.0	10.1		0.0				

### Intersection Summary

HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

### Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↕			↕
Traffic Vol, veh/h	157	11	604	232	4	940
Future Vol, veh/h	157	11	604	232	4	940
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	87	87	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	165	12	694	267	4	1022

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1348	483	0	0	962
Stage 1	829	-	-	-	-
Stage 2	519	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16
Critical Hdwy Stg 1	5.86	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23
Pot Cap-1 Maneuver	~ 141	527	-	-	705
Stage 1	386	-	-	-	-
Stage 2	559	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	~ 139	526	-	-	704
Mov Cap-2 Maneuver	268	-	-	-	-
Stage 1	386	-	-	-	-
Stage 2	552	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	36.2	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	268	526	704
HCM Lane V/C Ratio	-	-	0.617	0.022	0.006
HCM Control Delay (s)	-	-	37.9	12	10.1
HCM Lane LOS	-	-	E	B	B
HCM 95th %tile Q(veh)	-	-	3.7	0.1	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection				
Intersection Delay, s/veh	4.1			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	117	249	33	15
Demand Flow Rate, veh/h	120	257	33	15
Vehicles Circulating, veh/h	80	39	88	241
Vehicles Exiting, veh/h	176	82	112	55
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.7	4.4	3.1	3.5
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	120	257	33	15
Cap Entry Lane, veh/h	1272	1326	1261	1079
Entry HV Adj Factor	0.975	0.970	0.991	0.986
Flow Entry, veh/h	117	249	33	15
Cap Entry, veh/h	1240	1287	1250	1064
V/C Ratio	0.094	0.194	0.026	0.014
Control Delay, s/veh	3.7	4.4	3.1	3.5
LOS	A	A	A	A
95th %tile Queue, veh	0	1	0	0

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	79	3	2	72	155	84
Future Vol, veh/h	79	3	2	72	155	84
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	94	4	2	86	178	97

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	318	227	275	0	-	0
Stage 1	227	-	-	-	-	-
Stage 2	91	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	673	810	1282	-	-	-
Stage 1	808	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	672	810	1282	-	-	-
Mov Cap-2 Maneuver	672	-	-	-	-	-
Stage 1	806	-	-	-	-	-
Stage 2	930	-	-	-	-	-























Approach	EB	NB	SB
HCM Control Delay, s	11.2	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1282	-	676	-	-
HCM Lane V/C Ratio	0.002	-	0.144	-	-
HCM Control Delay (s)	7.8	0	11.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-



HCM 6th Signalized Intersection Summary  
82: College Ave & Streamview Dr

Existing PM  
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	34	132	66	35	34	137	857	80	64	1038	65
Future Volume (veh/h)	49	34	132	66	35	34	137	857	80	64	1038	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.99		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	53	37	142	70	37	36	149	932	87	71	1153	72
Peak Hour Factor	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	265	65	248	168	169	165	175	1214	526	597	2081	906
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.10	0.34	0.34	0.34	0.59	0.59
Sat Flow, veh/h	1290	325	1248	1179	853	829	1767	3526	1526	1767	3526	1535
Grp Volume(v), veh/h	53	0	179	70	0	73	149	932	87	71	1153	72
Grp Sat Flow(s),veh/h/ln	1290	0	1573	1179	0	1682	1767	1763	1526	1767	1763	1535
Q Serve(g_s), s	4.7	0.0	13.4	7.4	0.0	4.7	10.8	30.6	5.2	3.6	25.9	2.6
Cycle Q Clear(g_c), s	9.4	0.0	13.4	20.8	0.0	4.7	10.8	30.6	5.2	3.6	25.9	2.6
Prop In Lane	1.00		0.79	1.00		0.49	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	0	312	168	0	334	175	1214	526	597	2081	906
V/C Ratio(X)	0.20	0.00	0.57	0.42	0.00	0.22	0.85	0.77	0.17	0.12	0.55	0.08
Avail Cap(c_a), veh/h	367	0	437	261	0	467	321	1782	771	597	2081	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	0.0	47.1	56.5	0.0	43.6	57.6	38.0	29.6	29.7	16.2	11.5
Incr Delay (d2), s/veh	0.4	0.0	1.7	1.6	0.0	0.3	4.5	4.7	0.7	0.0	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	5.4	2.3	0.0	2.0	5.0	13.7	2.0	1.5	10.1	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	0.0	48.8	58.1	0.0	44.0	62.1	42.7	30.3	29.7	17.3	11.6
LnGrp LOS	D	A	D	E	A	D	E	D	C	C	B	B
Approach Vol, veh/h		232			143			1168			1296	
Approach Delay, s/veh		48.6			50.9			44.2			17.7	
Approach LOS		D			D			D			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	49.2	50.1		30.7	17.3	82.0		30.7				
Change Period (Y+Rc), s	5.3	* 5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	13.6	* 66		36.1	23.6	55.7		36.1				
Max Q Clear Time (g_c+I1), s	5.6	32.6		22.8	12.8	27.9		15.4				
Green Ext Time (p_c), s	0.0	12.1		0.5	0.1	15.3		1.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				32.8								
HCM 6th LOS				C								
<b>Notes</b>												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary  
83: College Grove Dr & College Ave

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	879	312	271	889	109	181	131	329	81	98	5
Future Volume (veh/h)	17	879	312	271	889	109	181	131	329	81	98	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	18	906	255	295	966	91	199	144	285	92	111	6
Peak Hour Factor	0.97	0.97	0.97	0.92	0.92	0.92	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	26	1647	1050	280	1882	828	723	391	454	141	139	8
Arrive On Green	0.01	0.47	0.47	0.08	0.53	0.53	0.21	0.21	0.21	0.08	0.08	0.08
Sat Flow, veh/h	1767	3526	1538	3428	3526	1550	3428	1856	1543	1767	1743	94
Grp Volume(v), veh/h	18	906	255	295	966	91	199	144	285	92	0	117
Grp Sat Flow(s),veh/h/ln	1767	1763	1538	1714	1763	1550	1714	1856	1543	1767	0	1837
Q Serve(g_s), s	1.3	24.0	8.3	10.6	22.9	3.8	6.3	8.6	20.8	6.6	0.0	8.1
Cycle Q Clear(g_c), s	1.3	24.0	8.3	10.6	22.9	3.8	6.3	8.6	20.8	6.6	0.0	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	26	1647	1050	280	1882	828	723	391	454	141	0	146
V/C Ratio(X)	0.69	0.55	0.24	1.06	0.51	0.11	0.28	0.37	0.63	0.65	0.00	0.80
Avail Cap(c_a), veh/h	144	1647	1050	280	1882	828	952	515	557	205	0	213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.8	24.8	8.1	59.7	19.5	15.0	43.0	43.9	39.9	58.1	0.0	58.8
Incr Delay (d2), s/veh	11.6	1.3	0.5	69.1	1.0	0.3	0.4	1.1	2.8	1.9	0.0	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	10.0	5.0	7.2	9.2	1.4	2.7	4.1	8.3	3.0	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.3	26.2	8.6	128.8	20.5	15.3	43.4	45.0	42.7	60.0	0.0	66.4
LnGrp LOS	E	C	A	F	C	B	D	D	D	E	A	E
Approach Vol, veh/h		1179			1352			628			209	
Approach Delay, s/veh		23.1			43.8			43.4			63.6	
Approach LOS		C			D			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	76.1		32.3	15.0	67.4		15.3				
Change Period (Y+Rc), s	4.4	* 6.7		4.9	4.4	6.7		4.9				
Max Green Setting (Gmax), s	10.6	* 48		36.1	10.6	47.3		15.1				
Max Q Clear Time (g_c+1), s	13.3	24.9		22.8	12.6	26.0		10.1				
Green Ext Time (p_c), s	0.0	7.7		3.9	0.0	8.3		0.2				

Intersection Summary

HCM 6th Ctrl Delay	37.7
HCM 6th LOS	D

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary  
 84: College Ave & SR-94 WB Ramps

Existing PM  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↘		↗		↑↑			↑↑	↗
Traffic Volume (veh/h)	0	0	0	196	0	438	0	1072	0	0	1029	574
Future Volume (veh/h)	0	0	0	196	0	438	0	1072	0	0	1029	574
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		
Adj Sat Flow, veh/h/ln				1856	0	1856	0	1856	0	0	1856	1856
Adj Flow Rate, veh/h				209	0	466	0	1117	0	0	1083	0
Peak Hour Factor				0.94	0.94	0.94	0.96	0.96	0.96	0.95	0.95	0.95
Percent Heavy Veh, %				3	0	3	0	3	0	0	3	3
Cap, veh/h				623	0	555	0	1538	0	0	1538	
Arrive On Green				0.35	0.00	0.35	0.00	0.44	0.00	0.00	0.44	0.00
Sat Flow, veh/h				1767	0	1572	0	3711	0	0	3618	1572
Grp Volume(v), veh/h				209	0	466	0	1117	0	0	1083	0
Grp Sat Flow(s),veh/h/ln				1767	0	1572	0	1763	0	0	1763	1572
Q Serve(g_s), s				4.7	0.0	14.8	0.0	14.2	0.0	0.0	13.6	0.0
Cycle Q Clear(g_c), s				4.7	0.0	14.8	0.0	14.2	0.0	0.0	13.6	0.0
Prop In Lane				1.00		1.00	0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				623	0	555	0	1538	0	0	1538	
V/C Ratio(X)				0.34	0.00	0.84	0.00	0.73	0.00	0.00	0.70	
Avail Cap(c_a), veh/h				1148	0	1022	0	2272	0	0	2272	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				12.9	0.0	16.2	0.0	12.7	0.0	0.0	12.5	0.0
Incr Delay (d2), s/veh				0.3	0.0	3.5	0.0	0.7	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.7	0.0	5.3	0.0	4.4	0.0	0.0	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				13.3	0.0	19.7	0.0	13.3	0.0	0.0	13.1	0.0
LnGrp LOS				B	A	B	A	B	A	A	B	
Approach Vol, veh/h					675			1117			1083	
Approach Delay, s/veh					17.7			13.3			13.1	
Approach LOS					B			B			B	
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		29.7				29.7		24.8				
Change Period (Y+Rc), s		5.9				5.9		5.6				
Max Green Setting (Gmax), s		35.1				35.1		35.4				
Max Q Clear Time (g_c+I1), s		16.2				15.6		16.8				
Green Ext Time (p_c), s		7.5				7.4		2.4				

Intersection Summary

HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
85: College Ave & Federal Blvd

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	221	16	31	155	945	13	26	33	709	23	484
Future Volume (veh/h)	217	221	16	31	155	945	13	26	33	709	23	484
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	275	280	19	33	163	0	15	30	31	771	0	413
Peak Hour Factor	0.79	0.79	0.79	0.95	0.95	0.95	0.86	0.86	0.86	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	317	980	66	47	261		132	139	114	1176	0	514
Arrive On Green	0.18	0.29	0.29	0.03	0.14	0.00	0.07	0.07	0.07	0.33	0.00	0.33
Sat Flow, veh/h	1767	3346	226	1767	1856	1572	1767	1856	1524	3534	0	1543
Grp Volume(v), veh/h	275	147	152	33	163	0	15	30	31	771	0	413
Grp Sat Flow(s),veh/h/ln	1767	1763	1809	1767	1856	1572	1767	1856	1524	1767	0	1543
Q Serve(g_s), s	11.1	4.7	4.8	1.4	6.1	0.0	0.6	1.1	1.4	13.7	0.0	17.9
Cycle Q Clear(g_c), s	11.1	4.7	4.8	1.4	6.1	0.0	0.6	1.1	1.4	13.7	0.0	17.9
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	516	530	47	261		132	139	114	1176	0	514
V/C Ratio(X)	0.87	0.28	0.29	0.70	0.63		0.11	0.22	0.27	0.66	0.00	0.80
Avail Cap(c_a), veh/h	361	601	616	361	632		482	506	416	1927	0	841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.3	20.0	20.0	35.4	29.7	0.0	31.7	31.9	32.0	20.9	0.0	22.3
Incr Delay (d2), s/veh	16.5	0.3	0.3	6.8	2.5	0.0	0.1	0.3	0.5	0.6	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	1.8	1.9	0.7	2.7	0.0	0.2	0.5	0.5	5.2	0.0	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.8	20.3	20.3	42.2	32.2	0.0	31.8	32.2	32.5	21.5	0.0	25.3
LnGrp LOS	D	C	C	D	C		C	C	C	C	A	C
Approach Vol, veh/h		574			196			76			1184	
Approach Delay, s/veh		32.5			33.8			32.2			22.8	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	16.3		29.4	6.0	27.5		10.5				
Change Period (Y+Rc), s	4.0	6.0		5.0	4.0	6.0		5.0				
Max Green Setting (Gmax), s	15.0	25.0		40.0	15.0	25.0		20.0				
Max Q Clear Time (g_c+1/3), s	11.3	8.1		19.9	3.4	6.8		3.4				
Green Ext Time (p_c), s	0.1	0.7		4.5	0.0	1.5		0.1				

Intersection Summary

HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- User approved volume balancing among the lanes for turning movement.
- Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
86: College Grove Way & College Grove Dr

Existing PM  
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	14	6	133	65	346	50	261	149	337	316	85
Future Volume (veh/h)	34	14	6	133	65	346	50	261	149	337	316	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	37	15	7	145	71	300	54	284	129	366	343	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	55	288	244	188	428	362	72	632	282	427	1341	598
Arrive On Green	0.03	0.16	0.16	0.11	0.23	0.23	0.04	0.18	0.18	0.24	0.38	0.38
Sat Flow, veh/h	1767	1856	1572	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	37	15	7	145	71	300	54	284	129	366	343	70
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	1.2	0.4	0.2	4.5	1.7	10.1	1.7	4.0	4.1	11.1	3.7	1.6
Cycle Q Clear(g_c), s	1.2	0.4	0.2	4.5	1.7	10.1	1.7	4.0	4.1	11.1	3.7	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	55	288	244	188	428	362	72	632	282	427	1341	598
V/C Ratio(X)	0.67	0.05	0.03	0.77	0.17	0.83	0.75	0.45	0.46	0.86	0.26	0.12
Avail Cap(c_a), veh/h	950	997	845	950	1330	1127	950	3790	1691	950	3790	1691
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	20.1	20.0	24.3	17.2	20.4	26.5	20.4	20.5	20.2	11.9	11.2
Incr Delay (d2), s/veh	5.1	0.0	0.0	2.5	0.1	1.9	5.8	0.5	1.2	2.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.2	0.1	1.9	0.7	3.5	0.8	1.5	1.5	4.2	1.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	20.1	20.0	26.8	17.2	22.3	32.3	21.0	21.7	22.2	12.0	11.3
LnGrp LOS	C	C	C	C	B	C	C	C	C	C	B	B
Approach Vol, veh/h		59			516			467			779	
Approach Delay, s/veh		27.5			22.9			22.5			16.7	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.5	15.7	9.9	12.7	6.3	26.9	5.7	16.9				
Change Period (Y+Rc), s	4.0	5.7	4.0	4.0	4.0	* 5.7	4.0	4.0				
Max Green Setting (Gmax), s	30.0	60.0	30.0	30.0	30.0	* 60	30.0	40.0				
Max Q Clear Time (g_c+1/3), s	11.3	6.1	6.5	2.4	3.7	5.7	3.2	12.1				
Green Ext Time (p_c), s	0.5	2.5	0.2	0.0	0.1	4.0	0.0	0.8				

Intersection Summary

HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

\* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	7.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	11	196	8	5	2	0	1	0	7	127	18
Future Vol, veh/h	26	11	196	8	5	2	0	1	0	7	127	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	62	62	62	25	92	92	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	36	15	268	13	8	3	0	1	0	8	140	20

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	174	168	151	309	178	1	161	0	0	1	0	0
Stage 1	167	167	-	1	1	-	-	-	-	-	-	-
Stage 2	7	1	-	308	177	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	787	723	893	641	714	1081	1412	-	-	1615	-	-
Stage 1	833	758	-	1019	893	-	-	-	-	-	-	-
Stage 2	1012	893	-	700	751	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	774	719	892	439	710	1081	1411	-	-	1615	-	-
Mov Cap-2 Maneuver	774	719	-	439	710	-	-	-	-	-	-	-
Stage 1	832	753	-	1019	893	-	-	-	-	-	-	-
Stage 2	1000	893	-	477	746	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Control Delay, s	11.6		11.8			0			0.3		
HCM LOS	B		B								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1411	-	-	867	553	1615	-	-
HCM Lane V/C Ratio	-	-	-	0.368	0.044	0.005	-	-
HCM Control Delay (s)	0	-	-	11.6	11.8	7.2	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.7	0.1	0	-	-

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	544	207	161	686	0
Future Vol, veh/h	0	0	0	0	0	0	0	544	207	161	686	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	19	19	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	93	93	93	89	89	89
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	0	0	0	0	585	223	181	771	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1426	1960	386	-	0	0	827	0	0
Stage 1	1133	1133	-	-	-	-	-	-	-
Stage 2	293	827	-	-	-	-	-	-	-
Critical Hdwy	6.86	6.56	6.96	-	-	-	4.16	-	-
Critical Hdwy Stg 1	5.86	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	-	-	-	2.23	-	-
Pot Cap-1 Maneuver	125	62	610	0	-	-	793	-	0
Stage 1	267	274	-	0	-	-	-	-	0
Stage 2	728	382	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	75	0	610	-	-	-	793	-	-
Mov Cap-2 Maneuver	75	0	-	-	-	-	-	-	-
Stage 1	267	0	-	-	-	-	-	-	-
Stage 2	438	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	3.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	793	-
HCM Lane V/C Ratio	-	-	-	0.228	-
HCM Control Delay (s)	-	-	0	10.9	1.5
HCM Lane LOS	-	-	A	B	A
HCM 95th %tile Q(veh)	-	-	-	0.9	-