CITY OF SAN DIEGO MOBILITY MASTER PLAN Discussion Draft

Discussion Draft October 2023



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EXECUTIVE SUMMARY





Executive Summary

PURPOSE OF THE PLAN 1.1

How we get around affects everything we do. Modern transportation is a vital component of our lives that impacts much of how we spend our time. In this way, mobility is both a means to an end and an experience in itself. Our transportation system should go beyond just enabling trips; it should facilitate experiences and remove barriers while improving sustainability, equity, and quality of life in the City. To meet this vision, our transportation system needs improvement and innovation to serve existing and new homes and businesses. Through careful, methodical, and community-centered planning, mobility in San Diego can be transformed into one of the City's greatest assets.

The Mobility Master Plan is a comprehensive, data-driven resource that the City of San Diego will use when making decisions about mobility projects throughout the City. It will guide the City in implementing programs and projects that will reduce greenhouse gas (GHG) emissions and shift mode share to meet the City's Climate Action Plan (CAP) targets. This comprehensive multimodal mobility plan links all mobility planning efforts together to create one hub for projects identified by the City. It creates a robust prioritization framework that can evaluate all mobility projects and help the City assess which projects can achieve the greatest benefits and address the greatest needs in a more sustainable and equitable way. At its core, this Plan is an implementation tool to help projects and programs be realized.

This Plan is a living document. As demographics and the built environment continue to evolve, the Mobility Master Plan can be updated to incorporate new data and remain a valuable tool for decision making. Similarly, as new mobility projects are introduced through future planning efforts, they can be added and evaluated by the prioritization process established in this Plan.

1_2 **MOBILITY VISION**

As a comprehensive effort that links previous City planning efforts, the Mobility Master Plan is driven by goals that are found in the City's General Plan and throughout other mobility-related planning documents, as seen in Figure 1-1



1.3 PLANNING PROCESS

As the City's mobility network is transformed, so too will this Plan adapt and evolve. The Mobility Master Plan began as an idea; exploratory work was conducted in an initial phase to investigate what the City is currently doing related to mobility planning, what other cities are doing, what the City's mobility and mobility planning needs are, and what paths the City can take towards achieving its mobility vision. This exploratory work helped guide the second phase of this Mobility Master Plan process: the development of the Plan itself. Building on the engagement and outreach of the City's CAP, throughout this Plan's development, diverse stakeholders were engaged, and their input was used to inform this Plan. As this living document is refined and expanded in the future, stakeholders will continue to be a critical component of the process.

1.4 CONTENTS OF THE PLAN

The Mobility Master Plan begins by presenting baseline information about existing conditions and mobility trends in San Diego, summarizing the diverse stakeholder engagement efforts that took place, and outlining a comprehensive set of goals and objectives. It then describes the project development process including a technical methodology for the identification of recommended Mobility Master Plan Focus Areas along with a prioritized list of projects that are within these areas. Recognizing that many specific mobility projects are identified through larger programs, this Plan also includes fact sheets for key mobility programs that could enhance mobility citywide. This Plan concludes with an overview of implementation actions, a performance monitoring program, and potential funding sources to help San Diego achieve its bold mobility vision.

1.5 OUTCOMES OF THE PLAN

The Mobility Master Plan is a citywide planning document intended to support the various mobility functions of the City, from community planning and policy, to project design and engineering, to new land use and development projects, to innovative and expanded mobility options, to maintenance and everyday operations. This first Mobility Master Plan has several actionable outcomes that will help guide all aspects of mobility planning in San Diego moving forward. These outcomes are outlined in Figure 1-2.











2.1 DEVELOPING THE MOBILITY MASTER PLAN

The City of San Diego (City) is dedicated to improving the health and well-being of its residents, employees, and visitors. Everyone who lives, works, plays, shops, or does errands in San Diego deserves opportunities to use and experience the City in ways that improve their quality of life. As the backbone of the City, San Diego's transportation network serves as a primary and foundational aspect of people's lived experiences. Creating and maintaining a citywide mobility system that meets the needs and exceeds the expectations of all users is tantamount to ensuring that San Diego is a place people want to be in and explore.

While the City's existing transportation network has a strong foundation, there are opportunities to expand and enhance it through a suite of interconnected policies, projects, and programs. These improvements will allow San Diego's mobility system to effectively meet the needs of all users while helping the City achieve its climate, equity, and mobility goals. Just as critical to an enhanced mobility system as planning and developing policies, projects, and programs is successfully implementing them. San Diego has recognized the need to ensure complementary planned and potential mobility initiatives are not just forward-thinking, but also include a framework for successful implementation.

Development of a Mobility Master Plan serves as a vital tool in effectively implementing mobility improvements, services, and programs that align with the City's Climate Action Plan (CAP), General Plan, Community Plans, among other efforts. The CAP calls for reductions in greenhouse gas (GHG) emissions, especially those generated from combustion engine and fossil fueled vehicles, through a variety of strategies. While all strategies in the CAP are critical to combatting climate change, it is anticipated that strategies related to reducing vehicular travel would significantly reduce GHG emissions. The Mobility Master Plan supports the CAP by providing a roadmap to increase travel by walking/rolling, biking, and taking transit. The Mobility Master Plan also works together with long-range planning policies found in the General Plan and Community Plans that encourage new development in places where people are most likely to drive less, such as areas located in proximity to transit. Specifically, the Mobility Master Plan focuses on promoting safety through closing gaps in the multimodal transportation network, supporting the equitable distribution of mobility investments to move everyone better especially in areas with the greatest needs, and removing barriers that communities face in their daily mobility choices.

The Mobility Master Plan lays the groundwork for prioritizing much needed mobility projects to be implemented throughout the City. It not only creates new processes and tools — using input from community members and data on local and regional connectivity, priorities, and infrastructure — but also creates actionable steps for the City to take. These steps include recommending projects and programs that improve and promote the use of pedestrian and bicycle facilities, as well as increase efficiency and connections to transit. Overall, the Plan provides a necessary coordinated approach to transportation infrastructure development and a prioritization process for investments in accordance with citywide sustainability, equity, land use, and mobility policies.

WHY IS THIS FIRST ITERATION OF THE MOBILITY MASTER PLAN UNIQUE?

This first iteration of the Mobility Master Plan was developed to provide the initial comprehensive, strategic mobility planning framework that would serve as a helpful resource for City staff and the public moving forward. With that in mind, emphasis was placed on outlining the context and roles of the Plan within the overall City planning and project development structure, as well as connecting the Plan to other adjacent policies and strategies that strive to meet overall City goals. This particular Plan brings together mobility ideas, needs, and a focused subset of unbuilt projects and recommendations from previous planning efforts in order to establish processes related to consolidating mobility information and strategically implementing improvements that would eventually be applied citywide.

Key deliverables of this Plan include:

- » A policy framework connected with the General Plan and enhanced to provide actionable objectives related to mobility solutions.
- » A menu of programs that can optimize investments in capital infrastructure projects and provide additional mobility solutions in the form of incentives, public-private partnerships, and services to address various aspects of an individual's mobility needs.
- » A pathway to implementing mobility projects by prioritizing projects in areas with the greatest needs and with solutions that are most impactful to the traveling public.
- » A structure to articulate implementation actions that can be tracked over time and a process to monitor system performance as investments are made to improve the mobility system.

This Plan also has been developed to serve as a template for future Mobility Master Plan iterations. Overall, the intent of the Mobility Master Plan is to be dynamic in that it will be updated every four years in order to align with San Diego's evolving mobility system, to capture and build upon separate plans and improvements taking place, and to take advantage of changes in technology and emerging strategies.



WHAT IS THE DIFFERENCE BETWEEN TRANSPORTATION AND MOBILITY?

Transportation and mobility are distinct yet interconnected concepts. Both terms apply to everyone and all their modes, including people who walk, people who use wheelchairs or other assistive devices, people who bike, people who use shared micromobility devices or transit, and people who drive vehicles. Transportation primarily refers to the physical movement or process of moving people or goods from one place to another. Transportation typically focuses on the physical infrastructure (e.g., roads, railways, airports, ports) and the logistics to facilitate the movement of people and goods. Transportation networks play a crucial role in supporting mobility by providing the means for people and goods to reach their desired destinations.

Mobility is different from transportation in that it goes beyond the act of moving something or someone. Mobility is a broader and more holistic concept that refers to the ability of individuals or goods to move or be moved within a particular area or across regions, as well as covers the overall ease and efficiency of their movement. Mobility involves having access to quality transportation options that you can count on to get you where you need to go. Transportation is one of the key components of mobility, but the scope of mobility systems extend to encompass non-transportation aspects, such as digital connectivity, inclusivity, and the design of cities and spaces, all aimed at facilitating seamless movement and access to opportunities, services, and resources. Equitable, convenient, and effective mobility choices should support all our community members, businesses, and visitors. As mobility continues to evolve, the Mobility Master Plan leaves room for emerging technologies, patterns, and mobility options of the future.



2.1.1 RELATIONSHIP WITH THE GENERAL PLAN

The City's General Plan is a policy document that reflects the vision and values for San Diego and it's communities. It is comprised of 10 elements that provide a comprehensive slate of citywide goals and policies that guide where new homes and jobs should go, how our mobility system should improve, and where and how to invest in communities with new infrastructure and amenities.

Blueprint SD is the City's latest update to the General Plan. It is a proactive effort to refresh the framework for growth and development in an equitable and climatefriendly way. Specifically, Blueprint SD incorporates a land use strategy and complementary transportation policies that encourages the development of homes that are connected to affordable options to walk, bike, and ride transit to go to work, school, or the grocery store. This approach will help meet the needs of our growing City while making progress towards reducing GHG emissions.

Within the General Plan is the Mobility Element that lays out the City's vision of a balanced, well-connected, safe, sustainable, and equitable multimodal mobility system for people to safely, conveniently, and enjoyably move around. It also contains citywide goals and polices that play a crucial role in implementing this vision. Overall, the Mobility Element is part of a policy framework that directs the development and management of our mobility system.

The Mobility Master Plan is a separate comprehensive, strategic document that works with the General Plan in guiding the implementation of mobility improvements, services, and programs that achieve San Diego's climate, equity, and mobility goals. It aims to remove the barriers that people face when utilizing non-auto travel modes, expanding mobility options. As a Plan with implementation strategies and action items, it adds another layer of detail and guidance to help realize the broad citywide vision for mobility initially set forth by the City's General Plan Mobility Element.

Figure 2-1 illustrates how the Mobility Master Plan fits within the overarching General Plan Mobility Element of the City's policy framework. The Plan provides a key function within the City's process for identifying, budgeting, and implementing mobility.



FIGURE 2-1: Mobility Master Plan's Place in San Diego's Policy Framework



2.1.2 RELATIONSHIP WITH OTHER CITYWIDE EFFORTS

In addition to the General Plan, the City of San Diego's progress relies on a diverse set of visionary citywide initiatives and plans aimed at enhancing its livability, sustainability, and accessibility for San Diegans. The citywide efforts described below have created a strong foundation of aspirational goals and policies for the Mobility Master Plan to align with, build from, and in turn shape many of its recommendations.

CLIMATE ACTION PLAN

Cars and other fuel-powered vehicles are the largest source of greenhouse gas (GHG) emissions and pollutants impacting San Diego's air quality. These mobile sources of emissions from residents, passenger and freight transportation, employees, and visitors account for greater than 50% of all local GHG emissions. Updated in 2022, the City's Climate Action Plan (CAP) is a landmark plan that envisions a more sustainable San Diego by setting an ambitious citywide goal of net zero GHG emissions by 2035. The CAP serves as a roadmap for the City to move towards this goal through six strategies designed around decarbonization, renewable energy, transportation and land use planning, clean communities, resiliency, and emerging climate actions. Within each strategy, specific targets and implementing actions have been established. The targets and actions specifically relating to transportation are within *Strategy 3: Mobility and Land Use* in the CAP. Table 2-1 outlines key mobility targets for years 2030 and 2035 as described in the CAP.

TABLE 2-1: CAP Strategy 3: Mobility and Land Use Targets

2030 Target	2035 Target
Achieve 19% walking and 7% cycling mode share of a ll San Diego residents' trips	Achieve 25% walking and 10% cycling mode share of all San Diego residents' trips
Achieve 10% transit mode share of all San Diego residents' trips	Achieve 15% transit mode share of all San Diego residents' trips
Achieve 4% citywide vehicle miles traveled (VMT) reduction through telecommute by 2030	Achieve 6% citywide VMT reduction through telecommute by 2035
Install 13 new roundabouts	Install 20 new roundabouts
Achieve 8% VMT (Commuter and non- commuter) reduction per capita	Achieve 15% VMT (Commuter and non- commuter) reduction per capita

In this climate crisis every mile and every trip counts - the City's community members and visitors deserve more sustainable mobility options. The Mobility Master Plan identifies programs and promotes projects that encourage walking, biking, and transit, and to transition combustion vehicles to zero emission vehicles. As the Mobility Master Plan works to help guide the change in the way we travel and provide more opportunities to choose climate-friendly modes, it implements the CAP and helps reduce overall citywide vehicular travel (vehicle miles traveled, or VMT) and therefore GHG emissions.

CLIMATE RESILIENT SD

Climate Resilient SD is the City's comprehensive plan to prepare for, adapt to, and recover from the impacts of a changing climate. At its core, Climate Resilient SD is a plan for the people of San Diego to not only adapt, but to also thrive in the face of extreme heat, wildfires, sea level rise, flooding and drought. The Plan includes a suite of adaptation strategies that reduce climate change-related risk to the City and work towards solutions for more resilient, more sustainable buildings, infrastructure, and environmental systems.

STRATEGIC PLAN

The Strategic Plan identifies the City's vision, mission, operating principles, and priority areas of focus for 2022 and beyond. The Plan outlines key outcomes, strategies, and performance measures and organizes them according to the following five priority areas of focus: Create Homes for All of Us, Protect and Enrich Every Neighborhood, Advance Mobility and Infrastructure, Champion Sustainability, and Foster Regional Prosperity. Overall, the Strategic Plan guides the work of City leaders and employees to deliver what San Diego and its community members need to thrive.

Aligned with the Strategic Plan's focus on the advancement of transportation infrastructure and mobility options, the Mobility Master Plan serves as a tool to assess and prioritize multimodal investments and actions that help progress strategies and realize expected results related to infrastructure, safety, equity, accessibility, performance, and mobility options.

VISION ZERO STRATEGIC PLAN (2020-2025)

The City has committed to the Vision Zero goal of eliminating all traffic-related fatalities and severe injuries. The Vision Zero Strategic Plan lays out a course of purposeful actions to help achieve the Vision Zero goal along with other considerations to help San Diegans move around safely. Safe travel is a top priority for the City. The City can improve road safety for all users, especially the most vulnerable, through the application of engineering solutions that mitigate concerns related to traffic speeds, conflicts between different modes, and street quality. This Strategic Plan lays out a framework for years 2020-2025 and will be updated as the City makes progress toward the Vision Zero goal.

The commitment to safety and furthering Vision Zero initiatives permeates throughout the Mobility Master Plan through goals, objectives, policies, programs, actions, as well as its data-driven methodology for prioritizing projects.

MOBILITY ACTION PLAN

In 2019, the Mobility Action Plan (MAP) was developed as a step towards establishing a strategic vision and framework to address the changing mobility needs of San Diegans given climate change, emerging technologies, and increased awareness for equity. This Plan summarized existing mobility policies and programs and outlined initial priorities and actions for the City to deliver a greater range of mobility services and options. The MAP set out associated goals, some of which have since been initiated, such as creating a City of San Diego Mobility Department (now paired with Sustainability) to work across departments and with other agencies to facilitate the delivery of safe and convenient mobility options, and to be the champion for mobility innovation and implementation in the City.

As a follow-up to the MAP, the Mobility Master Plan builds off the MAP's vision, framework, goals, and actions to create new processes related to comprehensive mobility planning for the City, to develop a methodology for prioritizing mobility projects in areas with the greatest mobility needs, and to outline near-term and long-term mobility initiatives.

2.2 LOCAL MOBILITY CHALLENGES

As the City plans to meet the evolving mobility needs, several challenges will drive the local mobility environment going forward. Safety, population growth and housing, climate change, resiliency, equity, affordability, and inter-agency coordination are key challenges this Plan helps the City address as they intersect with mobility.



2.2.1 INCREASED VULNERABILITY

Safety is the backbone of all transportation networks; ensuring all users are and feel as safe as possible when using any mode is imperative to creating real mobility options for all. As transportation becomes ever more multimodal and auto trips are shifted to other more vulnerable modes such as walking, rolling, or bicycling, the potential for conflicts and collisions could increase. San Diego has recognized that there is no acceptable level of loss of life when traveling around the City and has joined other cities throughout the country to be a Vision Zero City. This commitment affirms that San Diego is dedicated to making systemwide changes that facilitate eliminating traffic fatalities and severe injuries. The Mobility Master Plan is safety-focused and sets forth projects that help the City reach its Vision Zero goal.

2.2.2 POPULATION GROWTH AND HOUSING

In addition to the homes already needed to accommodate San Diego's existing population, the City will continue to grow. Additional growth plus an aging population with increased disabilities requires investments in transportation infrastructure to ensure that people can safely and enjoyably move around, in ways that result in improved air quality and quality of life. In accordance with the City's General Plan and CAP, most new growth is anticipated to occur in urban areas located near transit. This planned land use strategy will need to be supported by effective, timely construction of quality infrastructure, especially first and last-mile connections to transit, in the areas that would serve the most people and would be most used. In addition to implementing supportive multimodal facilities by the time of need, the City will also need to balance maintaining targeted service levels across transportation assets already in place to fulfill the needs of all users. Overall, thoughtful and complementary land use and transportation planning is necessary to support growth.



2.2.3 CLIMATE CHANGE AND RESILIENCY

Recognizing that climate change will continue to impact San Diego at everincreasing scales unless deliberate and targeted mitigation actions are taken, the City's CAP sets the following 2035 non-auto mode share targets for resident trips: 25% walking, 10% cycling, and 15% transit. Similarly, adaptation is necessary to shape a San Diego that is resilient in the face of climate change's impacts. For example, the transportation network and associated infrastructure must continue to function under threats from rising sea levels, flooding, heat, and other changing climate conditions. This may involve elevating a coastal roadway to accommodate rising sea levels, utilizing erosion control treatments to protect roadway facilities against damage during extreme storm events, and provision of additional shade structures or trees at transit stations to protect riders from the impacts of extreme heat.



2.2.4 EQUITY

Historically, not all communities in San Diego have had access to the same breadth or quality of mobility choices. Due to past investment practices, some communities have not received the multimodal infrastructure and resources that their community members need to access opportunities. Equity comes into play, in such cases, as historically underserved communities are prone to limited mobility options which could also lead to social and economic inequities. Providing safe, convenient, and affordable multimodal mobility options is essential to uplifting all communities and connecting community members to where they want to go. The Mobility Master Plan recognizes the importance of prioritizing mobility investments in areas with the greatest need and provides a path to ensuring equitable mobility choices among all communities.

2.2.5 AFFORDABILITY

The high costs of homes and transportation make affordability a key challenge to live in San Diego. Housing and transportation expenditures together account for over half of San Diegans' annual incomes. Rising fuel prices, maintenance expenses, and public transportation fare costs have made it difficult for individuals and families to meet their mobility needs without straining their budgets. Moreover, the transition towards sustainable transportation alternatives, such as electric vehicles and bikes, can be costly upfront, even if they offer long-term savings. Affordability can be addressed through increased investments in multiple reliable cost and time competitive mobility choices, and through policies. For example, parking reform policies that unbundle parking from housing costs in certain areas of the City that are more walkable, bikeable, and transit accessible promotes cost savings for those that opt to not own a car. The Mobility Master Plan works to help diversify San Diego's transportation environment and identify innovative ways to make multiple mobility choices cost-effective, attractive, and convenient.



2.2.6 INTER-AGENCY COORDINATION

There are many agencies who operate, maintain, and plan different transportation resources throughout the San Diego region. Agencies such as the California Department of Transportation (Caltrans), Metropolitan Transit System (MTS), North County Transit District (NCTD), and the San Diego Association of Governments (SANDAG) all actively contribute to the City's transportation network. These agencies, along with mobility technology and services from private companies, have highlighted interjurisdictional challenges and opportunities. Guaranteeing all agencies coordinate effectively and operate with aligned goals and priorities will ensure the City's mobility network is seamless and connected. The Mobility Master Plan is founded on conversations with all stakeholder transportation agencies and accounts for their diverse needs.





2.3 BENEFITS TO IMPROVED MOBILITY

Mobility permeates just about every aspect of life in San Diego. The way that we move around affects almost everything we do, how we do it, when we do it, and where we do it. Improving mobility by providing more choice, increasing access, improving facilities, and enhancing safety has tangible positive impacts on San Diegans' lives.

One of the most impactful benefits of improved mobility is an enhanced sense of safety. Mobility projects that recognize and design for the most vulnerable people are critical in creating a safer transportation network. For example, implementing separated bicycle lanes or cycle tracks featuring physical barriers like raised curbs or rows of bollards in their design effectively reduces the incidence of collisions between bicyclists and motorists, consequently minimizing the risk of injuries. Proactively focusing on the safety of people walking, rolling, and biking using mobility enhancements, such as Complete Street elements and traffic calming measures, can significantly reduce traffic-related fatalities, further contributing to a safer overall transportation network. Application of this safe systems approach citywide, where design features slow and separate conflicting paths so the consequence of a collision is not severe injury or death, can lead to fewer potential conflicts throughout the City and result in safer, better neighborhoods for everyone.

When mobility is equitably improved, those who have historically faced mobility challenges are able to get around with more ease and efficiency. When trips are easier and more practical to make, people's unique individual needs can be met. The City continues to enhance accessibility for people with disabilities, making trips more comfortable and practical through efforts such as maintaing sidewalks, adding curb ramps with detectable warnings, and holistically implementing ADA standards across the City.

Meaningful mobility improvements focus not just on one mode, but multiple modes. One of San Diego's greatest assets for mobility is its year-round temperate climate. The City has ideal weather for multimodal transportation and a culture that is receptive to modes that place the user outdoors for all or part of their trip, such as walking, rolling,



54th Street and Chollas Parkway mobility improvements

bicycling, using micromobility (e.g., scooters), and taking public transit. Improving facilities that these modes use makes them safer, more appealing, more accessible, and more viable ways of getting around. In this way, improving these modes gives people more choices about how they will get around so that they can rely less on private automobiles for all trips.

Furthermore, using these more active modes of transportation can contribute to positive public health outcomes as users spend more time moving and being outdoors. A 2016 report prepared for the California Office of Health Equity concluded that increasing the active transportation of the typical Californian to 21.4 minutes per day could result in 8,057 fewer annual deaths and 142,101 fewer years of life lost and disability.¹ Designing and retrofitting the City's mobility network to be active transportation-friendly is an effective way to promote and encourage healthy lifestyles – both physical and mental. Physical activity and spending time outdoors can improve mental health. Enhancing multimodal transportation facilities thus creates a positive cycle of improved physical and mental health: better facilities contribute to increased safety, reduced conflicts with other modes, and more pleasant user experiences, which can encourage more multimodal transportation use, which in turn can contribute to better health of the user.

Improved active transportation facilities can also have positive economic benefits. When there are numerous viable ways to get to a commercial destination, it becomes easier for patrons to frequent that destination. The 2022 Metro Active Transportation Return on Investment Study, led by Portland State University, studied the impact of 12 active transportation projects in and around the Portland, Oregon area and concluded that there were measurable increases in businesses activity at most of the project locations.² Making it easier for people to travel to a destination generally makes it more likely they will go there, which is particularly beneficial for San Diego's small businesses that rely on in- person patronage. As such, improving multimodal transportation facilities in commercial areas can have economic benefits for the City's small businesses.

Improving mobility in the City affects more than the region's people; it affects the environment. Improving mobility by investing in alternative modes of transportation can reduce the number of private vehicle trips, thus reducing the associated environmental impacts such as GHG emissions and local air pollution. Shifting trips away from private and other fuel-powered vehicles and towards alternative, sustainable modes can positively impact San Diego's environment.

¹ Increasing Walking, Cycling, and Transit: Improving Californians' Health, Saving Costs, and Reducing Greenhouse Gases (2016). https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/Maizlish-2016-Increasing-Walking-Cycling-Transit-Technical-Report-rev8-17-ADA.pdf

² Metro Active Transportation Return on Investments Study (2022). https://www.oregonmetro.gov/sites/default/ files/2022/05/15/Active-Transportation-Return-on-Investment-study-2022.pdf



2.4 MOBILITY MASTER PLAN PROCESS

In 2019, the City completed the Mobility Action Plan (MAP) to understand the City's state of mobility planning, take inventory of City mobility policies in place, and to outline initial steps to implement the then 2015 CAP. As a next step, the Mobility Master Plan builds off the MAP vision framework and provides a centralized hub for all mobility related efforts, as well as provides clarification and refinement on the project implementation and prioritization process.

The Mobility Master Plan process began in December 2021, finding input and momentum from the CAP update's public outreach and engagement work. As shown in Figure 2-2, City departments and public agencies (i.e., SANDAG and MTS) were surveyed to explore challenges and aspirations for implementing mobility projects in San Diego in alignment with the CAP. A case study analysis of mobility master plans from peer jurisdictions across the country was also performed to research and compare different approaches. Extensive engagement with City departments and regional agencies was also conducted to understand the successes and common opportunities and barriers faced when implementing mobility-related programs and projects. This foundational exploratory work was then synthesized in the development of a preliminary outline for this first Mobility Master Plan. The final stage in the preliminary development of the Plan was a comprehensive literature review in which existing City plans, policies, and regulations were analyzed, with particular focus on identification of deficiencies and areas that may be appropriate for improvement. After this preliminary research and foundational work was completed, work began on prioritizing mobility projects and identifying programs and actions.

The Mobility Master Plan supports a continuum of ongoing engagement that is mission-based rather than project-based. This Plan mostly builds off the engagement work of the CAP, which included an extensive outreach process that centered around partnering with Community-Based Organizations that focus their work in underserved communities. Throughout this Plan's development, action-oriented engagement was conducted with community members focused in historically disadvantaged areas and Master Plan Focus Areas, which have high propensities to increase active, sustainable mobility.

In this first version of the Mobility Master Plan, information gathered during engagement activities was primarily used to verify mobility goals and objectives such that community needs and expectations are aligned with mobility initiatives. This Plan is intended to be a living document that will be regularly be updated as the mobility needs of the City evolve, and as aspects of the Plan are implemented and monitored. As the Plan is refined in the future, additional community and stakeholder engagement will be performed. Information gathered at this stage serves as the foundational repository that will inform future project and program efforts.



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FIGURE 2-2: Mobility Master Plan Process





WHERE WE ARE AND WHERE WE ARE GOING







miles of bus routes



3.1 COMMUNITY PROFILE

The City of San Diego has 93 miles of shoreline, wonderful weather, a dynamic economy, and diverse communities. With over 1.4 million residents and 700,000 jobs, it is the eighth largest and one of the most diverse cities in the nation. There are more than 100 languages spoken by community members who have come from all parts of the world to live here. This diversity provides many advantages, including a broad perspective of community voices, especially around mobility needs, and a diversity that influences travel patterns and transportation trends.

Additionally, with six universities and 80 research institutions, San Diego is a national leader in higher education and innovation. Fourteen tech-adjacent industries account for 12 percent of the jobs and produce \$42.1 billion of economic value annually in San Diego. The tourism industry also contributes substantially to the city's economy. Furthermore, San Diego is home to the nation's largest military community, with more than 100,000 active-duty personnel, and an additional 90,000 veterans living in San Diego.

As a large binational and metropolitan city, San Diego's transportation network is essential to our growing industries and economy. The composition of this complex, interconnected system includes roadway, highways, light rail, bus lanes, bicycle facilities, sidewalks, and recreational trails that facilitate a variety of travel options for both residents and visitors alike.

FIGURE 3-1: Daily Commute Mode Choice (2021)



3.2 EXISTING PLANS, POLICIES, AND REGULATIONS

The City recognizes the need to look at land use, its relation to transportation infrastructure, as well as expanding alternative modes to accommodate a growing population and changing mobility trends. As discussed in Chapter 2, the policies in the General Plan Mobility Element advance a strategy for increasing mobility choices in a manner that strengthens the City's land use vision and helps achieve the goals in the CAP. The Mobility Element is part of a larger body of plans and documents that guide mobility citywide. Figure 3-2 on the next page shows the documents over the last decade that were reviewed to build upon and help frame this Mobility Master Plan.

The City of San Diego is geographically defined by 52 separate community planning areas which all have their own Community Plan. While the General Plan provides broad policies that apply to the City as a whole, Community Plans refine the General Plan's policies into community-specific policies and recommendations to guide a community's development and public improvements for the next 30 years. This includes policies on land use, mobility, urban design, public facilities and services, natural resources, historic and cultural resources, and economic development. In reviewing Community Plans, the primary focus for this effort was each community's Mobility Element, with particular emphasis on the planned transportation network, mobility recommendations, and innovative policies.

The City has prepared the Pedestrian Master Plan and Bicycle Master Plan to not only help advance the citywide mobility vision, but also identify projects, policies and programs that improve active transportation and recreational opportunities for pedestrians and cyclists, respectively. The review of the Pedestrian and Bicycle Master Plans centered around the vision, policy framework, and recommendations of those plans. Attention was also paid to the degree of which plans did or did not discuss community engagement and equity.

Policies and regulations adopted in recent years have applied an equity lens, ensuring mobility projects and programs benefit all users, especially those in structurally excluded communities (e.g., historically disadvantaged and underinvested neighborhoods), where the greatest needs exist and where such investments would serve the most people. For example, the Complete Communities: Housing Solutions and Mobility Choices initiatives focused on increasing housing production in areas located close to transit,


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promoting the shift to sustainable modes, investing in active transportation infrastructure, increasing transit ridership, and reducing vehicle miles traveled. The City also amended parking requirements in Transit Priority Areas, with the following goals in mind: increasing housing affordability and supply, creating communities as places to live and work, requiring on-site alternative transportation amenities, and reducing individuals' reliance on cars, which reduces vehicle generated GHG emissions.

When reviewing existing projects, programs, policies, and regulations, distinct categories emerged during the preparation of this Mobility Master Plan. The categories included walkability, bicycle facilities, public transit systems, street network, Intelligent Transportation Systems and emerging technologies, commute options, and parking management. Additionally, several types of projects and programs were identified in existing plans: improvements to the pedestrian environment, expansion of bicycle facilities, community parking districts, transit system improvements, roadway improvements aimed at safety, and systems management.

While San Diego has a rich and diverse history of preparing an array of mobility-related plans and documents stemming from the General Plan, these plans often focus on specific modes (e.g. the Bicycle Master Plan) or individual communities (e.g. the Mira Mesa Community Plan). While these plans are valuable in their own right they have typically existed as separate resources for mobility. Mobility needs its own comprehensive plan across mobility types and communities to both integrate multiple modes and equitably advance solutions to help achieve the City's vision of a balanced, well-connected, safe, sustainable, and equitable multimodal mobility system. The Mobility Master Plan aims to consolidate and integrate various plans, policies, and regulations to create a comprehensive multimodal mobility framework that focuses on implementing transportation investments across the entire system to move everyone better. It seeks to prioritize transportation initiatives that align with citywide goals, promote equity, and adapt to changing transportation needs and trends.



PLANS TO BUILD ON . . .



FIGURE 3-2: Key Documents Reviewed Timeline



3.3 MOBILITY TRENDS

The transition towards cleaner, safer, and more sustainable forms of transportation has brought about new trends in mobility. These trends focus on better serving pedestrians, bicyclists, and public transit riders, in addition to motorists and the essential movement of goods. Emerging mobility trends promote innovative practices, intelligent technologies, the inclusion of programmatic solutions, and capital infrastructure. The following mobility strategies support these trends.

MOBILITY TREND: DESIGN SAFER INFRASTRUCTURE FOR VULNERABLE MODES OF TRANSPORTATION

Vision Zero and Complete Streets goals and policies provide a commitment to safety for all users of a mobility system. A major trend that has resulted from the Vision Zero commitment is the notion that transportation system safety can be achieved through design, including Complete Streets elements and universal design. Cities are recognizing that if facilities and infrastructure are designed to change unsafe behaviors and provide additional levels of protection for vulnerable users, then a safer environment for pedestrians, bicyclists, and motorists can be achieved. The following examples of mobility strategies and design elements support this trend:

Bicycle Boulevards

Bicycle boulevards are local or residential streets that have been enhanced with signs, pavement markings, speed management treatments and other traffic calming measures to facilitate safe, convenient bicycle travel. Bicycle boulevard design elements heighten motorists' awareness of bicyclists and slow vehicle traffic, which creates a more comfortable environment for bicyclists and pedestrians. Bicycle boulevards have also been referred to and branded as bicycle friendly streets/ corridors, bicycle priority streets, or neighborhood greenways/connectors.

Roundabouts

A roundabout is an intersection where traffic travels around a central island in a counterclockwise direction. Compared to a conventional intersection, a roundabout has features, such as a deflection



Bicycle boulevard Source: Reconnect Rochester, 2014



Roundabout at La Jolla Boulevard



Slow Street along Diamond Street in Pacific Beach



Flexible (flex) lane along El Cajon Boulevard

upon entering, that reduce the potential for collisions as drivers must slow down, yield to oncoming traffic before entering, and then veer to the right as they enter the roundabout. Slowing down helps drivers better see and share the road with pedestrians and bicyclists, creating a safer environment for all road users.

Slow Streets

Slow Streets include closures to vehicular traffic or through vehicular traffic along neighborhood local streets with connections to citywide bicycle networks, destinations that are within walking distance, or green space. Slow Streets prioritize pedestrian and bicyclist safety and promote community connectivity. Originally, Slow Streets were temporary traffic restrictions implemented by many cities, including San Diego, during the COVID-19 pandemic. Many of these Slow Streets have since become vibrant community gathering places and safe spaces for people to share the roadway. As a result, cities are working to establish programs to create permanent Slow Streets.

MOBILITY TREND: ENCOURAGE THE USE OF SUSTAINABLE MODES OF TRAVEL

As cities look to meet their climate goals, reducing GHG emissions from the transportation sector is an imperative action. San Diego, for instance, identifies vehicles as the single largest source of its GHG emissions, leading to City efforts to help reduce an individuals' reliance on cars. Single-occupancy vehicles a major contributor to traffic congestion in many cities, especially during peak hours. Cities have realized that key methods for reducing their carbon footprint, improving air quality, and alleviating traffic congestion can be achieved by promoting and facilitating sustainable modes of travel. A major mobility trend is enhancing access, convenience, and efficiency for safe and sustainable modes for people who need or want options. The following examples of mobility strategies and design elements support this trend:

Flexible (Flex) Lanes

Transit is the most efficient means of transportation, with the ability to move the greatest amount of people within and between communities. Cities are embracing a transformative approach to their streets, reallocating space to accommodate multiple modes of travel, such as dedicating a travel lane for transit. A flexible lane repurposes space (i.e., general purpose lanes) along a Major Arterial roadway to be used by a combination of non-single occupancy vehicles, such as bus transit, circulator or shuttles, future connected and autonomous vehicles, or other emerging mobility concepts. Cities, including San Diego, are identifying which roadways to plan for flex lanes as part of their transportation planning and programming efforts in order to reserve and designate the public right-ofway for future multimodal infrastructure at the time of need.

Commuter Solutions

Commuter trips represent a significant portion of an individual's daily travel and often represents their longest trip of the day. Commuter solutions refer to amenities, programs, and incentives that expand transportation options for residents of a development or employees in a workplace (sometimes referred to as Transportation Demand Management or TDM). The City of San Diego partners with SANDAG to implement and encourage participation in a variety of programs, such as iCommute and PRONTO Youth Opportunity Pass and employer/employee passes.

MOBILITY TREND: CREATE AND ENHANCE MOBILITY HUBS

As more cities continue to focus investments to allow for greater mobility options that are safe. and sustainable, mobility hubs have emerged as an essential component of the multimodal transportation network. Mobility hubs are locations that offer access to multiple transportation options, such as buses, trains, bicycles, electric scooters, and rideshare. Mobility hubs could also include a mix of passenger waiting areas, electric vehicle charging locations, curbside pick-up/ drop-off areas, real-time travel information, and micromobility. The convergence of travel modes not only facilitate seamless transfers, but the diversity encourages people to consider alternative modes. As cities enhance and redesign their transportation networks, many are incorporating mobility hubs. The following examples of mobility strategies and design elements support this trend:



MTS Rapid is an alterantive travel choice for SD commuters



Micromobility devices



Rideshare pick-up zone



Transit station also serving as a mobility hub Source: SANDAG



Intelligent transporation systems

Micromobility Devices

Micromobility devices consist of small, low-speed, human- or electric-powered mobility devices such as electric scooters, bicycles, and electricassist bicycles. While micromobility devices are available for individual purchase, they are also available for rent and shared through on-demand or subscription-based services. Early micromobility services required devices to be docked on a rack. or included no regulations for staging where vehicles needed to be picked up and left, but the second generation of sharing services employed a dockless model in which devices can be left within a geo-fenced area. Overall, shared micromobility programs offer community members increased access to flexible, sustainable, and cost-effective transportation options.

Rideshare

Rideshare is a service that connects drivers with passengers who need transportation. Pooled ride hailing services such as uberPOOL and Lyft Shared allow users to carpool with other passengers making similar trips, which reduces the cost burden on each individual and increases vehicle occupancy.

MOBILITY TREND: PROMOTE ADVANCEMENTS IN TRANSPORTATION SYSTEMS MANAGEMENT

As cities enhance their transportation networks to serve multiple modes and different types of users, many are retrofitting existing infrastructure and designing new facilities to enhance space efficiency and system operations. Cities are turning to supply and demand management strategies to address competing mobility-related needs for limited space. Cities are also leveraging technological innovations to increase transportation system safety, improve operations, increase and diversify the types of mobility modes available, and ensure users are able to interact with the system in accessible and convenient ways. The following examples of mobility strategies and design elements support this trend:

Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems integrate technology that can eventually support a variety of mobility technologies to "talk to each other" and improve travel times, goods delivery, and



Pay & Display kiosks and time-limited parking help with parking management

dissemination of real-time traffic information. The private sector continues to develop and introduce new technologies and applications that shift how the transportation system is used. This includes the continued development and testing of connected and autonomous vehicles to bring them closer to reality. These innovations have potential to make the transportation system much more efficient and safer; however, further City regulatory framework must guide implementation to ensure this.

Parking Management

Parking management assist cities to achieve mobility, environmental, and economic development goals. Implementing parking management programs and strategies can increase the turnover and parking availability, which further support the economic vitality of nearby businesses. Programs and strategies can include the creation of parking districts, the conversion of on-street parallel parking to diagonal parking for increased supply, dynamically-priced and time-limited parking, parkonce-and-walk strategies, shared parking solutions, smart parking meter technology, and community circulators.

Curbside Management

As mobility options increase, so does demand for curbside space. Different uses of curbside space include bus stops, passenger pick-up/drop-off zones, delivery loading/unloading areas, paratransit and accessible loading zones, outdoor dining, and micromobility corrals. With these many different uses, it is important to inventory and efficiently manage curb space.



Curbside management

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3.4 REGIONAL CONTEXT

Beyond the horizon of the City's CAP in 2035, the San Diego region is projected to continue to grow, change and innovate when it comes to mobility. While the City of San Diego is the largest of the 18 cities in San Diego County, it is important to understand where the region is going in the next 20 to 30 years so that the City can collaboratively plan and implement effective mobility solutions. This involves working in coordination with various stakeholders, including Caltrans for freeway operations, MTS and NCTD for transit operations, the County of San Diego and neighboring jurisdictions for their adjacent facilities, and the San Diego Association of Governments (SANDAG), the region's Metropolitan Planning Organization, for long-range regional plans. This collaborative approach ensures comprehensive and integrated planning is conducted to address the San Diego region's transportation needs.

SANDAG leads planning and transportation efforts for the region and conducts research on matters like population growth and emerging technologies. In particular, SANDAG is responsible for the preparation of the Regional Plan which serves as a roadmap to the growth and development of the San Diego region as a whole. The Plan creates a framework for the region's long-term transportation infrastructure needs, with the aim to provide and promote more transportation choices, a healthy environment, and a strong economy. A summary of the adopted 2021 Regional Plan and its "5 Big Moves" are highlighted in the excerpt below. The Regional Plan will be updated in 2025.

2021 REGIONAL PLAN - SAN DIEGO FORWARD

The 2021 Regional Plan crafted a vision called "5 Big Moves" as a bold approach to rethink mobility in the region, address traffic congestion, create equal access for all, and meet climate action goals. The 5 Big Moves are inter-reliant strategies that work to improve life in the region through creation of a comprehensive, connected mobility system.

THE 5 BIG MOVES INCLUDE:

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- » *Complete Corridors* leverage technology and a host of travel options to create a dedicated, safe space for everyone on highways and major roads.
- » *Transit Leap* creates a network of fast, convenient, and reliable transit services to move people from where they live to where they want to go.
- » *Mobility Hubs* are vibrant activity centers where different travel options come together to connect people with their destinations and businesses with their customers.
- » *Flexible Fleets* include a variety of on-demand transportation options that will offer firstand last-mile transit connections and convenient alternatives to driving alone.
- » *Next Operating System (Next OS)* will use leading-edge technology that will allow people to connect to transportation services and a digital platform that will enable dynamic management of roadways and transit services. (https://www.sandag.org/regional-plan/5-big-moves)

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COMPREHENSIVE MULTIMODAL CORRIDOR PLANS

The **Comprehensive Multimodal Corridor Plans (CMCPs)** turn the regional vision and transportation priorities of the SANDAG 2021 Regional Plan into reality by developing corridor-specific multimodal projects and programs and provide a pathway for project implementation. The planning efforts are grant funded, and each CMCP includes a steering committee comprised of executive leadership from SANDAG, Caltrans, and local cities, including the City of San Diego

CMCPs are expected to:

- » Meet local, regional, and statewide goals for achieving a safe, sustainable, and effective transportation system for the San Diego region
- » Reimagine the approach to mobility by focusing on quality of life, accessibility, sustainability, access to jobs, housing, education, and health for all
- » Address today's mobility challenges while building a foundation for the future
- » Evaluate travel modes and transportation facilities in each defined corridor, including highways and freeways, parallel and connecting roadways, pathways, bikeways, and transit options (local bus, Rapid bus, commuter rail, light rail, intercity rail, etc.)
- » Provide an integrated set of multimodal transportation improvements that align with regional, state, and local objectives and inform future transportation plans
- » Develop a balanced implementation plan for timely, phased (if necessary), integrated (with other parallel efforts), and effective results
- » Enable regions to compete for state funding under the Senate Bill 1 (SB 1), the Road Repair and Accountability Act (2017), and the Congested Corridors Program

There are currently six CMCPs underway, as shown in Figure 3-3. These CMCPs include: Central Mobility Hub and Connections; Coast, Canyons, and Trails – SR 52; North County – SPRINTER/Palomar Airport Road/SR 78/SR 76; San Vicente – SR 67; South Bay to Sorrento – Purple Line/I-805/Blue Line/I-5 South; and Kumeyaay Corridor – I-8. Future CMCP efforts will include SR 125, SR 94, and SR 56 (Source: SANDAG, 2022).



Where We Are and Where We Are Going



FIGURE 3-3: Regional Comprehensive Multimodal Corridor Plans

3.5 WHERE IS THE CITY GOING?

The City's comprehensive mobility planning and implementation efforts will be guided by the Mobility Master Plan moving forward. In addition, the City will continue to leverage other adopted plans, initiatives, and strategies; mobility trends and new technologies; and build on the work being completed at the regional level. All of these efforts combined will create a San Diego that is accessible to all community members with reliable transit, comfortable and sustainable transportation options, and cuttingedge technology that makes each trip safe and efficient. These investments will help the City make progress toward meeting CAP GHG reduction targets, the Vision Zero goal, and other goals outlined in General Plan. The City will continue to collaborate with public agency partners to advance the Regional Plan and support the region in realizing its vision for future mobility within the City and beyond.

Similar to SANDAG's Regional Plan, which is updated every four years, the Mobility Master Plan will be refreshed on a four-year basis to reflect new projections, needs, technology, and opportunities. The Mobility Master Plan is intended to be a living document that will be updated as mobility projects and programs are implemented and as other connected planning efforts (e.g., Community Plan Updates and the Bicycle Master Plan Update) done in parallel identify new policies, projects, and programs. Figure 3-4 illustrates separate, but related connections to the Mobility Master Plan.

As a result, a consolidated and comprehensive mobility project inventory will be prepared and also updated on a regular basis to serve as a resource for the City, local decision-makers, and community members in planning, prioritizing, and budgeting mobility investments for implementation. In addition, the community engagement component of the Mobility Master Plan will be ongoing and will involve continued listening sessions to understand evolving community needs and presentations to allow City staff to share progress on Plan implementation. As community needs change and new technologies and trends emerge, the vision for the Mobility Master Plan can transform to reflect new goals and objectives.

FIGURE 3-4: Mobility Master Plan and Connected Efforts







ENGAGEMENT





Engagement

4.1 ENGAGEMENT OVERVIEW

Direct community engagement was woven throughout the development of the City's first Mobility Master Plan. A Community Engagement Plan was developed at the beginning to guide the key purposes of engagement. With the extensive engagement process of the recent CAP update, it was essential to incorporate what City staff already heard from community members, business owners, agencies, and City departments about mobility, and build on those conversations for this Mobility Master Plan. By tapping into this feedback resource, the project team gained insights on the community's understanding about mobility and helped jumpstart the best ways to continue to engage with community members on specific network gaps, barriers, and needs for all users of the mobility system. City staff worked collaboratively with the community through in-person and online engagement activities to hear input and then apply ideas to the Plan. The engagement for this first Mobility Master Plan is summarized in Figure 4.1 and was built from three fundamental objectives:



Introduce the plan, build relationships, and invite initial input.



Identify gaps and mobility challenges and prioritize various mobility improvements.



Explain how input was considered and maintain community relationships for future involvement.

4.1.1 INCORPORATING FEEDBACK INTO THIS PLAN

Input received from community members was used to help craft the goals and objectives of this Plan (Chapter 5) and reflects the methodology used in this Plan to prioritize future mobility projects. These projects were evaluated under a set of criteria aligned with community members' feedback, including safety, health, access, sustainability, equity, and user experience. Further details on the prioritization criteria and process can be found in Chapter 6 and Appendix A.

4.1.2 ONGOING ENGAGEMENT

The City is maintaining a project webpage that has information on how to stay involved in the Mobility Master Plan. This Plan will be regularly updated to respond to the City's latest conditions and evolving needs. Community engagement will be an integral part of the Plan's evolution. The project webpage is: https://www.sandiego. gov/sustainability-mobility/mobility/mobility-master-plan.

FIGURE 4-1: Community Engagement Timeline for the City's First Mobility Master Plan



Engagement

4.2 VOICES WE HEARD

A diverse array of community voices was heard through engagement activities targeting geographies of varying scales, and feedback from these outreach events was used to inform the goals and objectives of this Plan and the project prioritization criteria included in Appendix A. Engagement was focused in structurally excluded communities and historically disadvantaged areas in the City that currently, or in the near future will, use alternative modes of transportation. City staff worked directly with Community-Based Organizations (CBO) with direct connections in these neighborhoods to conduct interviews and determine the best locations for pop-up engagement activities. In addition, the City presented information on the Plan to a number of Committees and Boards. A summary of the engagement activities is included below.

4.2.1 COMMUNITY BASED ORGANIZATIONS

Building on our conversations and partnerships on the CAP, City staff held focused interviews with Community-Based Organizations that provided insight on their unique mobility needs. The following Community-Based Organizations participated these interviews:

- » Sherman Heights Community Center
- » City Heights Community Development Corporation
- » Mid-City CAN
- » Bayside Center
- » Groundwork San Diego
- » Urban Collaborative Project



Sharing a booth with Groundwork San Diego at Mt. Hope Earth Day event

4.2.2 POP-UP EVENTS

City staff presented information on the Mobility Master Plan as part of a series of community engagement events for the CAP hosted at local libraries and also held pop-up events to introduce the Plan and receive input in areas of the community where residents would already be present. These outreach events were critical because they allowed the project team to showcase how the Plan would further goals in the CAP and to directly connect with community members in their neighborhoods and give them an opportunity to share to their everyday mobility challenges. Events were held in March, April, and May of 2023, at following locations:

CLIMATE ACTION PLAN LIBRARY SERIES

- » Mountain View/Beckwourth Library
- » City Heights/Weingart Library

POP-UP EVENTS

- » Sherman Heights Community Center
- » City Heights Mid-City Gymnasium
- » Mt. Hope Earth Day Event
- » Otay Mesa-Nestor Library



CAP library series on mobility at Mountain View/Beckwourth Library

Engagement

4.2.3 COMMITTEES AND ADVISORY BOARDS

As part of the ongoing continuum of engagement to support the development of the Mobility Master Plan, staff participated in meetings with the City of San Diego's Active Transportation and Infrastructure Committee, Mobility Board, Accessibility and Advisory Board, and Community Planners Committee to share information on the Plan and receive preliminary input on the scope and desired outcomes of the Plan. These advisory groups each have representatives from every City Council District from across the City, reflecting a unique perspective on the City's mobility needs and opportunities.

4.2.4 SURVEYS

The project team conducted an online survey that received over 400 responses. Paper copies of the survey were also available in English and Spanish at the pop-up events described above. The goal of the survey was to understand each respondent's individual mobility journey and what type of investments would improve that journey.

	Commuting	It is impractical to commute (without using a car) to business/employment centers.
₽Ŷ.	Bicycling/ walking	Sidewalks "just end." Neighborhoods do not have enough bicycle lanes. Long distances between a trip's origin and transit resources. Unhoused population using sidewalks. Topography.
	Transit	Limited transit access to the beach. Connecting between neighborhoods needs micro shuttle options. Waiting at the City College transit station is unpleasant.
	Citywide	Lack of protected bike lanes/intersections. High vehicle speeds at major roadway crossings.
प्रहेम	Schools	Congested drop-off areas.

Where is the greatest mobility challenge and what type of challenge is it?



What can improve mobility in your community?

Example survey questions and results from Mobility Master Plan outreach

4.3 ENGAGEMENT FEEDBACK

Common themes emerged from the groups included in this Plan's engagement efforts. A high-level summary of each theme is included below.

SIDEWALKS/TREES: Well-maintained sidewalks with trees that accommodate all users, including those who use assistive mobility devices, is important for a positive pedestrian experience. Street trees provide shade and help create a sense of place and can make walking or rolling more attractive and functional. Many neighborhoods recognize trees as a major component of walkability, pride of place, air quality, and heat reduction.

TRANSIT SERVICE AND AMENITIES: Amenities such as shade, seating, lighting, and restrooms are important for transit users as is frequency of service. Communities need safe and timely access to local resources such as schools, medical care, social support, wellness/recreation, and food as well as to regional resources such as regional parks, the coastline, job centers, and educational institutions. Continued coordination with transit agencies is critical for comprehensive transit planning.

BICYCLES: Bike storage facilities such as bike racks and lockers are important elements that are needed to complement the development and implementation of safe bikeways. In underserved communities, there is currently more walking or rolling and bicycling without the high-quality infrastructure to properly support these modes. Educational programming to support safe biking and the use of other modes will help achieve the mode shift targets outlined in the CAP.

VEHICLES AND PARKING: As the population grows, the number of vehicles on City streets will increase and parking in high demand areas may become more challenging to accommodate. Exploring options like neighborhood electric vehicles (NEVs) may help support some local trips (e.g. grocery store, doctor's office) and reduce parking demand. Expansion of incentive programs, such as vanpool and carpool programs, may also reduce vehicle miles travelled and parking demand.

YOUTH AND SENIOR NEEDS: Youth in underserved areas often rely more on bicycling and walking or rolling than those in other areas. Travel via these modes is enhanced with traffic-calming measures or with a connected system of sidewalks and protected bicycle lanes. Alternatively, the senior population often has specialized needs for access to food and medical care. Improvements and services that may help meet their needs include: on-demand microtransit services, programs for pick-up/drop-off assistance, and connections between internal neighborhoods and primary corridors where bus stops or transit locations are located.

PEFORMANCE METRICS AND MONITORING: Performance metrics are key to evaluating project performance (e.g ridership) and progress toward achieving the mode share targets outlined in the CAP and the safety goals included in Vision Zero. Along with monitoring and reporting, ongoing coordination at the community level is important to review monitoring reports and to hear directly from community members about mobility needs and improvements where they live, work, and play.





VISIONING FRAMEWORK



Visioning Framework

5.1 VISION FOR MOBILITY

The Mobility Master Plan lays the groundwork for implementing citywide mobility initiatives to help meet the City's CAP and General Plan goals. The Plan helps implement ambitious mobility initiatives aimed at creating a safe and convenient transportation network that minimizes its impacts on the environment and addresses existing mobility needs and gaps to improve the health and well-being of San Diego's community members, employees, and visitors. Projects, programs, and policies have been identified through a planning process that includes the analysis of local and regional connectivity, priorities, and infrastructure data, as well as the review of relevant City and regional plans, documents, and community input. This Plan builds upon the City's mobility planning efforts and helps advance goals identified in the CAP to reduce GHG emissions and vehicle miles traveled and ensure equitable access to mobility improvements and investments.

To maximize the impact of the Mobility Master Plan's core benefits, the City must focus on the removal of barriers that community members, especially those in structurally excluded communities, face in their daily mobility choices. The Mobility Master Plan prioritizes projects and identifies programs needed to create a balanced and wellconnected multimodal transportation system with safe, accessible, sustainable, and attractive travel options for all users. To that end, this Plan helps facilitate a comprehensive mobility system by using the City's mobility prioritization system from the General Plan (also referred to as mobility loading priority). This framework prioritizes the most vulnerable transportation modes, supports public transit for improved efficiency and performance, and plans for shared, commercial, and personal electric vehicles to enable the transportation modes that can both reduce GHG emissions and meet the travel needs of everyone throughout the City. The mobility loading priority is shown in Figure 5-1.

To ensure equitable outcomes, the City must construct and maintain high-quality multimodal infrastructure in all communities, prioritizing investments in those areas



FIGURE 5-1: City of San Diego Mobility Loading Priority



Enhanced pedestrian treatments at 30th Street and Landis Street in North Park

with the greatest need, and thus increasing the number of people that choose to walk, bike, and take transit as their primary mode of transportation whenever possible – because as stated before, every mile and every trip counts. The Mobility Master Plan serves as an implementation-focused roadmap for achieving this safe, accessible, and equitable mobility system.

The Mobility Master Plan supports San Diego's overall vision to advance mobility and infrastructure, as outlined in both the General Plan and the City's 2022 Strategic Plan. This vision seeks to promote opportunity in every neighborhood and prioritizes the health, well-being, and quality of life for every San Diegan. A major component of this vision is increasing mobility options in areas with the greatest needs, with an emphasis on equity, accessibility, safety, and transit options that make travel without private automobiles a more viable choice. The goals and objectives detailed in this section provide a framework for the City to help make this vision a reality.

The Mobility Master Plan consolidates the City's mobility needs as identified in other plans and documents to provide a set of cohesive, inclusive goals and objectives based on existing conditions and mobility demands. These goals and objectives stem from the General Plan as well as are inspired by existing City documents and peer jurisdiction case study findings.

As foundational priorities for the City's mobility system, the Mobility Master Plan goals and objectives serve as a thematic baseline for assessing and prioritizing mobility projects described in Chapter 6. All prioritization criteria used in this analysis measure the alignment with goals and objectives outlined in the following subsection. The mobility projects discussed in Chapter 6 and inventoried in Appendix B will help San Diego advance these mobility goals and objectives.



5.2 GOALS AND OBJECTIVES

Goal 1: Increase opportunities for access to safe modes of transportation for all users.

An effective mobility system is safe and accessible to all users. All transportation facilities in the public right-of-way should promote safe, comfortable, and convenient access and travel for persons of all ages and abilities. These facilities should also accommodate emergency responders and goods movement needs. Objectives for this goal aim to increase access to safe, high quality mobility choices for everyone.

- **Objective 1.1** Increase the proportion of mobility improvements implemented in underserved areas with the greatest needs across the city to create additional opportunities for San Diegans to choose from mobility options that make their journeys more efficient, sustainable, or complete.
- **Objective 1.2** Work with employers and other organizations to increase transportation options for employees traveling to jobs in hard-to-reach locales or transit deserts.
- **Objective 1.3** Strengthen the operations and increase the number of shared mobility equity programs for community members with the greatest needs, including low-income individuals, aging populations, and people living with disabilities who are highly dependent on alternative modes of transportation.
- **Objective 1.4** Implement transportation projects, programs, and grants that reduce transportation costs.
- **Objective 1.5** Work with the San Diego Association of Governments (SANDAG) to continue the Youth Opportunity Pass program and expand it to college students and those community members who have the greatest needs or who could greatly benefit.



Student boarding a bus along La Jolla Village Drive



CAP Library Series on mobility

Goal 2: Incorporate best practices to promote equity during all phases of the planning process.

The City's Mobility Action Plan states that "Mobility Equity refers to a mobility network that increases access to high quality mobility options for communities of concern" (MAP, 2019). Historically, structurally excluded communities have had less access to safe, efficient, and cost-effective mobility options. This Plan identifies specific communities for prioritizing mobility projects and transportation investments: Mobility Master Plan Focus Areas. Communities for all communities. These opportunities should maximize benefits and reduce barriers to mobility within San Diego.

- **Objective 2.1** Empower structurally excluded community members by involving them in the decision-making process to ensure their mobility needs are met.
- **Objective 2.2** Participate in research around regional and/or local benefitting programs that ensure the benefits of mobility investments are prioritized in Mobility Master Plan Focus Areas.
- **Objective 2.3** Develop funding mechanisms to prioritize transportation and mobility investments and infrastructure improvements in Mobility Master Plan Focus Areas.





Goal 3: Create a safe, connected, and convenient network for pedestrians.

Promoting, encouraging, and sustaining a safe and efficient transportation network that provides users convenient and attractive travel choices is paramount in achieving the City's vision. Pedestrians are the most vulnerable transportation system users and are thus highest up on San Diego's Mobility Loading Priority. Pedestrians are those who are walking, running, or rolling as their transportation mode. While not everyone is a pedestrian for their entire trip, everyone is a pedestrian at some point on their journey. Objectives for this goal are meant to enable walking and rolling, create a safe and comfortable environment for all street users, and reduce vehicle miles traveled. Creating an attractive and functional pedestrian environment with trees, shade structures, and green infrastructure will help combat the impacts of extreme heat and reduce the urban heat island effect in dense areas.

- **Objective 3.1** Support and promote walkability, access for persons living with disabilities, and connectivity by increasing the construction of sidewalk and intersection improvements throughout all communities.
- **Objective 3.2** Support Vision Zero by implementing projects that enhance safety considerations for pedestrians.
- **Objective 3.3** Increase the number of pedestrian-oriented street design and treatments implemented, including Americans with Disabilities Act (ADA)-compliant curb ramps, Leading Pedestrian Interval signals, and high-visibility crosswalks, to ensure accessibility to individuals of all ages and abilities.
- **Objective 3.4** Support citywide efforts to preserve and expand the tree canopy within the public right-of-way and during implementation of transportation projects.

Goal 4: Create a safe, connected, and convenient network for cyclists and micromobility users.

To improve mobility in San Diego, cycling and other forms of micromobility such as scooters must be a viable mode to get around. Cycling and micromobility are particularly important components of connecting users with public transit through first-mile/last-mile transportation options. The City has envisioned creating a safe and accessible bicycle and micromobility network through the adoption of the Bicycle Master Plan and regulations for shared mobility device rental companies, respectively. The Mobility Master Plan supports implementation of the Bicycle Master Plan through prioritizing bicycle-related projects and programs and supports the viability of micromobility through the expansion of shared mobility programs and coverage.

Objective 4.1 Update the City's Bicycle Master Plan to maintain consistency with the City's Street Design Manual and Caltrans' requirements and to reflect recent Community Plan updates, proposed regional connections, and current best practices.



- **Objective 4.2** Increase the rate of implementation of projects identified in the City's Bicycle Master Plan and Community Plan bicycle networks, with a focus on projects that create a physical barrier between motorists and bicyclists in the roadway.
- **Objective 4.3** Increase the implementation of wayfinding and markings, secure bike parking, bike signals, and separated bikeway improvements that enhance safety, comfort, and accessibility for all levels of bicycle riders and micromobility users.
- **Objective 4.4** Increase the number and quality of public education programs that promote bicycling and bicycle safety through raising awareness of bicycling's diverse benefits, highlighting San Diego's existing and planned bicycle resources and facilities, and educating drivers about other roadway users.
- **Objective 4.5** Strengthen and increase partnerships with shared mobility device operators to optimize the number and locations of devices available for first/last mile trips and seamless transfer between modes.
- **Objective 4.6** Increase the availability of charging locations for e-bikes and scooters, prioritizing solutions that facilitate first/last mile trips and transfer between modes.



Goal 5: Improve access to the public transit system and provide corridors that offer safe, convenient, and reliable transit service and connections.

Public transit and the connections to/from it are vital components of a transportation system that provide more options and enhance mobility within San Diego.

- **Objective 5.1** Expand City dedicated/shared bus lanes to increase transit efficiency and on-time performance, prioritizing routes that support community members with the greatest needs.
- **Objective 5.2** Support regional efforts to make trips safer, more convenient, and more enjoyable by increasing the number of bus shelters and street furniture and improving access to restrooms in high transit use areas with a focus on historically underserved communities.
- **Objective 5.3** Improve the reach of transit by implementing infrastructure improvements that grow transit routes, enhance the user experience, and integrate connections to first/last mile modes and services through docking/parking stations, charging services, circulators, and user amenities.



Goal 6: Improve inter-departmental and inter-agency coordination.

Good coordination and communication among City departments and outside agencies is crucial to implementing mobility planning initiatives and streamlining overall project processes.

- **Objective 6.1** Establish an interdepartmental mobility governance group and workflow to provide strategic guidance and oversight for project coordination to promote Complete Streets and the responsible and efficient use of fiscal resources for activities within the public right-of-way.
- **Objective 6.2** Develop guidelines and affirm roles and responsibilities for inter-agency coordination among the City and other regional and state agencies that also manage mobility options and utilize the City's right-of-way.
- **Objective 6.3** Create a dynamic project information repository with all relevant information that is both accessible and utilized by all City departments.
- **Objective 6.4** Increase collaboration with regional partners to identify opportunities to promote sustainable transportation modes, connect communities to park or recreational land, and improve neighborhood air quality related to mobility (e.g. car, truck) emissions.

Goal 7: Incorporate current best practices for design and implementation in the planning process.

Best practices can include standards and guidelines that encourage the construction of efficient facilities that prioritize the safety of vulnerable road users and balanced mobility options by identifying a variety of innovative solutions for immediate and long-term implementation of roadway improvements.

- **Objective 7.1** Establish a Complete Streets Council Policy to ensure that transportation facilities are planned, designed, implemented, operated, and maintained to provide safety, comfort, and access to destinations for all users with greater mobility options.
- **Objective 7.2** Update citywide practices for developing and implementing sustainable transportation and mobility projects that contribute to reduced GHG emissions and air pollution, are resilient to local impacts of climate change, and incorporate additional elements to improve user comfort and safety in changing climate conditions.
- **Objective 7.3** Ensure that mobility projects create and/or maintain network redundancy that ensures evacuation routes during emergencies are sufficient for all types of users and provide alternative options in case individual routes become unusable.





Roundabout and sharrows

Objective 7.4 During the planning phase for mobility projects, document that they will be resilient to the impacts of climate change and create and/or maintain mobility network redundancy that ensures evacuation routes during emergencies are sufficient for all types of users and provide alternative options in case one becomes unusable.



Goal 8: Incorporate innovative technologies into the City's mobility network to increase the safety and efficiency of the network, expand mobility choices, while enhancing user experience and reducing greenhouse gas emissions.

The rapid evolution of technology has completely transformed our lives. From hailing a ride on your smartphone to booking a scooter for a short ride, enabling telework, or optimizing traffic through smart intersections – these technologies are increasingly changing the way we move around San Diego. Priorities should be geared towards providing more convenient and cleaner mobility options, improving the user experience, and increasing safety. Appropriately incorporating these innovative technologies into the City's mobility network is critical to ensuring a modern transportation system that uses the best available tools to keep up with the evolving mobility landscape in the pursuit of meeting the City's goals.

- **Objective 8.1** Expand the use of Intelligent Transportation Systems (ITS) and innovative technologies to help improve public safety, reduce collisions, optimize traffic signal timing, minimize traffic congestion, maximize parking efficiency, manage transportation and parking demand, and improve environmental awareness and neighborhood quality.
- **Objective 8.2** Increase the use of emerging mobility technologies and services such as Mobility as a Service (MaaS), shared mobility services, and connected vehicles.
- **Objective 8.3** Increase and accelerate electrification of the transportation system by expanding partnerships with private entities (i.e.,

Public Private Partnerships) and state and regional partners and programs such as the California Energy Commission, San Diego Community Power (SDCP), San Diego Gas & Electric (SDG&E), SANDAG, and County of San Diego.

- **Objective 8.4** Coordinate with regional transit agencies to improve transit efficiency in the right-of-way and increase the prevalence and accuracy of real-time transit information at transit stops and stations.
- **Objective 8.5** Maximize available right-of-way space throughout the City to serve a variety of transportation modes and prioritize non-private vehicle use while optimizing system performance.

Goal 9: Utilize curb management tools, mobility services, and strategies to dynamically address parking and curb space management.

The curb is a valuable public space that can serve a variety of uses and services. While parking is an important use of some curb space, it must be balanced with other curb space needs such as deliveries, passenger loading, and ADA access. The COVID-19 pandemic unlocked even more potential for the curb including outdoor dining, Slow Streets, and promenades. This goal provides tools to balance these needs and ensure adequate space for a variety of curb uses.

- **Objective 9.1** Establish a citywide curb space inventory and policy to optimize the use of the curb and dynamically manage them based on demand.
- **Objective 9.2** Increase implementation of curb management strategies in commercial, business, and mixed-use areas to efficiently utilize curb space, support deliveries, and promote parking turnover.



FRED electric shuttle in Downtown San Diego Source: SANDAG

- **Objective 9.3** Develop last-mile delivery pilot projects, programs, or policies that optimize curb space and reduce congestion in communities that are disproportionately impacted by commercial deliveries, last-mile freight, rideshare, and other passenger and goods loading uses.
- **Objective 9.4** As mobility projects that interact with or are adjacent to curbs are implemented, continuously evaluate for opportunities to refine and optimize the curb space.
- **Objective 9.5** Increase the availability of curb space by implementing streetscape projects that employ strategies such as the removal/ relocation of driveways/curb cuts, and expansion of sidewalks.
- **Objective 9.6** Increase the availability of alternative modes of transportation, such as micromobility, carshare, and circulator services, to reduce demand for curbside parking while also integrating curb-related technology, such as curbside charging infrastructure, to support system electrification.
- **Objective 9.7** Work with communities to evaluate and implement comprehensive curb and parking strategies through the establishment of Community Parking Districts citywide.

Goal 10: Expand and build upon existing comprehensive mobility strategies like Transportation Demand Management (TDM) to expand mobility options and increase the efficiency of existing transportation resources.

Many of San Diego's roads experience challenges related to congestion. This congestion is in large part caused by an overabundance of single-occupant vehicles. However, congestion affects all modal users and contributes to reduced efficiency of many modes. Comprehensive mobility strategies that reduce the demand placed on roadways by single-occupant vehicles and expand safe and sustainable mobility options are increasingly important.

- **Objective 10.1** Develop and partner on shared mobility programs like bike share, car share, and neighborhood shuttles, to increase the use of alternative transportation modes for short trips.
- **Objective 10.2** Support and incentivize employer TDM programs such as discounted transit passes for employees, guaranteed ride home programs, bike chargers and lockers, and alternative work schedules.
- **Objective 10.3** Develop a City-specific mobility program to increase the percentage of City employees who can utilize various travel modes.
- **Objective 10.4** Continue to require new developments to incorporate physical amenities (e.g., bike lockers, showers for employees) that support alternative modes of transportation and are conducive to implementing TDM strategies.






PROJECTS AND FOCUS AREAS

6.1 PROJECTS: IDEAS TO IMPLEMENTATION

One of the core elements of this Plan is the inclusion of mobility projects that can help meet our shared sustainability, equity, and safety goals. Given the size of the City, the transportation project development process is a multifaceted and multi-departmental responsibility. As such, implementing mobility projects requires the involvement from internal City departments, but can also include outside stakeholders such as Caltrans, SANDAG, and transit agencies. In terms of planning, multimodal infrastructure needs are currently identified in community plan updates, and through traffic safety evaluation and other studies as necessary. Mobility improvement requests also come directly from residents, community groups, or City Council Offices, and the Transportation Department captures/gathers a list of those needs.

The City prepared the Mobility Action Plan (MAP), a precursor to the Mobility Master Plan, to develop a consolidated approach and to help streamline the process for comprehensive mobility planning moving forward. The Mobility Master Plan builds on these MAP actions and provides a centralized hub for all mobility related projects and programs, includes clarification on the project implementation process, and establishes evaluation criteria to guide project prioritization. The Mobility Master Plan will serve as a resource to improve how to better prioritize and direct funding for mobility projects to reach City goals. Figure 6-1 shows how the Mobility Master Plan will be incorporated into the Capital Improvement Program's project prioritization and funding process for project implementation.

Five departments, described in the excerpt below, work closely to ensure successful planning, programming, implementation, and management of mobility projects citywide.

PLANNING

- » **Sustainability and Mobility Department:** leads the policy development and implementation of the City's CAP and focuses on interdepartmental and regional coordination to further the City's goal for equitable, efficient, and effective mobility choices for all.
- » **City Planning Department:** receives community input on infrastructure improvements and General Plan and community plan policies, and development regulations that accelerate the creation of more homes for people, encourage walking, bicycling, and transit use, protect the environment, improve public spaces and advance social equity.

PROGRAMMING, IMPLEMENTATION & ASSET MANAGEMENT

- » Engineering and Capital Projects Department: provides project services including technical and operational support, engineering, design, and construction management for the Capital Improvements Program (CIP) and the oversight of the development of public infrastructure and facilities, including mobility assets.
- » Development Services Department: provides review, permit, inspection and code enforcement services for private and public development projects throughout the City. DSD assists with development projects to ensure compliance with all applicable regulations, ensuring all communities continue to be healthy, safe and livable for all residents, visitors and businesses.
- » Transportation Department: is responsible for the operation and maintenance of streets, our public right-of-way, including bike facilities, sidewalks, and trees; performs traffic and transportation.

Projects and Focus Areas



CIP = Capital Improvements ProgramFY = Fiscal YearCIPRAC = Capital Improvements Program Review and Advisory CommitteeCP 800-14 = Council Policy 800-14 Prioritizing Capital Improvement Program ProjectsEBR = Executive Budget Review



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6.2 PROJECT FOCUS AREAS OVERVIEW

For this first iteration of the Mobility Master Plan, mobility projects from specific Focus Areas in the City are prioritized. Sections 6.3 through 6.8 provide information on the data sets and analysis used to establish the project Focus Areas for this Plan. Future iterations of the Mobility Master Plan will analyze planned mobility projects citywide using the framework and methodology established in this version of the Plan.

Rather than gathering all projects from across the entire City, this first Mobility Master Plan looks at where mobility projects are needed most and where they can have the most immediate impact. Understanding these geographical locations first will allow the City to start moving toward implementation of projects that are in these areas.

To do this, the City conducted a robust geospatial analysis to identify these priority areas for investment, which are referred to as Mobility Master Plan Focus Areas. While the City has already undertaken significant work to identify underserved communities through planning efforts such as the General Plan, Vision Zero Strategic Plan, and the Climate Equity Index's Communities of Concern, the Mobility Master Plan Focus Areas combine elements of those previous approaches into a comprehensive analysis that specifically emphasizes the Plan's mobility goals.

In many cases, the Mobility Master Plan Focus Areas overlap with historically underserved communities that have suffered from a lack of infrastructure investment. The data-driven spatial analysis process drew upon a variety of resources related to population, employment, land use, travel patterns, planned development, safety records, and climate risk. This model was comprised of four mobility sub-models, as shown in Figure 6-2.

Due to the interrelation of different modes, there is overlap in some of the data included in each model. However, the focus of this analysis is to understand the concentration of interrelated modal activity today and multimodal propensity in the future.



FIGURE 6-2: Geospatial Analysis Process

6.3 PEDESTRIAN MODEL

The Pedestrian Model represents the inclination for people to walk or roll and the need for supporting infrastructure improvements (see Figure 6-3). This model was included in the Mobility Master Plan Focus Area definition analysis because pedestrian travel is a critical element of mobility; everyone is a pedestrian at some point in their transportation journey.

PEDESTRIAN MODEL INPUTS:

- Percentage of workers that commute by walking: 2021 American Community Survey
- 2. All crashes involving pedestrians: Vision Zero Strategic Plan (2020-2025)
- **3.** Pedestrian propensity analysis: City of San Diego 2016 Pedestrian Propensity Map

6.4 BIKE MODEL

The Bike Model represents the inclination for people to bike and the need for supporting infrastructure improvements (see Figure 6-4). This model was included in the Mobility Master Plan Focus Area definition analysis because biking is a sustainable mode the City is dedicated to promoting through infrastructure and network improvements to help achieve its CAP goals and reduce reliance on private automobiles.

There are many reasons someone may choose to bike. Biking is a form of active recreation that can improve public health while being a fun way to spend time. Biking can also have positive environmental impacts as people shift from modes with GHG emissions. Furthermore, when safe, high quality, and connected bicycle facilities are provided, biking can be a viable travel mode for work- and errandbased trips, particularly those that are a 30 minute or less ride. The Bike Model inputs identify areas in need of improvements and provide location-based insight into the current and potential increase of cycling as a mode of transportation.

BIKE MODEL INPUTS:

- 1. Percentage of workers that commute by biking: 2021 American Community Survey
- 2. All crashes involving cyclists: Vision Zero Strategic Plan (2020-2025)
- **3.** Bicycle propensity analysis: City of San Diego 2016 Bicycle Propensity Map



Pedestrians and cyclists at the intersection of Washington Street and Goldfinch Street.

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FIGURE 6-3: Pedestrian Model



FIGURE 6-4: Bike Model

6.5 PUBLIC TRANSIT MODEL

The Public Transit Model represents the inclination for people to take public transit trips and the need for supporting infrastructure (see Figure 6-5). This model was included in the Mobility Master Plan Focus Area definition analysis because public transit is a key mode to increase equitable access throughout the City and provide an alternative to the private automobile.

Public transit is the most efficient way to move the greatest number of people from place to place. Roadways can accommodate many more people if they travel in public transit rather than private automobiles. The more people use public transit, the more capacity roadways can accommodate, and the more people can get to where they are going without delays. A fast, reliable, flexible, and convenient public transit system that connects the region's activity centers and surrounding communities can ensure everyone has access to high quality transportation that meets their trip needs and minimizes environmental impacts. The selection of the Public Transit Model inputs helped assess the current state of public transit usage and identify areas where improvements or investments are needed.

PUBLIC TRANSIT MODEL INPUTS:

- Percentage of workers that commute by transit: 2021 American Community Survey
- 2. Transit Priority Areas: City of San Diego, 2016

6.6 PATTERNS AND TRENDS MODEL

The Patterns and Trends Model represents general mobility patterns and needs throughout San Diego (see Figure 6-6). This model was included in the Mobility Master Plan Focus Area definition analysis as a robust repository of all relevant previous City planning efforts and datasets.

PATTERNS AND TRENDS MODEL INPUTS:

- 1. Number of severe and fatal collisions: Vision Zero Strategic Plan (2020-2025)
- 2. Climate Equity Index (CEI): City of San Diego, 2021
- **3.** Blueprint development propensity model: Blueprint San Diego, 2022¹
- 4. Population density: 2021 American Community Survey
- 5. Population growth: 2021 American Community Survey
- 6. Communities of Concern: City of San Diego
- 7. SANDAG Smart Growth Areas: SANDAG²
- Mixed-use density score: Blueprint San Diego, 2022³
- **9.** Transit competitiveness: Blueprint San Diego, 2022⁴
- **10.** Households with no vehicle ownership: 2021 American Community Survey
- **11.** Proximity to:
 - a. Major employers
 - **b.** Schools/universities
 - c. Shopping centers
 - d. Public transit
 - e. Parks and beaches

2 SANDAG Smart Growth Areas are areas that SANDAG has identified through its Regional Plan as being strong candidates for supporting smart growth, transit, walking or rolling, and biking.

3 The Blueprint mixed-use density score is a model forecast of areas citywide that have high propensity for mixed-use development.

4 Transit competitiveness is how attractive transit is compared to other modes; higher transit competitiveness means that users are more likely to choose transit over other modes.

¹ The Blueprint development propensity model is a citywide model that shows areas which are receptive to future housing and retail development through the forecasting year of 2050 that would help achieve San Diego's mode share goals.

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FIGURE 6-5: Public Transit Model



FIGURE 6-6: Patterns and Trends Model

6.7 RECOMMENDED FOCUS AREAS

The four sub-models were combined to form a composite model that evaluates mobility needs citywide. As shown in Figure 6-7, the areas with the most overlap among the sub-models were identified as Mobility Master Plan Focus Areas due to their high levels of multimodal activity and need. Several factors, each supported by data-driven analysis, contributed to the designation of the Project Focus Areas. This holistic approach ensured that the Focus Areas are geographies with high levels of multimodal activity and need.

Focus Area	Community Plan Area	City Council District(s)
1	 » Downtown » Barrio Logan » Uptown » Southeastern San Diego 	3, 8
2	 Southeastern San Diego Encanto Neighborhoods Eastern Area 	4
3	» Uptown» North Park» City Heights	3, 4, 9
4	» Uptown» Old Town San Diego» Pacific Highway	2, 3
5	» College Area	9
6	» Otay Mesa - Nestor» San Ysidro	8
7	» Pacific Beach	1
8	» University	1, 6
9	» Mira Mesa	6
10	» Linda Vista	7
11	» Rancho Bernardo	5

TABLE 6-1: Mobility Master Plan Focus Areas

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FIGURE 6-7: Mobility Master Plan Focus Areas

6.8 FOCUS AREA PROJECT PRIORITIZATION

Once the Mobility Master Plan Focus Areas were determined, the development of the project list, determination of evaluation criteria, and project rankings were the next steps to ultimately arrive at an actionable list of projects that could be implemented over time.

DEVELOPING THE FOCUS AREA PROJECT LIST

A comprehensive database of mobility projects located within the Focus Areas was compiled from the following sources:

- » Community Plans
- » Specific Plans
- » Build Better San Diego
- » Bicycle Master Plan

DETERMINING PROJECT EVALUATION CRITERIA

Next, an interdisciplinary set of criteria was established to help the City prioritize these projects for implementation over the near- and long-term. This set of prioritization criteria was developed using the goals and objectives established in Chapter 5 along with input from the community about mobility needs and expectations. Criteria include the following factors: safety, health/access, sustainability, equity, connectivity/ user experience, land use and transportation connection/ future growth, and cost effectiveness. The full prioritization criteria and explanations of each criteria's scoring metrics and rationale are included in Appendix A.

EVALUATING THE PROJECTS

The mobility projects were then analyzed using the evaluation criteria to yield a list (Appendix B) of prioritized mobility projects within the Mobility Master Plan Focus Areas. Combined with targeted mobility projects, programs have been identified in Chapter 7 for potential exploration and application citywide. They can stand alone or provide complementary solutions. Mobility programs were not ranked but can provide cost effective solutions to achieve sustainability goals and enhance mode share.

Looking forward, new projects can be added to the consolidated project database and be evaluated using the prioritization process outlined above and detailed in Appendix A. Additionally, the project list can ultimately be expanded in future Mobility Master Plans to include all projects across the City with the evaluation criteria updated to score Focus Area connection (rather than selecting only projects within the Focus Areas as is done in this first Mobility Master Plan).





PROGRAMS



PROGRAMS OVERVIEW 7.1

To advance the Mobility Master Plan's goals and objectives, the City will explore a variety of mobility programs aimed at implementing new mobility options and enhancing existing transportation systems. These programs are designed to enhance overall mobility for all, with particular emphasis on community members living in historically disinvested and underserved areas. Some of these programs, such as transit fare subsidies, are already operational in San Diego and can be expanded to better meet the spectrum of mobility needs community members have identified. Other programs would be new to San Diego but are similar to others that have been successfully implemented in cities across the nation.

7.2 PROGRAM FACT SHEETS

The following program snapshot pages include a broad overview of each program, key implementation details, best practices from other cities, and relevance to the City of San Diego's plans and priorities.

How to read the program fact sheets



Program Name



Geographical Scale of Program

Programs may be implemented at the regional, citywide, or community level.

.....

Program Category



Programs are categorized into one of the following typologies: Shared Mobility, Financial Incentives, Digital Infrastructure, System Management, or Community Enhancement.

Affected Mobility Modes



The icons indicate the mobility modes that are affected by the program: walking or rolling, biking, bus, rail, car, or a combination of these modes.

Program Description



6

This section provides a brief description of the program and highlights similar efforts in San Diego, where applicable.



Program in Action

This section describes similar successful programs in other cities.

Program Highlights

This table summarizes implementation details of the program, including an estimated timeframe to initiate it, potential costs¹ and funding sources, and entities responsible for program implementation.



The table also describes how the program aligns with the goals and policies of this Plan and the CAP, and the mobility needs of the community that were identified during outreach and engagement efforts.

¹ Implementation cost symbols reflect the following scale: \$ (\$1.5 million or less); \$\$ (between \$1.5 million and \$5 million); \$\$\$ (between \$5 and \$10 million); \$\$\$\$ (\$10 million or more)

How to read the program fact sheets E-Bike Rebate



An e-bike rebate program can encourage and incentivize individuals to purchase electric bikes by providing them a rebate if they do so. This type of program would offer a partial reimbursement or discount on the electric bike purchase, decreasing the cost burden on the individual. This expanded access to affordable and environmentally friendly mobility options would benefit the City of San Diego in several ways. The use of electric bikes in cities can reduce congestion, decrease reliance on fossil fuels, and contribute to positive public health outcomes.

PROGRAM HIGHLIGHTS

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Estimated Initiation Timeframe 1-3 years

Implementation Cost \$\$\$\$

Potential Funding Sources
 » General Fund
 » Federal, state, and regional grants

Leading Department Sustainability and Mobility

Collaborating Entities

Other City departments, partner agencies, public-private partnerships

Relevance to Mobility Master Plan Goals Goals 1, 2, 4, 5, 8, 10



Relevance to Climate Action Plan Policies Policies 3.1e, 2.2 SA-2, 2.4a, 2.3 SA-4, 3.1 b, 3.1f, 3.1 SA-24

Incorporating Community Engagement The community identified San Diego's topography and size as major mobility challenges. An e-bike rebate program could increase mobility options in the City and help community members navigate the challenging topography. A rebate program could also make these bikes more accessible and affordable to a wider population and incentivize participation in this form of active transportation.





Denver's e-bike rebate Source: FattE Bikes Blog, 2022

PROGRAM IN ACTION

Denver, CO has been successful in implementing an e-bike rebate program. The Climate Action, Sustainability and Resiliency city department launched this program in 2022 and has seen 5,502 e-bike vouchers redeemed as of May 2023. With a standard rebate voucher, any Denver resident can save \$300 on the purchase of an e-bike. The program also offers vouchers for income-qualified individuals and persons with disabilities, with discounts up to \$1,400. Vouchers are released every two months on a first-come, first-served basis. More information can be found at: https://www.denvergov.org/Government/ Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Climate-Action-Sustainability-Resiliency/Sustainable-Transportation/Electric-Bikes-E-Bikes-Rebates#section-1

CITYWIDE SYSTEM MANAGEMENT



Slow Streets

Slow Streets foster safer, more accessible, and pedestrian-friendly environments and encourage non-motorized transportation on neighborhood local streets. Along retail corridors, the additional seating areas for visitors and patrons of surrounding businesses that can be created when slow streets are implemented foster a bustling pedestrian atmosphere. Under the City's Slow Streets Program, bollards were installed in May 2023 at intersections along Fifth Avenue in the Gaslamp Quarter, restricting through vehicular traffic during business hours and transforming the street into small pedestrian-centered plazas. A feasibility study will be completed by the end of 2023 to evaluate other proposed improvements along Fifth Avenue. Exploring possible conversions of streets in other neighborhoods can promote greater mobility and safety across San Diego.



Cyclist/surfer using the Slow Street in Pacific Beach Source: City of San Diego, 2023

PROGRAM HIGHLIGHTS



Estimated Initiation Timeframe 1-3 years



Implementation Cost \$\$\$\$



Potential Funding Sources » Federal grants

» Community Parking District funds

Leading Department Transportation

Collaborating Entities Other City departments



Relevance to Mobility Master Plan Goals Goals 3, 4, 7

Relevance to Climate Action Plan Policies Policies 3.1SA-13, 3.1SA-22, 3.5SA-2

Incorporating Community Engagement



The community identified lack of safety for pedestrians and cyclists as a key challenge to their mobility needs. Slow Streets will create safe and comfortable environments for walking or rolling, cycling, and other micromobility modes.

PROGRAM IN ACTION

The City of Oakland, CA, is developing a planning framework and a set of design considerations for the implementation of permanent Slow Streets. Building on the existing Bicycle Plan and Five-Year Paving Plan, in February 2023 the City announced that it planned to identify potential locations along approximately 50 miles of the bicycle boulevard network that were suitable for conversions to Slow Streets. This program would entail installing a combination of pavement markings; guide, warning, and regulatory signs; and barricades to promote non-motorized mobility options. Details of the City's plan can be found at: https://www.oaklandca.gov/projects/oakland-slowstreet



Road Closure in Oakland Source: The Oaklandside, 2020

Programs

COMMUNITY ENHANCEMENT



Art in the Right-of-Way

Art in the Right-of-Way programs involve integrating artistic installations and other creative elements within public spaces such as sidewalks, streets, plazas, and parks. These programs aim to promote a sense of place within a community, foster public engagement, and promote cultural expression within the public realm. The utilization of cool pavement coatings can also be incorporated to reduce the urban heat island impact by reducing the amount of solar radiation absorbed by the painted surface. A program that enables the design and implementation of public art – created by local artists and community members – in active transportation infrastructure would create more visible and community-centered spaces for users.



Mural on crosswalk at White City Place, London Source: My Modern Met, 2020

PROGRAM HIGHLIGHTS



Estimated Initiation Timeframe 1-3 years



Implementation Cost \$\$\$\$

Potential Funding Sources
 » General Fund
 » Public-private partnerships

Leading Department Sustainability and Mobility



Collaborating Entities Other City departments, partner agencies, public-private partnerships



Relevance to Mobility Master Plan Goals Goals 2, 3, 4, 7

Relevance to Climate Action Plan Policies Policies 3.5a, 3.5 SA-1, 3.5 SA-3, 3.1 SA-13

Incorporating Community Engagement



The community identified incorporating locally-made aesthetic elements into projects to make walking or rolling and cycling more attractive as a top mobility need.

PROGRAM IN ACTION

Mural Arts Philadelphia is the nation's largest public art program, supported by local artists, community organizations and city departments. With its roots in an anti-graffiti program established in 1984, Mural Arts Philadelphia is now an international leader with over 4,400 works of community-based public art. Not only have the art pieces activated unassuming locations in Philadelphia; more importantly, the program has created discourse and dialogue in communities by heavily involving residents in projects from conception to implementation. More information can be found at: https://www.muralarts.org/



Mural under viaduct, City of Philadelphia Source: Mural Arts, 2021

E-Bike Rebate

An e-bike rebate program can encourage and incentivize individuals to purchase electric bikes by providing them a rebate if they do so. This type of program would offer a partial reimbursement or discount on the electric bike purchase, decreasing the cost burden on the individual. This expanded access to affordable and environmentally friendly mobility options would benefit the City of San Diego in several ways. The use of electric bikes in cities can reduce congestion, decrease reliance on fossil fuels, and contribute to positive public health outcomes.

PROGRAM HIGHLIGHTS

1	0-0-0 ₁

1-3 years
Implementation Cost \$\$\$\$
 Potential Funding Sources » General Fund » Federal, state, and regional grants
Leading Department Sustainability and Mobility Collaborating Entities Other City departments, partner agencies, public-private partnerships
Relevance to Mobility Master Plan Goals Goals 1, 2, 4, 5, 8, 10 Relevance to Climate Action Plan Policies Policies 3.1e, 2.2 SA-2, 2.3 SA-4, 3.1 b, 3.1f, 3.1 SA-24
Incorporating Community Engagement The community identified San Diego's topography and size as major mobility challenges. An e-bike rebate program could increase mobility options in the City and help community members navigate the challenging topography. A rebate program could also make these bikes more accessible and affordable to a wider population and incentivize participation in this form of active transportation.



E-Bike



Denver's e-bike rebate Source: FattE Bikes Blog, 2022

PROGRAM IN ACTION

Denver, CO has been successful in implementing an e-bike rebate program. The Climate Action, Sustainability and Resiliency city department launched this program in 2022 and has seen 5,502 e-bike vouchers redeemed as of May 2023. With a standard rebate voucher, any Denver resident can save \$300 on the purchase of an e-bike. The program also offers vouchers for income-qualified individuals and persons with disabilities, with discounts up to \$1,400. Vouchers are released every two months on a first-come, firstserved basis. More information can be found at: https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Climate-Action-Sustainability-Resiliency/ Sustainable-Transportation/Electric-Bikes-E-Bikes-Rebates#section-1

CITYWIDE SHARED MOBILITY



On-demand Specialized Transportation Services

On-demand specialized transportation services provide flexible and individualized transportation options to meet the needs of individuals with mobility challenges. Building upon the paratransit service offered by the transit agencies, users can request rides in real time and be offered door-to-door pickups and drop-offs in an accessible vehicle. SANDAG designated Facilitating Access to Coordinated Transportation as the Consolidated Transportation Services Agency for San Diego County which coordinates with multiple transportation service providers to offer users the most affordable and accessible transportation option. An on-demand service program in San Diego would supplement this program and provide more options within the City in addition to the MTS Access Service.



Paratransit Vans

PROGRAM HIGHLIGHTS



Goals 1, 5, 9

Relevance to Climate Action Plan Policies Policies 3.1f, 3.1 SA-8, 3.1 SA-24

Incorporating Community Engagement



The community identified providing more (and affordable) mobility options to facilitate better transportation access for the City's senior populations and persons with disabilities as a major mobility need since these populations may be unable to use active transportation modes and often live on fixed incomes.



PROGRAM IN ACTION

The Massachusetts Bay Transportation Authority (MBTA) operates the RIDE Flex program. The paratransit service utilizes a network of accessible vehicles to provide transportation options to its users with personal mobility limitations. More information can be found at: https://www.mbta.com/accessibility/the-ride/the-ride-flex

Ride Flex Transportation Source: MBTA, 2021

COMMUNITY SHARED MOBILITY

Neighborhood Shuttles





Pacific Beach shuttle Source: City of San Diego, 2023

PROGRAM HIGHLIGHTS



Estimated Initiation Timeframe 3-5 years

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Implementation Cost \$\$\$\$

Potential Funding Sources

- » Community parking districts (or similar
- locally-raised sources)
- » General Fund
- » Federal, state, and regional grants

Leading Department

Sustainability and Mobility



Collaborating Entities

SANDAG, other City departments, partner agencies, public-private partnerships



Relevance to Mobility Master Plan Goals Goals 1, 2, 5, 9, 10

Relevance to Climate Action Plan Policies Policies 3.5 SA-3, 3.1f, 3.1 SA-24, 3.2 SA-1, 3.2 SA-2

Incorporating Community Engagement



The community identified intra-neighborhood mobility solutions as a top mobility need. Residents want safe and functional access to schools, medical facilities, shopping options, and job centers. A neighborhood shuttle program offers an opportunity to fill this gap in the transportation system.

neighborhood shuttle program provides А shuttle services within a specific community or neighborhood through either a fixed-route or zone-based structure. A fixed-route shuttle follows one specific route within a community while a zonebased shuttle offers riders the opportunity to book door-to-door services within a zone or community. These programs are designed to connect residents to key destinations like shopping centers, schools, medical services, and local attractions. When financed through neighborhood-sourced funding such as community parking district revenue, neighborhood shuttles can be financially selfsustainable. In July 2023, the City of San Diego and SANDAG launched a neighborhood electric vehicle (NEV) shuttle service in Pacific Beach. The Pacific Beach Shuttle provides residents and visitors with a new and sustainable way to travel to beachside destinations. Programs such as this one can be expanded to serve other communities in San Diego and improve mobility options for all residents by bridging gaps in public transportation infrastructure.



Menlo Park shuttle Source: City of Menlo Park, 2019

PROGRAM IN ACTION

The City of Menlo Park, CA provides a free shuttle service that provides access to local community destinations and job centers. This program consists of three fixed-route shuttles and one door-to-door shuttle, the Shoppers' Shuttle, that must be reserved in advance. All shuttles are wheelchair accessible and operate Monday-Friday, with the exception of the Shoppers' Shuttle that is available seven days a week. More information can be found at: https:// menlopark.gov/Government/Departments/Public-Works/Transportation-Division/Shuttle-services

Programs

CITYWIDE SYSTEM MANAGEMENT



Curbside Management

As mobility options increase, so does demand for curbside space. With these numerous options, (see Figure 5-1), a program that inventories, allocates, and optimizes use of the curb in the most efficient, safe, and accessible way is important. Strategies to effectively manage demands on the curbside include curbside inventory and evaluation, passenger pick-up/drop-off zones, performance parking pricing, and loading and delivery zones.



PROGRAM IN ACTION

In 2014, Washington D.C. completed а Curbside Management Study that inventoried and categorized curb usage. The City now has several programs in place that manage and regulate curbside usage. These programs

include Pick-up/Drop-off (PUDO) Zones, Motorcoach Parking, Performance Parking Zones, and Off-Sidewalk Parking Corrals. More information on these programs can be found at: https://movedc.dc.gov/ pages/curbside-management

PROGRAM HIGHLIGHTS



Enhancing the pedestrian experience by making the sidewalk and curb space safer and more aesthetically pleasing was identified as a major mobility need during community engagements.



FIGURE 7-1: Curbside Uses

Source: National Association of City Transportation Officials (NACTO) Curb Appeal Resource Paper, 2017

CITYWIDE SYSTEM MANAGEMENT

Community Parking Districts

Community Parking Districts (CPDs) are entities established by City Council that oversee a defined area that is adversely impacted by parking. CPDs provide a mechanism whereby communities unable to meet existing parking demands may develop and implement parking management solutions to meet their specific needs and address parking impacts. Parking meter revenue collected in a CPD are reinvested back into the districts to finance neighborhood improvements such as sidewalk gaps, street furniture, and landscaping. The City has 5 CPDs, established in Downtown, Uptown, Mid-City, Pacific Beach, and Old Town. Initiatives supported by CPDs so far include neighborhood shuttles, wayfinding signages, curb ramps, parking meter installations, pedestrian promenades, and various design and planning studies.



Normal Street promenade funded by Uptown CPD revenue Source: City of San Diego, 2019

PROGRAM IN ACTION

The City of Austin passed two ordinances in 2011 and 2014 to create the PBD and the Parking and Transportation Management District (PTMD) Programs. Together, they allow business owners and residential associations to apply to create PBDs and PTMDs. Parking revenue within these districts has since been used to finance sidewalk improvements and upkeep of recreational spaces. More information can be found at: https://www.austintexas.gov/ department/parking-and-transportation-managementdistrict

PROGRAM HIGHLIGHTS



Implementation Cost

Potential Funding Sources

Not applicable

Leading Department Sustainability and Mobility



Collaborating Entities Other City departments, community planning

groups, City-owned non-profit organizations



Relevance to Mobility Master Plan Goals Goals 3, 4, 5, 9



Relevance to Climate Action Plan Policies

Policies 3.1e, 3.4 SA-2

Incorporating Community Engagement



Several street infrastructure and amenities were identified by the community as top improvement projects needed, including lighting, shelter, shade, and landscaping. Establishing new CPDs in areas in need would generate revenue to help finance these improvements.



PBDs and PTMDs, City of Austin Source: Parking Reform, 2022

Programs

Carshare



ZipCar, San Diego Source: ZipCar, 2023

Carsharing offers short-term use of a car, typically on an hourly basis, in a geographically limited area. This shared mobility option provides a more affordable and sustainable alternative to car ownership while maintaining the same level of mobility that one would have owning a car. These programs can provide first- and-last-mile connections to and from destinations on trips made using public transportation. Carsharing can also generate positive environmental benefits such as improved air quality: as the electrification of carsharing fleets continues to expand across the nation, greater reductions in GHG greenhouse gas emissions can be expected. In San Diego, ZipCar, Turo, and Getaround are companies and platforms that provide carsharing services. Carsharing can be expanded to underserved communities to advance transportation equity across throughout the City and help all residents enjoy the same mobility options and benefits.



BlueLA Los Angeles Source: Blink Mobility, 2023

PROGRAM HIGHLIGHTS

Estimated Initiation Timeframe 1-3 years Implementation Cost \$\$ Potential Funding Sources > General Fund > Federal, state, regional grants Leading Department Sustainability and Mobility Collaborating Entities Other City departments, partner agencies,

Other City departments, partner ag public-private partnerships



Relevance to Mobility Master Plan Goals Goals 8, 9, 10

Relevance to Climate Action Plan Policies Policy 3.1f

Incorporating Community Engagement



The community highlighted intraneighborhood mobility and navigating San Diego's topography and size as key mobility needs and challenges. An expanded carsharing program would provide an affordable and convenient transportation option that bridges these mobility gaps.

PROGRAM IN ACTION

In 2015 the City of Los Angeles (LA), CA initiated the BlueLA Carsharing Pilot Project with the intention of providing clean and affordable mobility alternatives to LA residents. The program aims to specifically serve disadvantaged communities within LA, including East Hollywood and Boyle Heights, which are within the top 25% of the statewide highest need communities on CalEPA's CalEnviroScreen index. Between February 2021 and September 2022, nearly half of all BlueLA trips were made by low-income community members. The City plans to increase the number of cars and stations from 100 to 300 and 40 to 100 respectively by 2024 to better meet the mobility needs of disadvantaged communities in LA. More information can be found at: https://ladot.lacity.org/bluela

REGIONAL DIGITAL INFRASTRUCTURE

Mobility as a Service (MaaS)

MaaS programs combine various modes of transportation into a single, digital platform, allowing users to move throughout cities and regions with ease. The service enables users to plan, book, and pay for multiple different types of mobility options in one platform. MaaS programs also provide real-time arrival and service information to help users plan their trips. To improve overall mobility equity, MaaS programs can also consider providing subsidies to key user groups. This type of program would benefit San Diego by making the mobility system not only more efficient and user-friendly with the incorporation of innovative technology, but also more equitable and accessible.



Mobility as a Service



PROGRAM HIGHLIGHTS



Estimated Initiation Timeframe 5+ years



Implementation Cost



Potential Funding Sources

- » General Fund» Federal, state, regional grants
- Federal, state, regional grants

Leading Department Sustainability and Mobility



Collaborating Entities Other City departments, partner agencies, public-private partnerships

Relevance to Mobility Master Plan Goals Goals 1, 3, 4, 5, 8, 10

Relevance to Climate Action Plan Policies Policy 3.1 SA-1

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Incorporating Community Engagement



The community identified needing more connections to regional resources such as the coastline and job centers as a major mobility need. An MaaS program would make these regional connections more seamless.



PROGRAM IN ACTION

Portland, OR has made significant efforts to use new technologies that provide seamless mobility options to its residents and visitors. The City implemented TriMet Tickets, a single platform that allows users to plan, book, and pay for multiple modes of transportation including buses, light rail, streetcar, and bikeshare. More information can be found at https://trimet.org/imi/about.htm

Portland's TriMet Rail

Transit Fare Subsidies

Transit fare subsidies encourage the switch from cars to public transportation modes by providing free or reduced fares on mass transit. As youth and senior community members are often more likely to have low or no incomes, they are often more reliant on public transportation. Fare subsidies can help improve equitable access to affordable transportation options. In May 2022, SANDAG and its collaborating partners launched the Youth Opportunity Pass Program, offering free public transit to anyone age 18 and under. This program is funded by SANDAG as part of its Transit Equity Pilot and aims to connect youth to more educational, vocational, social, and errand-based opportunities throughout San Diego. While the pilot program has been extended through June 2024, making it permanent and expanding it to other vulnerable community members would further advance transportation equity across San Diego.

PROGRAM IN ACTION

Los Angeles Metro (Metro) has a series of programs aimed at reducing the transportation cost burden for low-income residents, students, elderly individuals, and people with disabilities. The GoPass fareless pilot program, launched in 2021, provides unlimited free rides on Metro's bus and rail as well as other partner transit agencies to all K-14 students. Metro also offers fare discounts on transit passes for Metro and other participating transit agencies to low-income riders under the Low-Income Fare is Easy (LIFE) program. Seniors, college students, and people with disabilities are also eligible for reduced fares. More information can be found at: https://www.metro.net/riding/fares/



SANDAG

BREAKING: SANDAG Extends Free Transit for Youth 18 and Under in the San Diego Region through June 2024



Extension of Youth Opportunity Pass Source: SANDAG, 2023

PROGRAM HIGHLIGHTS



Estimated Initiation Timeframe 1-3 years

Implementation Cost

Potential Funding Sources

- General Fund
- **Regional funds**

Leading Department



Collaborating Entities

MTS, NCTD, Transportation Department, partner agencies



Relevance to Mobility Master Plan Goals Goals 1, 2, 5, 6



Incorporating Community Engagement



The community highlighted affordability as a key challenge to their mobility, especially for those below 24 years of age. Transit fare subsidies advance transportation equity by providing greater access to a wider range of affordable mobility options for low-income community members.

Programs

CITYWIDE DIGITAL INFRASTRUCTURE



Urban Sensing

Urban sensing refers to the collective set of technologies for gathering data about physical spaces and human activities in cities. Data collected can be used to analyze a city's performance on mobility-related metrics such as traffic speed, curbside usage, and air quality. This information can inform policies and plans that aim to improve the overall experience for everyone in the city. In 2018 San Diego introduced the Smart Streetlights program, which installed sensors across the City to monitor pollution levels, traffic patterns, pedestrian safety, and more. This program was suspended in 2020 for additional consideration of the scale and type of data uses. Expanding the network of sensors while ensuring personal privacy protection can help to advance the City's goals related to enhancing mobility options for all and reducing greenhouse gas emissions.



Streetlight with sensors, San Diego Source: San Diego Union-Tribune, 2019

PROGRAM IN ACTION

In 2016 the City of Chicago, IL launched the Array of Things (AoT) initiative, an urban sensing project that installed a network of interactive, modular sensor boxes across the city to collect realtime data on the its environment, infrastructure, and activity for research and public use. AoT builds privacy protection into the design of the sensors to minimize collection of personal data. Since these sensors were installed, data has been used to assess the safety of at-grade rail crossings, assess pedestrian crosswalk usage, and detect flooding along the Chicago River. More information can be found at: https://arrayofthings.github.io/

PROGRAM HIGHLIGHTS



Estimated Initiation Timeframe 3-5 years



Implementation Cost \$\$\$\$



Potential Funding Sources

» General Fund» Federal, state, and regional grants

Leading Department Transportation Department



Collaborating Entities Other City departments, partner agencies, public-private partnerships

Relevance to Mobility Master Plan Goals Goals 1, 3, 4, 5, 8, 9

Relevance to Climate Action Plan Policies

Policies 3.4b, 3.4 SA-1, 3.4 SA-2, 3.6a

Incorporating Community Engagement



The community identified sidewalk and bike lane improvements and traffic calming measures as key priorities to improve safety. Urban sensing provides information about traffic and infrastructure conditions that can inform policies and plans to address safety challenges.



Installing AoT sensors, Chicago Source: University of Chicago, 2016

CITYWIDE

Estimated Initiation Timeframe

Implementation Cost

SHARED MOBILITY

Programs

Micromobility Charging and Services



Micromobility Infrastructure in Denver

Micromobility public charging stations provide a place for e-bikes and scooters to charge within mobility hubs and around activity centers. This infrastructure addresses the needs of all micromobility users and encourages sustainable mobility options. Charging stations will allow both fleet users and people with personally-owned devices to have confidence that their devices will be charged when needed.

Bikeshare programs are included in the broader suite of micromobility solutions, which includes existing scootershare in San Diego. A bikeshare program allows users to access short-term bike rentals (electric or pedaled) throughout the City. These bikes can either be docked at stations or dockless and accessed through an app. Ensuring these programs include adaptive devices (e.g., tricycles and hand-powered bicycles) provides all users with the opportunity to utilize such a program.

PROGRAM IN ACTION

The New York City Housing Authority is investing approximately \$25 million in e-bike charging infrastructure at 53 sites. The charging hubs are expected to be installed by 2025 and will provide a reliable charging source to riders within the City. The investment will provide micromobility users with a safe outdoor place to charge and store their devices while reducing the burden of in-home storage and reducing the risk of fires that may be caused by lithium ion batteries.

PROGRAM HIGHLIGHTS

3-5 years

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Citibike Station in New York City Source: Jeff Greenbery /Getty Images



IMPLEMENTATION AND MONITORING



Implementation and Monitoring

8.1 IMPLEMENTATION APPROACH

This chapter discusses how we implement this Mobility Master Plan and monitor performance over time. While implementing transportation projects and programs in the City is a critical component of the Plan, we also recognize a comprehensive mobility plan can create a pathway to change City policies and regulations, improve internal City processes, strengthen valuable partnerships, identify funding opportunities, and conduct on-going outreach. The implementation approach identified in this chapter will help ensure that projects prioritized in the Mobility Master Plan are aligned with the Capital Improvement Program (CIP) process. Project programming will continue to be conducted under Council Policy 800-14, which set the guidelines for developing the City's CIP.

8.2 CLIMATE ACTION PLAN IMPLEMENTATION

The Mobility Master Plan also considers the actions set forth in the CAP. To accompany the CAP, the Climate Action Implementation Plan (Implementation Plan) organizes and prioritizes the actions from each CAP strategy. These actions are organized into six different measures and prioritized by implementation timing (Preliminary, Foundational, Next, and Other).

8.3 IMPLEMENTATION ACTIONS

The Mobility Master Plan will be implemented through a combination of near-term and long-term actions over time. Near-term actions are defined as those that can be accomplished over the next five years which falls within the development period of the next Mobility Master Plan. The long-term actions are those that can be accomplished by 2035, which aligns with the CAP's horizon year for achieving net zero GHG emissions and 50% non-auto mode share. Long-term actions will become near-term actions over future Mobility Master Plan cycles and will be refined as more is known about these efforts and ways to fund them. This work will also be informed by future outreach on Mobility Master Plan updates and implementation efforts, but also through parallel and complementary initiatives, including any updates to the General Plan, community plan updates, and modal master plan updates.

8.3.1 NEAR-TERM ACTIONS (0 - 5 YEARS)

- » Develop and implement Mobility Master Plan projects and programs based on budget availability and staffing resources.
- » Continue to refine Mobility Master Plan projects and programs as necessary, including the definition of specific corridors or project bundles to enhance both project and program effectiveness.
 - » Leverage SANDAG "On the Move" project funding through the Transit Strategic Partnership grant to bring prioritized projects and programs closer to construction and implementation.

- » Research opportunities to connect all capital investment with mobility programs as identified in Chapter 7 (Programs).
- » Fold in outreach and engagement activities from Council Policy 000-32 Neighborhood Input on Infrastructure Needs and Priorities in partnership with the City Planning Department as part of their Equity Forward initiative.
- » Evaluate other documented transportation needs in partnership with the Transportation Department.
- » Evaluate programs for opportunities to implement with an equity lens.
- » Establish the Mobility Governance Group amongst the City's planning and asset management departments to ensure the implementation of Complete Streets.
- Develop a comprehensive data mapping and visualization portal of mobility projects and programs along with the appropriate data governance framework to manage both transparency and efficiencies that can be gained by having a consolidated location for all mobility mapping information, including the following support activities:
 - » Incorporate planned mobility infrastructure into asset management portals (i.e., find opportunities to leverage the Enterprise Asset Management systems).
 - » Maintain this comprehensive inventory of existing and planned mobility infrastructure integrated with City databases and programs (i.e., Mobility Master Plan, Capital Improvement Program, Transportation Unfunded Needs List, Public Facility Financing Plans, Enterprise Asset Management systems).
 - » Initiate process to transition unmet needs identified in the City's Transportation Unfunded Needs List (TUNL) into projects to be defined for future plans and included in the data viewer.
- » Support the development of a citywide electric vehicle (EV) strategy to accelerate EV adoption, including flexible fleets, circulators, and electric bicycles, focusing on the barriers to ownership and charging for residents within Communities of Concern.
- » Increase the number and quality of public education programs that promote bicycling and bicycle safety through raising awareness of bicycling's diverse benefits.
- » Implement the following "Preliminary" Mobility CAP actions:
 - » Identify transit stops where upgrades are needed, especially in Communities of Concern (CoCs), and streamline implementation of upgrades to high priority transit stops (Implementation Plan 3.3c).
 - » Establish a team and roadmap to support actions that require connectivity and close the digital divide (Implementation Plan 3.2 SA-3).
 - » Improve and expand data gathering and outreach in CoCs to understand which residents need the most assistance to technology options, what the barriers are to remote work, and improved community's ability to access technology (Implementation Plan 3.3 SA-7).
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- » Amend the land development code to eliminate parking minimum requirements (Implementation Plan 3.6 b).
- » Implement the following "Foundational" Mobility CAP actions:
 - » Update Bicycle Master Plan (Implementation Plan 3.1b).
 - » Develop a City of San Diego employee TDM policy and associated TDM ordinance (Implementation Plan 3.3a, 3.3b).
 - » Work with MTS to improve amenities including transit shelters at high-volume transit stops (Implementation Plan 3.2c).
 - » Update of the Street Design Manual to incorporate Complete Street elements and keep pace with innovation and best practices surrounding street design (Implementation Plan 3.1 SA-4).
 - » Develop a Quick-build program to enable the implementation of pilot projects, tactical urbanism opportunities, slow streets, and traffic calming throughout all City rights-of-way (Implementation Plan 3.1 SA-8, 3.2b).
 - » Amend land development code regulations to require more efficient pedestrian access between existing and new development (Implementation Plan 3.5 SA-4).
- » Implement the following "Other" Mobility CAP actions:
 - » Adopt a Complete Streets Policy (Implementation Plan 3.5 SA-3).
 - » Update the General Plan Mobility Element (Implementation Plan 3.5 SA-3).
 - » Explore fee structure/incentive program to increase cost savings for shared transportation network company (TNC) trips relative to private TNC trips (Implementation Plan 3.1 SA-20).
 - » 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. (Implementation Plan 3.2a).
 - » Explore transit pass subsidy programs Citywide (Implementation Plan 3.2 SA-2).
 - » Explore opportunities to enhance goods movement, deliveries, and the management of curb space including ADA access, passenger loading considerations, and micromobility (Implementation Plan 3.4 SA-2, 3.6a).
 - » Partner with private mobility operators to solve "first/last" mile barriers with coordinated solutions (Implementation Plan 3.1g).
 - » Review and improve flexible fleets and micro-mobility policies/shared use mobility programs and first mile/last mile applications (Implementation Plan 3.1f, 3.1g).
 - » Develop Safe Routes to School Programs (toolkit, encourage use of alternative modes youth opportunity programs) (Implementation Plan 3.1a).

- » Implement a Slow Street Ordinance and Implementation Tool Kit.
- » Complete a Roundabout Master Plan to discover and prioritize locations where roundabout implementation would be beneficial to access, safety, and mobility while working to achieve Climate Action Plan goals.
- » Update street typologies to better align the transportation network with Complete Streets efforts.
- » Complete the Accessible Pedestrian Connections and Safety Plan to serve as a blueprint for safe and accessible access for pedestrians of all abilities throughout the City.
- » Monitor the implementation of the Mobility Master Plan on a four-year reporting cycle, through the development of a Mobility Master Plan Implementation Monitoring Report.
- In alignment with Climate Resilient SD, integrate consideration for climate change hazards, due to sea level rise, extreme heat, precipitation driven flooding, and wildfire, into the planning and implementation of the mobility network to enhance the ability of City infrastructure and communities to a changing climate.
- » Continued coordination with external agencies and peer jurisdictions involved in regional and local transportation network planning, implementation, and operations (Port, Airport, Caltrans, SANDAG, APCD, MTS, NCTD, and San Diego Unified School District).
- » Revise CP 100-18 Community Parking District, which could include flexibility on their formation, joint establishment during a Community Plan Update process, and funding use.
- » Explore and invest in parking management technologies (i.e., sensors, dynamic parking capabilities) to help with curbside management.
- Support systemic safety by developing a comprehensive policy addressing the development and implementation of quick, near-term safety projects, and streamlines the process and delivery of critical traffic safety improvements (e.g., paint, safety posts, temporary sidewalk extensions, other innovative materials) to City streets.
- » Develop a strategic mobility financing strategy that identifies annual funding for mobility projects, programs, and operations through 2035.



8.3.2 LONG-TERM ACTIONS (BY 2035)

- » Continue to implement Mobility Master Plan projects and programs based on budget availability and staffing resources.
- » Implement the following "Next" Mobility CAP Actions:
 - 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 (Implementation Plan 3.2d).
 - » Increase the canopy of street trees or other shading mechanisms to beautify neighborhoods, cool the pavement and enhance transit stops, reduce the urban heat island effect, and create shade within the public realm, prioritizing areas at risk of heat exposure (Implementation Plan 5.2f).
- In alignment with Climate Resilient SD, continue to integrate consideration for climate change hazards, due to sea level rise, extreme heat, precipitation driven flooding, and wildfire, into the planning and implementation of the mobility network to enhance the ability of City infrastructure and communities to a changing climate.
- » Continue to offer or expand incentive programs that support sustainability objectives, improve safety, and enhance equity.
- » Seek pathways to deploy Mobility as a Service (MaaS) through collaborative agreements with existing services, new services if required to fill existing gaps, and customer-focused user applications to make multimodal trip making accessible, convenient, and affordable for all.
- » Accommodate autonomous and connected vehicle infrastructure and operations as those services are deployed through goods movement applications, transit agency service, public and private mobility solutions, and with personal mobility devices and vehicles throughout the City.
- » Invest in dynamic arterial management systems to maximize roadway rights-of-way through prioritization of sustainable modes.

All of these actions would be contingent on available budget, grant programs, and other funding identified in Chapter 9. Additionally, implementation of these actions would benefit from continued and expanded partnerships with both public and private organizations with similar goals.

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8.4 PERFORMANCE MONITORING

A critical element of success to project implementation is a robust performance monitoring framework. Such a framework serves to provide oversight of project progress to all parties, enable more effective project management, and promote greater accountability. To this end, clear internal reporting workflows and structures can be developed so that all relevant staff and project members across departments can keep track of project timelines and address potential issues or concerns early on. These workflows can incorporate regular cost and funding updates to ensure that projects remain financially feasible.

For greater transparency to the public, the City will update the Mobility Master Plan webpage with status updates of actions being implemented. As the Plan and projects may evolve over time, this webpage can remain a permanent channel for public feedback and suggestions. The Mobility Master Plan also includes a commitment to monitor the implementation of the Mobility Master Plan on a four-year reporting cycle, beginning 2025, through the development of a Mobility Master Plan Implementation of the performance monitoring indicators outlined in the following section.

In parallel, the Climate Action Plan includes an annual monitoring report and commits to conducting comprehensive GHG emissions inventories at least every two years. The annual progress report will use data from the GHG inventories and air quality monitoring data from the Air Pollution Control District (APCD), City departments, and external partners to demonstrate the progress of implementation and the outcomes of actions to-date.

8.4.1 PERFORMANCE MONITORING INDICATORS

- » Commute mode share (American Community Survey)
- » Commute travel times (American Community Survey)
- » Vehicle miles traveled (Caltrans Performance Measurement System)
- » Fatalities and serious injuries (City of San Diego)
- » First-mile/Last-mile projects completed (City of San Diego)
- » Miles of new and repaired sidewalks (programmed and completed) (Climate Action Plan Monitoring)
- Miles of new bikeways completed, by classification (Class I-IV) (programmed and completed) (Climate Action Plan Monitoring)
- Modeled percentage of average weekday trips taken by City residents that are completed by walking and biking (Climate Action Plan Monitoring)
- Miles of dedicated bus lanes, shared bus-bike lanes (programmed and completed) (Climate Action Plan Monitoring)

- » Annual bus and rail transit boardings in the City (total and percent change) (Climate Action Plan Monitoring)
- » Modeled percentage of average weekday trips taken by City residents that are completed using public transit (Climate Action Plan Monitoring)
- » Number of residential units required to include mandatory TDM regulations, including provisions related to remote work (approved and built) (Climate Action Plan Monitoring)
- » Amount of non-residential square footage required to include mandatory TDM regulations, including provisions related to remote work (approved and built) (Climate Action Plan Monitoring)
- » Modeled citywide vehicle miles traveled (compared to Business As Usual Assumption for citywide vehicle miles traveled for the same year as reported in the CAP) (Climate Action Plan Monitoring)
- » Number of new roundabouts and traffic circles installed (Climate Action Plan Monitoring)
- » New residential units within Transit Priority Areas (TPAs)/Sustainable Development Areas (SDAs) (approved and built) (Climate Action Plan Monitoring)
- » Non-residential square footage within TPAs/SDAs (approved and built) (Climate Action Plan Monitoring)
- » Modeled per-capita vehicle miles traveled (Climate Action Plan Monitoring)
- » Linear feet of curb space optimization projects (programmed and completed) (Climate Action Plan Monitoring)





FUNDING





Funding

9.1 FUNDING OVERVIEW

By prioritizing mobility projects in areas of San Diego with the greatest need, the Mobility Master Plan sets a pathway for CAP implementation success. These mobility projects and programs will need sustainable funding sources and models. A robust monitoring framework can provide justification for funding opportunities over time, track effectiveness of the expenditures, and can help ensure there are sufficient resources in the long-term to achieve the multiple goals and objectives of this Plan.

This chapter outlines the types of governmental funding sources that are available to the City. Each funding source and program has specific eligibility criteria and requirements to ensure funds are allocated to projects that would contribute to or achieve the funding programs' goals, such as climate resilience, traffic safety, and sustainable transportation. With this framework of funding options, the City can consider the best funding source, or combination of sources, to develop a funding strategy for this Plan and secure individual project and program funds.



FIGURE 9-1: Governmental Funding Sources

9.2 PLANNING AND IMPLEMENTATION FUNDING SOURCES

The following sections outline many of the possible funding sources that are available for mobility projects in the first phases of their lifecycles from planning to implementation.

9.2.1 FEDERAL FUNDING SOURCES

USDOT REBUILDING AMERICAN INFRASTRUCTURE WITH SUSTAINABILITY AND EQUITY (RAISE) DISCRETIONARY GRANTS

Established in 2009, as the Transportation Investments Generating Economic Recovery (TIGER) grants, and later renamed RAISE under the Biden Administration in 2021, this competitive grant program provides \$1.5 billion in funding each fiscal year (FY) from FY22 to FY26 to support multimodal and multi-jurisdictional projects of local or regional significance. Projects are evaluated on safety, environmental sustainability, mobility and community connectivity, economic competitiveness, and opportunity criteria. Strong preference is given to projects that address transportation-related disparities and climate change and improve equity and environmental justice.¹ Both capital and planning projects are eligible for RAISE grants.

FEDERAL HIGHWAY ADMINISTRATION (FHWA) PROMOTING RESILIENT OPERATIONS FOR TRANSFORMATIVE, EFFICIENT, AND COST-SAVING TRANSPORTATION (PROTECT) PROGRAM

The PROTECT program provides funding for capital and planning projects that improve the resilience of transportation infrastructure and facilities to climate change and natural disasters. Between FY22 to FY26, a total of \$8.7 billion will be made available for formula funding and competitive grants. While formula funding is apportioned to each state, the competitive grant is open to a variety of entities including metropolitan planning organizations (MPOs) and local governmental entities.^{2, 3}

FHWA SURFACE TRANSPORTATION BLOCK GRANTS (STBG) & TRANSPORTATION ALTERNATIVES

The STBG is a formula funding program that supports states and localities in capital and planning projects aimed at preserving and improving the conditions and

¹ FY 2023 RAISE Grants Notice of Funding Opportunity, US Department of Transportation. https://www.transportation.gov/RAISEgrants/raise-nofo

² Bipartisan Infrastructure Law - Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Formula Program Fact Sheet, Federal Highway Administration. https://www.fhwa.dot.gov/ bipartisan-infrastructure-law/protect_fact_sheet.cfm

³ PROTECT Discretionary Grant Program Fact Sheet, US Department of Transportation. https://www.fhwa.dot.gov/ bipartisan-infrastructure-law/docs/PROTECT_Discretionary.pdf

Funding

performance of surface transportation, including transit. Between FY22 and FY26, \$72 billion has been authorized for allocation. Ten percent of the annual available STBG funds is required to be set aside for Transportation Alternatives, which funds smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, and safe routes to school projects.^{4, 5}

US DOT RECONNECTING COMMUNITIES PILOT (RCP) PROGRAM

The RCP was established by the Bipartisan Infrastructure Law (BIL) to provide competitive grants to restore community connectivity by removing, retrofitting, or mitigating highways or other transportation facilities that have historically segregated communities and acted as barriers to mobility and economic opportunities. From FY22 to FY26, an estimated \$1 billion will be made available to a range of entities, including local governments and MPOs, for both capital and planning projects.⁶

US DOT SAFE STREETS AND ROADS FOR ALL (SS4A) GRANT PROGRAM

In 2022, the BIL created the new SS4A discretionary grant program to support local safety initiatives aimed at preventing fatalities and serious injuries on roads and streets. From FY22 to FY26, the US Department of Transportation will award up to \$1 billion annually to fund planning and capital projects, including the development of comprehensive safety action plans. Funding is provided directly to and exclusively for local entities such as MPOs and political subdivisions of a state.⁷

FEDERAL TRANSIT ADMINISTRATION (FTA) CAPITAL INVESTMENT GRANTS (CIG) PROGRAM

The CIG program provides approximately \$4.6 billion per fiscal year from FY22 to FY26 to fund large-scale light, heavy, and commuter rail, streetcar, and bus rapid transit capital projects. State and local government agencies, including transit agencies, may apply for funding to support new or expansion projects. To be awarded funding through this program, proposed projects must complete a multi-year, multi-step development process outlined in the CIG statute.⁸

FTA STATE OF GOOD REPAIR AND RAIL VEHICLE REPLACEMENT PROGRAM

The State of Good Repair formula grant program allocates funding to state and local government authorities in urbanized areas operating high-intensity fixed guideway and

⁴ Implementation Guidance for the Surface Transportation Block Grant Program (STBG) as Revised by the Bipartisan Infrastructure Law, US Department of Transportation. https://www.fhwa.dot.gov/specialfunding/stp/bil_stbg_implementation_guidance-05_25_22.pdf

⁵ Bipartisan Infrastructure Law - Surface Transportation Block Grant (STBG) Fact Sheet, Federal Highway Administration. https://www.fhwa.dot.gov/bipartisan-infrastructure-law/stbg.cfm

⁶ Reconnecting Communities Pilot (RCP) Program - Fact Sheets, Federal Highway Administration. https://www.fhwa. dot.gov/bipartisan-infrastructure-law/rcp_fact_sheet.cfm

⁷ Safe Streets and Roads for All (SS4A) Grant Program, US Department of Transportation. https://www.transportation.gov/grants/SS4A

⁸ Fact Sheet: Capital Investment Grants Program, Federal Transit Administration. https://www.transit.dot.gov/fund-ing/grants/fact-sheet-capital-investment-grants-program

bus systems for the maintenance, replacement, and rehabilitation of capital assets, as well as development and implementation of transit asset management plans. From FY22 to FY26, \$22.8 billion will be made available to support this program.

Additionally, \$300 million of the annual available funding is set aside for competitive grants under the Rail Vehicle Replacement Program to assist state and local government agencies in reinvestments for rail rolling stock.^{9, 10}

FTA GRANTS FOR BUSES AND BUS FACILITIES PROGRAM (CAPITAL)

The Grants for Buses and Bus Facilities Program (Buses and Bus Facilities Program) includes formula and competitive grants to support a range of capital projects including replacement, rehabilitation, and acquisition of buses and related equipment, and construction of bus-related facilities. The program also includes the Low or No Emission Grant Program (Low-No Program), a competitive grant which aims to support the transition of transit fleets to least-polluting and most energy efficient vehicles. From FY22 to FY26, approximately \$3.16 billion and \$1.96 billion will be made available for Buses and Bus Facilities Program formula and competitive grants respectively; a total of \$5.62 billion will be made available under the Low-No Program.¹¹ State, local governmental entities, and designated recipients that operate fixed-route bus service or allocate funding to fixed-route bus operators are eligible to apply.¹² While the City of San Diego is not an eligible recipient of these funds, transit improvements resulting from this Program may advance non-auto mode-share in the City.

FTA URBANIZED AREA FORMULA GRANTS

The Urbanized Area Formula Funding program provides \$33.1 billion from FY22 to FY26 to support capital and planning projects and operating costs of equipment and facilities for public transportation use in urbanized areas.¹³ In urbanized areas with populations greater than 200,000, funding is disbursed directly to the MPO, whereas Caltrans administers funds for urbanized areas with populations of fewer than 200,000.¹⁴ While the City of San Diego is not an eligible recipient of these funds, transit improvements resulting from this Program may advance non-auto mode-share in the City.

⁹ Fact Sheet: State of Good Repair and Rail Vehicle Replacement Program, Federal Transit Administration. https://www.transit.dot.gov/funding/grants/fact-sheet-state-good-repair-and-rail-vehicle-replacement-program

^{10 2022} State of Good Repair Program Guidelines, California Department of Transportation. https://dot.ca.gov/-/ media/dot-media/programs/rail-mass-transportation/documents/sgr/202207-sgr_2022_guidelines-ver1-a11y.pdf

¹¹ Low or No Emission and Grants for Buses and Bus Facilities Competitive Programs FY2023 Notice of Funding Opportunity, Federal Transit Administration. https://www.transit.dot.gov/notices-funding/low-or-no-emission-and-grants-buses-and-bus-facilities-competitive-programs-fy2023

¹² Fact Sheet: Buses and Bus Facilities Program, Federal Transit Administration. https://www.transit.dot.gov/fund-ing/grants/fact-sheet-buses-and-bus-facilities-program

¹³ An urbanized areas is defined here as an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census.

¹⁴ Infrastructure Investment and Jobs Act: Transportation Overview, California Senate Office of Research. https:// sor.senate.ca.gov/sites/sor.senate.ca.gov/files/IIJA%20Transportation%20Overview%20-%20SOR-FINAL.pdf

Funding

FTA PILOT PROGRAM FOR TRANSIT ORIENTED DEVELOPMENT PLANNING

This program provides funding for site-specific or comprehensive planning projects that are associated with a new fixed guideway or core capacity transit capital project. Plans funded through this program must explore ways to improve transit access for active mobility options, create opportunities for economic development and increased ridership, identify infrastructure needs, and enable mixed-use development near transit stations. As the City works with SANDAG to plan and implement more flex lanes to support the Transit Leap strategy, integrating land use and transportation planning with any new fixed guideway and core capacity transit corridor projects will become more critical and may be an eligible use of this funding. From FY22 to FY26, approximately \$68.9 million will be available to state or local government authorities for such projects.¹⁵

9.2.2 STATE FUNDING SOURCES

CALTRANS AND CTC ACTIVE TRANSPORTATION PROGRAM (ATP)

The ATP was established to encourage greater use of active mobility options such as walking or rolling and biking, as well as to increase the safety and mobility of non-motorized users. Approximately \$200 million of state and federal funding is made available each year to support capital, planning, and other non-infrastructure projects by entities within California, including local, regional, or transit agencies.^{16, 17} Since 2013, there have been six application cycles, with the most recent cycle concluding in 2022.

CALTRANS SUSTAINABLE TRANSPORTATION PLANNING GRANTS¹⁸

The Sustainable Transportation Planning Grant Program consists of three separate grants which aim to support Caltrans' mission of providing a safe and reliable transportation network that serves all people and respects the environment. The level of funding varies annually; for the most recent FY23/24 cycle that closed in March 2023, a total of \$84 million was made available for planning projects that maintain and integrate the state's multimodal transportation system while improving public health, social equity, the environment, and environmental justice. The following list outlines the three grants that comprise the Sustainable Transportation Grant Program.

¹⁵ Biden-Harris Administration Announces \$13.1 Million in Grant Awards to Help Communities Plan for Transit-Oriented Development. https://www.transit.dot.gov/about/news/biden-harris-administration-announces-131-million-grant-awards-help-communities-plan

¹⁶ Active Transportation Program Fact Sheet, California Transportation Commission, Caltrans. https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/atp/2020/atpfactsheet20202024.pdf

^{17 2023} Active Transportation Program Guidelines, California Transportation Commission. https://catc.ca.gov/-/media/ctc-media/documents/programs/atp/2022/adopted-2023-active-transportation-program-guidelines-a11y.pdf

¹⁸ Sustainable Transportation Planning Grants Webpage, Caltrans. https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/regional-and-community-planning/sustainable-transportation-planning-grants



UC San Diego Blue Line Trolley station.

- Sustainable Communities Grant. This state-funded grant is intended to support and implement local and regional multimodal transportation and land use planning projects that further the region and state's GHG emissions reduction targets. Typically, approximately \$12.5 million is distributed annually to MPOs on a formula basis; the amount for competitive grants varies from year to year. In the last four cycles, between \$17.4 and \$29.5 million were awarded to qualifying projects. Competitive grants are open to a range of applicants, including eligible MPOs, Regional Transportation Planning Agencies (RTPA), transit agencies, and cities.
- » Climate Adaptation Planning Grant. Newly created in FY23/24, this statefunded competitive grant is dedicated to tribal, local, and regional identification of transportation-related climate vulnerabilities. \$50 million was available for development of climate adaptation plans and project-level adaptation planning. MPOs, RTPAs, transit agencies, cities, and more entities are eligible to apply.
- Strategic Partnerships and Strategic Partnerships (Transit) Grants. The Strategic Partnerships Grants are funded by the FHWA and FTA for planning projects that partner with Caltrans to address projects on or connecting to the State Highway System; the transit sub-category addresses multimodal planning projects which have a transit focus. In the last four cycles (FY21-FY24), between \$3.2 and \$4.5 million were available annually under the Strategic Partnerships and Transit subcategory respectively.

CTC LOCAL TRANSPORTATION CLIMATE ADAPTATION PROGRAM (LTCAP)

The LTCAP provides competitive grants to local agencies to support development and implementation of capital projects that adapt local transportation infrastructure to climate changes while advancing environmental justice.¹⁹ From FY22 to FY26, approximately \$400 million will be available over two funding cycles to MPOs, RTPAs, cities, counties, local transportation authorities and entities, and tribal governments.²⁰

¹⁹ Local Transportation Climate Adaptation Program (LTCAP), California Transportation Commission. https://catc. ca.gov/programs/local-transportation-climate-adaptation-program

²⁰ Local Transportation Climate Adaptation Program Guideline Development Workshop 3. https://catc.ca.gov/-/media/ctc-media/documents/programs/ltcap/november-27-ltcap-presentation-a11y.pdf

CALIFORNIA NATURAL RESOURCES AGENCY ENVIRONMENTAL ENHANCEMENT AND MITIGATION (EEM) PROGRAM FOR RELATED TRANSPORTATION FACILITY

The EEM program seeks to provide funding to projects for the purposes of mitigating environmental impacts caused by new or modified public transportation facilities, such as mass transit guideways, transit stations, or park-and-ride facilities. Each year, this competitive grant awards up to \$7 million to local, state, and federal agencies and non-profit entities.²¹

CALIFORNIA AIR RESOURCES BOARD CLEAN MOBILITY OPTIONS (CMO) PILOT PROGRAM

The CMO program is funded by California Climate Investments, a statewide initiative that allocates Cap-and-Trade dollars to capital projects that improve access to clean transportation and to increase zero-emission mobility choices for disadvantaged and low-income communities. Project locations must be in a community that is either a Disadvantaged Community or a California Assembly Bill (AB) 1550-designated low-income community. Funding amounts vary annually; for FY21/22, \$20 million was made available while the FY22/23 cycle which closed in April 2023 provided \$33 million for bikesharing, ride-on-demand services, carpooling services, and other similar mobility projects.^{22, 23}

CALIFORNIA OFFICE OF TRAFFIC SAFETY (OTS) GRANTS

The OTS provides funding for non-infrastructure projects that prevent serious injury and death resulting from motor vehicle crashes. Funds can be used for bicycle and pedestrian safety. Only public entities, or non-profit organizations with a public entity as a host agency, are eligible to apply for funding. The amount of funding varies annually and project expenses are reimbursed after expenditure.²⁴

CALTRANS TRANSPORTATION DEVELOPMENT ACT (TDA)

The TDA authorizes the use of revenues from fuel and sales taxes to support projects improving public transportation services and encouraging regional transportation coordination.²⁵ Two funding sources are established under TDA:

» **State Transit Assistance (STA) funds**. STA funds are allocated by formula to planning agencies and other selected agencies for transportation planning and mass transportation purposes only. This grant may not be used to fund administration, streets, or road projects.

²¹ Environmental Enhancement and Mitigation Grant Program, California Natural Resources Agency. https://resources.ca.gov/grants/environmental-enhancement-and-mitigation-eem/

²² Clean Mobility Options Webpage. https://cleanmobilityoptions.org/

²³ Implementation Manual for the Clean Mobility Options Voucher Pilot Program (CMO), Clean Mobility Options. https://cleanmobilityoptions.org/wp-content/uploads/2022/12/Final-Implementation-Manual-December-23-2022. pdf

²⁴ California Office of Traffic Safety Grant Program Manual For Federal Fiscal Year 2023, California Office of Traffic Safety. https://www.ots.ca.gov/wp-content/uploads/sites/67/2022/11/GRANT-PROGRAM-MANUAL-FFY-2023.pdf

²⁵ Transportation Development Act, Caltrans. https://dot.ca.gov/programs/rail-and-mass-transportation/transportation-development-act

» Local Transportation Fund (LTF). LTF is derived from a quarter-cent general sales tax collected statewide. The State Board of Equalization returns the tax revenue to the originating county to be administered by the designated RTPA for local public transit planning, operations, and capital projects.

9.2.3 REGIONAL FUNDING SOURCES

Regional funding sources stem primarily from *TransNet*, a half-cent sales tax for transportation projects administered by SANDAG. Through the *TransNet* Extension Ordinance approved by San Diego County voters in 2004, approximately \$13.85 billion (2002 dollars) is expected to be available for capital and planning projects over the 40-year lifetime of *TransNet*.²⁶

SANDAG TRANSNET ACTIVE TRANSPORTATION GRANT PROGRAM (ATGP)27

The ATGP provides competitive grants to the San Diego region's cities and the County of San Diego for capital, planning, and non-infrastructure projects that encourage the increased use of active transportation, including walking, rolling, and biking. Projects must be consistent with San Diego's regional bike plan, Riding to 2050, and SANDAG's *Planning and Designing for Pedestrians: Model Guidelines for the San Diego Region*.

SANDAG TRANSNET SMART GROWTH INCENTIVE PROGRAM (SGIP)²⁸

The SGIP provides competitive grants to the region's cities and the County of San Diego for transportation-related infrastructure and planning projects that support smart growth and transit-oriented development in Smart Growth Opportunity Areas.

9.2.4 LOCAL FUNDING SOURCES

Local funding may come from a variety of sources, including grants, loans, bonds, taxes and fees, and budgets. One of San Diego's key local funding sources is the Capital Improvements Program (CIP) Budget, the City's financial plan for the construction of its capital projects.

²⁶ SANDAG *TransNet* Program Webpage, SANDAG. https://www.sandag.org/-/media/SANDAG/Documents/PDF/ funding/transnet/transnet-extension-ordinance-and-expenditure-plan.pdf

²⁷ SANDAG – Active Transportation Grant Program Fact Sheet. https://www.sandag.org/-/media/SANDAG/Doc-uments/PDF/funding/grant-programs/active-transportation/TransNet-active-transportation-grant-program/ac-tive-transportation-grant-program-fact-sheet-2019.pdf

²⁸ SANDAG – Smart Growth Incentive Program Fact Sheet. https://www.sandag.org/-/media/SANDAG/Documents/ PDF/funding/grant-programs/smart-growth-and-housing/TransNet-smart-growth-incentive-program/smart-growthincentive-program-fact-sheet-2023.pdf

Funding

TABLE 9-1: City of San Diego Fiscal Year 2024 Adopted Capital Improvements Pr	rogram Budget
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Funding Source	FY 2024	Percent of Total CIP Budget
Airport Funds	\$4,614,497	0.66 %
Bond Financing	\$104,631,689	14.86 %
Climate Equity Fund	\$9,450,000	1.34 %
Development Impact Fees	\$24,844,796	3.53 %
EDCO Community Fund	\$325,521	0.05 %
Enhanced Infrastructure Financing District Fund	\$1,150,000	0.16 %
Facilities Benefit Assessments	\$26,792,948	3.81%
Fleet Services Internal Service Fund	\$2,028,631	0.29 %
Gas Tax Fund	\$4,742,656	0.67 %
General Fund	\$8,050,000	1.14 %
Golf Course Enterprise Fund	\$4,000,000	0.57 %
Infrastructure Fund	\$27,156,372	3.86 %
Library System Improvement Fund	\$300,000	0.04%
Loans	\$6,830,094	0.97%
Mission Bay Park Improvement Fund	\$12,869,721	1.83 %
Other Funding	\$2,346,515	0.33 %
Recycling Fund	\$10,000,000	1.42 %
Redevelopment Funding	\$713,171	0.10 %
Refuse Disposal Fund	\$400,000	0.06 %
Regional Transportation Congestion Improvement Program	\$50,000	0.01 %
San Diego Regional Parks Improvement Fund	\$6,329,850	0.90 %
Sewer Funds	\$136,411,094	19.37%
TransNet Funds	\$27,324,625	3.88 %
Trench Cut/Excavation Fee Fund	\$2,000,000	0.28%
Water Fund	\$280,753,141	39.87 %
Grand Total	\$ 704,115,321	

CAPITAL IMPROVEMENTS PROGRAM (CIP) BUDGET

The CIP Budget allocates existing funds and anticipated revenues to both new and continuing projects in San Diego's CIP. Multiple sources, shown in Table 9-1, contribute funding to the budget, such as *TransNet*, the General Fund, the Infrastructure Fund, and the Climate Equity Fund. Under the adopted FY24 budget, an additional \$704.1 million has been added to the City's multi-year CIP budget, a portion of which is allocated to transportation projects.

The funding sources that are more specifically tied to mobility improvements include the Gas Tax fund, Road Maintenance and Rehabilitation Act (RMRA) fund, *TransNet* funds, Trench Cut Fee fund, Utilities Undergrounding Program fund, the Regional Transportation Congestion Improvement Program (RTCIP) Fee, various community based Development Impact Fees (DIF), the Citywide Mobility DIF, the Otay Mesa Mobility DIF, the Active Transportation In-Lieu Fee, and other developer contributions for specific mobility improvements. Community Parking Districts, Maintenance Assessment Districts (MADs), and Business Improvement Districts (BIDs) may also sometimes contribute to mobility improvements for projects in their specific locations.

The funding sources that are used for all of the General Fund asset types, including mobility improvements, include General Fund Contributions to the CIP, the Capital Outlay fund, the Infrastructure Fund, Debt Financing (which includes lease revenue bonds and Commercial Paper Notes), and the Climate Equity Fund.

SPECIAL FINANCING DISTRICTS

Special financing districts such as Infrastructure Financing Districts (IFDs), Enhanced Infrastructure Financing Districts (EIFDs) and Climate Resiliency Districts (CRDs), where established, could provide dedicated funding for mobility projects in the City. While technically not new revenue sources, as they divert future property tax revenue, they can be beneficial by partnering with other tax sharing entities that would benefit from the project and can be used in conjunction with other funding sources. The City formed the Otay Mesa EIFD in 2017, which provides funding support for many infrastructure projects in the Otay Mesa community, approximately 70% of which are transportation related. In 2022, the City Council authorized staff to join the County of San Diego in analyzing the feasibility of forming a joint EIFD to provide funding support for the expansion of the San Diego River Trail park system.

9.2.5 MARKET FUNDING SOURCES

PUBLIC PRIVATE PARTNERSHIPS

Public Private Partnerships (P3s) are agreements between a government and a private entity to deliver projects. In a P3, the private entity is responsible for providing some or part of the capital funding for a project and takes on some components of the risk - such as design, construction, maintenance and operation - and any direct revenue or operational savings is shared between the government and private entity based on the expected returns, operational responsibilities, or other contractual terms.

EXAMPLES OF P3 PROJECTS

- » Public right-of-way improvements as part of a development project
 - Installation and maintenance of shade trees
 - Benches
 - Sidewalk bulb-outs at crossings adjacent to the development
 - High-visibility crosswalk striping

- » Smart infrastructure installations (with operations and maintenance contracts)
 - EV Charging Stations
 - Energy Services and Performance Contracts
 - Smart/Adaptive lighting sensors
- » Signage/information installations and operations and maintenance (in exchange for share of advertising revenue)
 - Neighborhood wayfinding signage
 - Transit wayfinding signage
 - Wayfinding and mobility kiosks
- » Shared mobility
 - Bikeshare/scootershare
 - Neighborhood electric shuttles
 - Autonomous shuttles

9.2.6 GREEN/CLIMATE BONDS

Green bonds (also known as climate bonds) are a specialized funding mechanism intended to support sustainability, climate-resilience, and other environmental projects. Among other project types, they may be used to finance energy efficiency and clean transportation projects. As the Mobility Master Plan takes an initial step toward mode shift, this type of financing mechanism may be useful in pursuing EV charging projects, micromobility projects, or those projects which include a climate resilience element such as shelters at transit stops to project from extreme heat or the installation of solar panels at bike lockers to charge e-bikes. Green bonds is a designation to attract specific investors based on the sustainable projects funded by the proceeds generated. The security for Green bonds would be no different from the other City bonds issued for infrastructure funding including General Fund backed Lease Revenue Bonds or Utility Fund backed revenue bonds.



GLOSSARY OF TERMS



1	Balboa Ave/Garnet Ave	3.5
	Pacific Beach	5.7
1	Civic Center/Downtown	12.3



GLOSSARY OF TERMS

Accessibility: A general term used to describe the degree to which a system is usable by as many people as possible or the degree of ease with which it is possible to reach a certain location from other locations. In the Mobility Master Plan, one meaning of accessibility specifically focuses on people with disabilities and their ability to access entities. (As defined in the City of San Diego's General Plan.)

Activity Centers: Areas that generate high pedestrian and vehicular trips such as shopping, entertainment, and commercial districts, universities, recreational facilities, or business parks. (As defined in the City of San Diego's General Plan.)

Best Practice: The most efficient (least amount of effort) and effective (best results) way of accomplishing a task based on repeatable procedure that have proven themselves over time. (As defined in the City of San Diego's General Plan.)

Bicycle Master Plan (BMP): A policy document that guides the development and maintenance of a bicycle network, including other roadways that bicyclists have the legal right to use, support facilities and other programs for San Diego over the next 20 years. These policies address important issues related to San Diego's bikeways such as planning, community involvement, utilization of existing resources, facility design, multimodal integration, safety and education, support facilities, as well as specific programs, implementation, maintenance, and funding. (As defined in the City of San Diego's General Plan.)

Blueprint San Diego (Blueprint SD): Blueprint SD is the City of San Diego's refresh of the General Plan. The purpose of this refresh is to address the updated Climate Action Plan and Regional Plan. It is also a proactive effort to create an equitable and sustainable framework for growth to support current and future San Diegans.

Capital Improvements Program (CIP): A program established by a city or county government which schedules permanent improvements, usually for a minimum of five years in the future to fit the projected fiscal capability of the local jurisdiction. The program generally is reviewed annually, for conformance to and consistency with the General Plan. (As defined in the City of San Diego's General Plan.)

Climate Action Plan (CAP): A climate action plan is a planning document that lays out a path for a community to meet sustainability and climate change mitigation goals through a variety of means. San Diego's 2022 CAP establishes a citywide goal of net zero greenhouse gas emissions by 2035. (As defined in the City of San Diego's Climate Action Plan.)

Climate Change: Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change results from: 1) natural factors (e.g., changes in the sun's intensity or slow changes in the Earth's orbit around the sun); 2) natural processes within the climate system (e.g., changes in ocean circulation); and 3) human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the surface (e.g. deforestation, reforestation, urbanization, desertification, etc.).

Climate Equity: Addressing historical inequities suffered by people of color, allowing everyone to fairly share the same benefits and burdens from climate solutions and

attain full and equal access to opportunities regardless of one's background and identity. (As defined in the City of San Diego's Climate Action Plan.)

Climate Equity Index (CEI): Addressing historical inequities suffered by people of color, allowing everyone to fairly share the same benefits and burdens from climate solutions and attain full and equal access to opportunities regardless of one's background and identity. Also a tool to measure the level of access to opportunity residents have within a census tract and assess the degree of potential impact from climate change to these areas. (As defined in the City of San Diego's Climate Action Plan and General Plan.)

Communities of Concern (CoC): A census tract that has been identified as having very low or low access to opportunity as identified in the San Diego Climate Equity Index. (As defined in the City of San Diego's General Plan.)

Community Plan(s): The officially adopted land use plan of a local community that sets forth goals, policies, and recommendations intended to direct present and future physical development that occurs within the community. Community Plans within the City of San Diego are an integral part of the Land Use and Community Planning Element of the City's General Plan and therefore, must be consistent with the goals and policies of the General Plan. *(As defined in the City of San Diego's General Plan.)*

Complete Streets: Streets designed and operated to enable mobility for all users. Users include people of all ages and abilities, regardless of whether they are traveling as pedestrians, bicyclists, transit users, or motorists.

Demand Management Strategies: As it relates to transportation, strategies to reduce transportation demand through modifying travel behavior and land development policies that reduce automobile dependence. (As defined in the City of San Diego's General Plan.)

Development Impact Fees (DIF): Within urbanized communities, which are near buildout, Development Impact Fees (DIF) are collected to mitigate the impact of new development through provision of a proportionate share of the financing needed for identified pubic facilities and to maintain existing levels of service for that community. *(As defined in the City of San Diego's General Plan.)*

Equity: Occurs when we eliminate institutional racism and systemic disparities, providing everyone with equitable access to opportunity and resources to thrive, no matter where they live or how they identify. (As defined by the City of San Diego's 2022 Budget Equity Guide.)

General Plan (GP): A long range policy document to guide land use decisions about physical, economic, and environmental growth. California state law requires counties and cities to have a General Plan which contains multiple elements including, but not limited to, Land Use and Community Planning; Mobility; Urban Design; and Public Facilities, Services, and Safety. (As defined in the City of San Diego's Climate Action Plan.)

Greenhouse Gas (GHG): Gases, including water vapor, carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), that trap heat in the Earth's atmosphere are called greenhouse gases. GHGs influence climate change through the greenhouse effect, which is contributing to a global rise in average temperatures. (As defined in the City of San Diego's Climate Action Plan.)

Heat Island: A "dome" of elevated temperatures over an urban area caused by structural and pavement heat fluxes, and pollutant emissions. (As defined in the City of San Diego's General Plan.)

Intelligent Transportation Systems (ITS): Electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of the mobility system. (As defined in the City of San Diego's General Plan.)

Micromobility: Micromobility devices consist of electric scooters, electric skateboards, shared bicycles, electric pedal assisted bicycles, pedelec ("pedal electric cycle") bicycles, and neighborhood electric vehicles (NEV). While micromobility devices are available for individual purchase, they are more commonly rented/shared through on-demand or subscription-based services.

Mobility: As it relates to transportation, the ability to move. Among other things, can depend on motor skills, assistive devices, transportation infrastructure (sidewalks, roadways, bikeways, light rail, heavy rail, control devices, etc.), vehicles (bikes, cars, trucks, busses, trolleys, rail cars), transit service (hours of operation, frequency), and congestion. (As defined in the City of San Diego's General Plan.)

Mobility Equity: Mobility equity further defines the need to establish a transportation network that increases access to high-quality mobility options to areas with the greatest needs, and improve the overall transportation network to be safe, reliable, efficient, and affordable for all users and modes of travel. (As defined in the Clty of San Diego's Mobility Action Plan.)

Mobility Loading Priority: A mobility prioritization for roadways, that prioritizes safety for users in the following order: 1) People walking/rolling on every street; (2) People who ride a bike and use micromobility; (3) Transit riders; and (4) People using shared, commercial, and personal vehicles (both for personal trips and for the delivery of goods).

Mode: Means of travel used during a trip, including, but not limited to walking, biking, transit, or the driving.

Mode Shift: As it relates to transportation, the shift from motorized vehicles to alternative modes of transportation, such as walking, bicycling, and taking transit. (As defined in the City of San Diego's General Plan.)

Multimodal: Having or involving multiple travel options (modes) within a corridor or facility; also, connections between modes.

Mixed-use: Development consisting of 2 or more land uses that are combined in a single structure or located on a single site, with functional interrelationships between uses and a coherent design. (As defined in the City of San Diego's General Plan.)

Parking Management: Employing complementary policies and programs designed to optimize the use of public and private parking resources. (As defined in the City of San Diego's General Plan.)

Pedestrian Master Plan (PMP): A master plan designed to enhance neighborhood quality and mobility options by facilitating pedestrian-oriented improvement projects. The City of San Diego's Pedestrian Master Plan identifies and prioritizes

recommendation based on technical analysis and community input, and improve the City's ability to receive grant funding to implement future pedestrian improvement projects. (As defined in the City of San Diego's General Plan.)

Public Facility Financing Plan (PFFP): A document identifying needed public facilities, required timing, responsible parties, and anticipated funding. Also referred to as an Impact Fee Study (IFS). *(As defined in the City of San Diego's General Plan.)*

Public Right-of-way: Public easements or public property that have been dedicated for use as streets, alleys, or other public purposes. (As defined in the City of San Diego's Municipal Code.)

Quick-build: A construction approach in which street space is redesigned using low intensity techniques, low cost measures, and readily available and modifiable materials.

Regional Plan: A minimum 20-year plan that is required by state and federal law to guide the development of the region's transportation system. (As defined in the City of San Diego's General Plan.)

Rolling: A means of travel using wheelchairs or other assistive devices (e.g., hand cycles) or using other wheeled devices, including but not limited to, non-motorized scooters, skateboards, rollerblades, and roller skates.

Shared Mobility Device: An electrically motorized board as defined in Section 313.5 of the Vehicle Code, motorized scooter as defined in Section 407.5 of the Vehicle Code, electric bicycle as defined in Section 312.5 of the Vehicle Code, bicycle as defined in Section 231 of the Vehicle Code, motorized bicycle as defined in Section 406 of the Vehicle Code, or other similar personal transportation device, except as provided in subdivision (b) of Section 415 of the Vehicle Code, that is made available to the public by a shared mobility service provider for shared use and transportation in exchange for financial compensation via a digital application or other electronic or digital platform. (As defined in the City of San Diego's Municipal Code.)

Street Design Manual: Provides information and guidance for the design of the public right-of-way that recognizes the many and varied purposes that a street serves. It includes technical information for the design of residential, commercial, collector, major streets and rural roads; provides design options for traffic calming measures; and other street design standards. (As defined in the City of San Diego's General Plan.)

Structurally Excluded Communities: A term that takes into consideration how racial disparities are often connected to place and are rooted in historic racialized policies and practices that created and maintain unfair racial outcomes. A structurally excluded community also takes into consideration how systems interact with racial and ethnic differences to design disparities and shape racial biases which impact access to opportunities. (As defined by the City of San Diego's 2022 Budget Equity Guide.)

Sustainable Development Area (SDA): Area within a defined walking distance along a pedestrian path of travel from a major transit stop that is existing or planned, if the planned major transit stop is included in a transportation improvement program or applicable regional transportation plan, as follows: 1) Within Mobility Zones 1 and 3 the walking distance is 1 mile; 2) Within Mobility Zone 4 the walking distance is 0.75 mile; and 3) Mobility Zone 2 is the SDA. (As defined in the City of San Diego's Municipal Code.)

Traffic Calming: The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for nonmotorized street users. (*As defined in the City of San Diego's General Plan.*)

Transit Priority Area (TPA): A "Transit priority area" is an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan. (As defined in the California Public Resources Code section 21099(a)(7).)

Transportation Demand Management (TDM): Transportation demand management is a series of measures that encourage use of alternative forms of transportation to alleviate traffic demand on roadways. It is also the application of strategies or policies to increase efficiency of mobility systems, that reduce travel demand, or to redistribute this demand in space or in time.

Underserved: Refers to people and places that historically and currently have not had equitable resources or access to infrastructure, healthy environments, housing choice, etc. Disparities may be recognized in both services and in outcomes. (As defined by the City of San Diego's 2022 Budget Equity Guide.)

Universal Design: A way of designing buildings, products and environments that are inherently accessible to all including people with disabilities, older people and others often excluded by traditional design.

Vision Zero: Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. First implemented in Sweden in the 1990s, Vision Zero has proved successful across Europe and has been gaining momentum in major American cities.

Vehicle Miles Traveled (VMT): A metric that accounts for the number of vehicle trips generated and the length or distance of those trips. For transportation analysis, VMT is generally expressed as VMT per capita for a typical weekday. (As defined in the City of San Diego's Transportation Study Manual.)

Walkability: The extent to which walking is readily available to the consumer, as a safe, connected, accessible, and pleasant activity. (As defined in the City of San Diego's General Plan.)

ACRONYMS AND ABBREVIATIONS LIST

Acronym/ Abbreviation	Long Form
ACS	» American Community Survey
AB	» Assembly Bill
ADA	» Americans with Disabilities Act
ATGP	» Active Transportation Grant Program
AT	» Active Transportation
BIL	» Bipartisan Infrastructure Law
APCD	» Air Pollution Control District
BID	» Business Improvement Districts
BMP	» Bicycle Master Plan
CAP	» Climate Action Plan
СВО	» Community-Based Organization
CEI	» Climate Equity Index
CIG	» Capital Investment Grant
CIP	» Capital Improvements Program
CIPRAC	» Capital Improvements Program Review and Advisory Committee
СМО	» Clean Mobility Options
СМСР	» Comprehensive Multimodal Corridor Plans
CoCs	» Communities of Concern
СР	» Council Policy
CPDs	» Community Parking Districts
CRD	» Climate Resiliency Districts
СТС	» California Transportation Commission
DIF	» Development Impact Fee
DSD	» Development Services Department
EEM	 Environmental Enhancement and Mitigation
EIFD	» Enhanced infrastructure Financing Districts
EV	» Electric Vehicle
FHWA	» Federal Highway Administration
FY	» Fiscal Year
FTA	» Federal Transit Administration
GP	» General Plan
GHG	» Greenhouse Gas
IFD	» Infrastructure Financing Districts
IFS	» Impact Fee Study
ITS	» Intelligent Transportation Systems
LA	» Los Angeles
LTCAP	» Local Transportation Climate Adaptation Program

Acronym/ Abbreviation		Long Form
LTF	»	Local Transportation Fund
MAP	»	Mobility Action Plan
MADs	»	Maintenance Assessment Districts
MaaS	»	Mobility as a Service
MPOs	»	Metropolitan Planning Organization
MTS	»	San Diego Metropolitan Transit System
NACTO	»	National Association of City Transportation Officials
NEV	»	Neighborhood Electric Vehicle
NTCD	»	North County Transit District
OTS	»	Office of Traffic Safety
P3	»	Public Private Partnership
PBD	»	Parking Benefit District
PDT	»	Project development team
PMP	»	Pedestrian Master Plan
PROTECT	»	Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation
PTMD	»	Parking and Transportation Management District
RCP	»	Reconnecting Communities Pilot program
RARA	»	Road Maintenance and Rehabilitation Act fund
RAISE	»	Rebuilding American Infrastructure with Sustainability and Equity
RIP	»	Regional Improvement Program
ROW	»	Right-of-Way
RTCIP	»	Regional Transportation Congestion Improvement Program
RTPA	»	Regional Transportation Planning Agencies
SANDAG	»	San Diego Association of Governments
SB	»	Senate Bill
SD	»	San Diego
SDA	»	Sustainable Development Area
SDCP	»	San Diego Community Power
SDG&E	»	San Diego Gas & Electric
SGIP	»	Smart Growth incentive Program
SOVS	»	Single Occupancy Vehicles
SS4A	»	Safe Streets for All Grant
STA	»	State Transit Assistance
STBG	»	Surface Transportation Block Grant
TDM	»	Transportation Demand Management

Acronym/ Abbreviation	Long Form
TDA	» Caltrans Transportation Development Act
TIGER	» Transportation investments Generating Economic Recovery grant
TNC	» Transportation Network Company
ТРА	» Transit Priority Area
TUNL	» Transportation Unfunded Needs List
US DOT	» United States Department of Transportation
VMT	» Vehicle Miles Traveled



