
PERFORMANCE AUDIT OF THE PARK AND RECREATION DEPARTMENT'S MAINTENANCE OPERATIONS

Instituting a More Systematic and Data-Driven Approach to Assessing Work Order Completion and Staff Deployment Would Strengthen Maintenance Operations

Office of the City
Auditor

City of San Diego



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THE CITY OF SAN DIEGO

October 12, 2017

Honorable Mayor, City Council, and Audit Committee Members
City of San Diego, California

Transmitted herewith is a performance audit report of the Park and Recreation Department's Maintenance Operations. This report was conducted in accordance with the City Auditor's Fiscal Year 2017 Audit Work Plan, and the report is presented in accordance with City Charter Section 39.2. The Results in Brief are presented on page 1. Audit Objectives, Scope, and Methodology are presented in Appendix B. Management's responses to our audit recommendations are presented after page 27 of this report.

We would like to thank staff from the Park and Recreation Department. All of their valuable time and efforts spent providing us information both in the office and in the field is greatly appreciated. The audit staff members responsible for this audit report are Nathan Otto, Luis Briseño, Shawnee Pickney, and Kyle Elser.

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Results In Brief

The City's park and recreation system fulfills the public's need for leisure, supports San Diego's economic base through tourism, and enhances the City's ability to attract and retain business. San Diego's municipal park system is very large—the second-largest by acreage in the United States. With approximately 400 parks that encompass thousands of acres of land, a systematic approach to maintenance operations and staff deployment is essential.

The Park and Recreation Department (PRD) is responsible for operating and maintaining the City's parks. PRD has multiple divisions and various service areas that assist in fulfilling the department's mission "to provide healthy, sustainable, and enriching environments for all." The Community Parks I (CPI) and Community Parks II (CPII) Divisions utilize Grounds Maintenance Workers (GMWs) to perform routine grounds maintenance and custodial tasks—such as watering and pruning park landscapes; removing trash; and cleaning restrooms—at parks and other public facilities. Additionally, the Citywide Maintenance Team (CMT) within the Developed Regional Parks Division provides maintenance and support services for park sites throughout the City that require specialized equipment and skills. For example, CMT is made up of specialized work crews, including park forestry, facility repair, playground repair, and irrigation, among others.

In reference to CMT operations that involve service requests to repair park assets, we found that PRD does not currently use data from ManagerPlus®, its work order system, to comprehensively assess the performance of all CMT functions. We also found other areas where potential changes to the system could improve the work order process in general. Specifically, PRD should align its Park Maintenance Standards to its work order system to better track progress in meeting these standards. We recommend that PRD develop or refine work order completion time standards—or, when appropriate, response time standards for assessing work orders—for all Citywide maintenance functions so that these standards can be tracked in ManagerPlus®.

In regards to operational staffing deployment within the CPI and CPII Divisions, we found that PRD affords managers discretion in adjusting their current staff assignments for its existing park assets. However, the adjustments to staffing assignments are typically not documented. We also found that PRD affords maintenance staff discretion in completing maintenance tasks at park sites. Given this discretion, we examined public feedback mechanisms to determine if the existing deployment mechanisms resulted in outcomes that satisfied park users. We found that, while PRD has made efforts to assess, track, and report on the effectiveness of its maintenance outcomes, these efforts have either been discontinued or they do not specifically ask survey respondents about their satisfaction with grounds maintenance outcomes. We recommend that PRD develop and/or institute structured public feedback and use the results to inform staffing decisions.

We made four recommendations to address the issues outlined above, and management agreed to implement all recommendations.

Background

In accordance with the Office of the City Auditor's Fiscal Year 2017 Audit Work Plan, we conducted a performance audit of the City of San Diego's Park and Recreation Department (PRD).

The overall objective of this audit was to assess the efficiency and effectiveness of PRD's grounds maintenance efforts. To achieve this objective, we:

- Assessed whether PRD met its Park Maintenance Standards for work orders created in FY 2016; and
- Evaluated park maintenance operations by assessing PRD's mechanisms for staff deployment of Grounds Maintenance Workers in the Community Parks Divisions and by shadowing park maintenance crews at several park sites.

A detailed Objective, Scope, and Methodology statement is found in Appendix B.

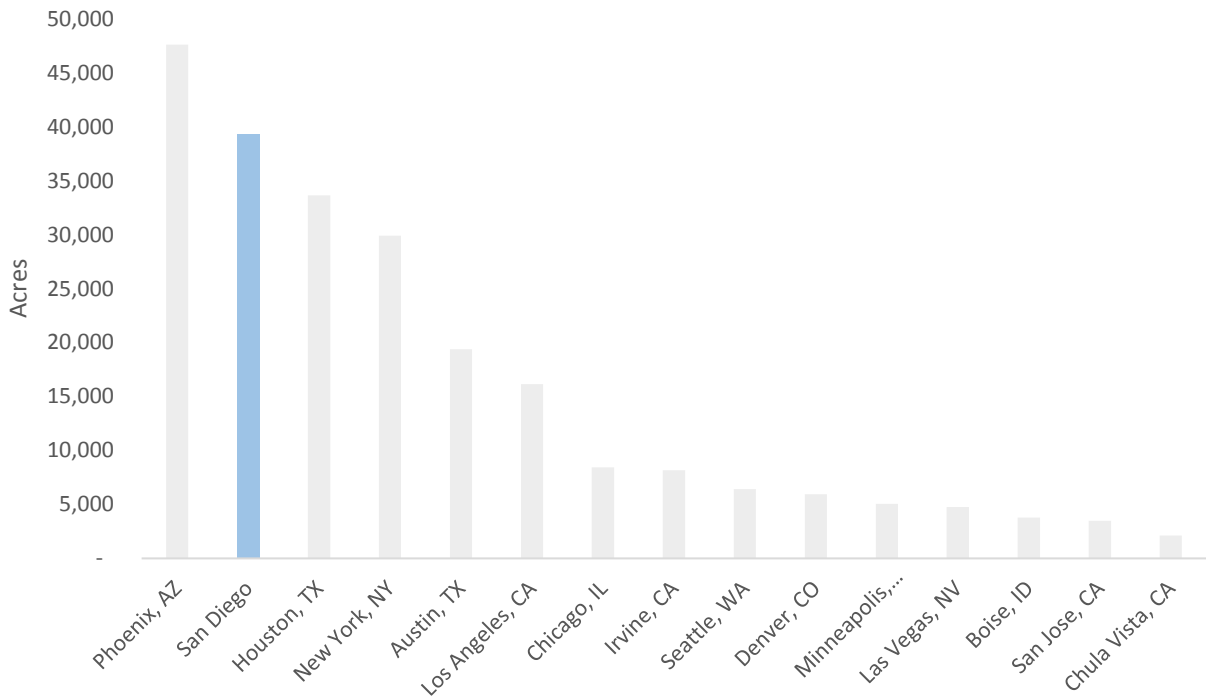
We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on the audit objectives.

Department Overview

PRD operates and maintains a diverse and valued park system that serves millions of residents and visitors each year. According to PRD literature, the City's park system not only fulfills the public's need for leisure, but it also supports San Diego's economic base through tourism and enhances the City's ability to attract and retain business. As shown in **Exhibit 1**, San Diego's municipal park system is very large—the second-largest by acreage in the United States.

Exhibit 1:

The City of San Diego’s Park System is the Second-Largest by Acreage in the United States



Source: OCA based on Trust for Public Land’s 2016 City Park Facts Report.

PRD expects that its park footprint will increase. In 2016, the City, in partnership with the San Diego Unified School District, introduced a new initiative to expand the joint-use program. The goal of this initiative is to maximize the shared use of public facilities and resources for educational and community use. The initiative is expected to create over 30 new joint-use parks in the City over the next five to ten years. PRD will maintain and operate these new facilities.

Overview of the Community Parks I, Community Parks II, and Developed Regional Parks Divisions

PRD has multiple divisions and various service areas that assist in fulfilling the department’s mission “to provide healthy, sustainable, and enriching environments for all.” This audit focused on the Community Parks I (CPI) and Community Parks II (CPII) Divisions and the Citywide Maintenance Team (CMT) within the Developed Regional Parks (DRP) Division of PRD. As illustrated in **Exhibit 2**, these divisions contain the core staff involved in park maintenance operations. Management over the CPI and CPII Divisions include:

- District Managers, who are responsible for a Park Service District, which includes multiple Area Managers;
- Area Managers, who supervise multiple Grounds Maintenance Workers (GMWs); and
- GMWs, who perform on-site grounds maintenance, which includes cleaning up debris and trash; edging, pruning, and trimming park landscapes; removing graffiti; cleaning and disinfecting restrooms; and other responsibilities.

Each division also includes a Management Analyst responsible for budget and staffing, among other things.

Exhibit 2:

Park Maintenance Staff are Contained within the Community Parks I, Community Parks II, and Developed Regional Parks Divisions of the City of San Diego's Park and Recreation Department



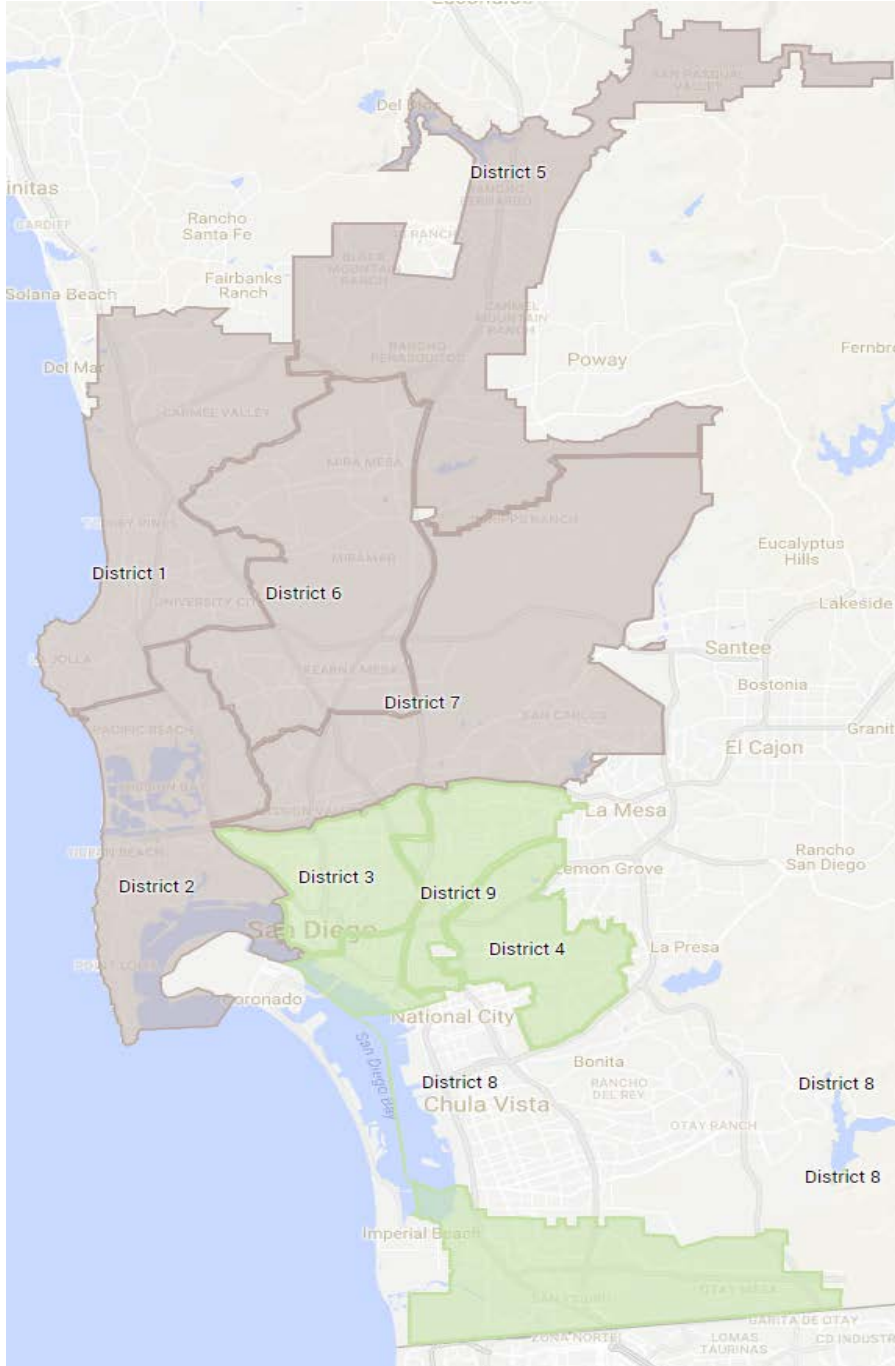
Source: OCA based on the Park and Recreation Department's organization charts.

Note: Other divisions within the Park and Recreation Department include Administrative Services, Open Space, and Golf Operations.

As shown in **Exhibit 3**, these divisions generally split responsibility for park maintenance between the northern and southern parts of the City. Additionally, CMT provides maintenance and support services that require specialized equipment and skills for park sites throughout the City. For example, CMT is made up of specialized work crews including park forestry, facility repair, playground repair, and irrigation, among others.

Exhibit 3:

Community Parks I and II Divisions Generally Split Park Maintenance between Northern and Southern Parts of the City



Community Parks I

- Includes Council Districts 1, 2, 5, 6, and 7
- Facilities include recreation centers, athletics fields, multipurpose courts, picnic facilities, play areas, and landscaping and turf
- Includes the Downtown Park Maintenance Program

Community Parks II

- Includes Council Districts 3, 4, 8, 9
- Includes Cemetery Operations and Therapeutic Recreational Services

Citywide Maintenance Team

- Provides maintenance and support services for park sites throughout the City

Source: OCA based on the Park and Recreation Department's Division Profiles.

Note: The map is offered to demonstrate a general overview of divisional maintenance responsibilities. However, several caveats exist. For example, much of District 3 is serviced by CPII as shown in the map. However, CPI oversees the Downtown Maintenance Program, which is in a portion of District 3.

**Budgetary Overview for
Community Parks I,
Community Parks II, and
the Citywide
Maintenance Team**

Between FY 2015 and FY 2017, average expenditures for park maintenance were approximately \$14 million and \$8 million for CPI and CPII, respectively.¹ Personnel costs related to park maintenance were approximately \$5 million and \$3 million a year for CPI and CPII, respectively. However, expenditures per acre were similar between the two divisions. Annual expenditures for the Citywide Group averaged approximately \$13 million over the same period, with personnel cost being the largest contributor at about \$8 million a year.²

**Citywide Maintenance
Team Work Order
System for Receiving
Service Requests**

According to interviews with the department, on-site staff at parks throughout the City submit service requests to DRP staff for maintenance issues. DRP reviews the service request and forwards them to the appropriate CMT unit. CMT staff electronically store the work orders in its ManagerPlus® system.

According to the ManagerPlus® website, the software links asset management, maintenance management, inventory, and purchasing functions together for quick and easy viewing and decision-making. Further, the Work Requests module is capable of managing service requests for better planning and prioritization, tracking service requests in one centralized place, and helping to better utilize labor and resources.

According to PRD, it acquired ManagerPlus® over 10 years ago for its equipment repair shop. To improve its paper-based work order tracking system, PRD instituted the system department-wide in July 2015. ManagerPlus® contains fields for describing and grouping the work orders—for example: a work order's priority level, the CMT work entity responsible, a description of the work to be performed, dates for when the order was created and/or completed, a work order number, etc.

¹ Park maintenance expenditures include line items related to contracts, personnel costs, and supplies, with personnel and utilities driving costs.

² Expenditures within the Citywide Group include line items for contracts, supplies, and personnel costs.

Audit Results

Finding 1: PRD Should Use a Data-Driven Approach to Assess its Maintenance Performance

The Park and Recreation Department (PRD) plays a key role in the quality of life for San Diego residents and visitors by maintaining over 400 parks that encompass over 40,000 acres of park area. The City's parks provide spaces for physical activity, communal gatherings, and respite. While the maintenance operation of park agencies nationwide may differ for various reasons, certain principles are basic to any effective maintenance operation. These principles include defining maintenance goals and target service levels and periodically assessing progress toward meeting those goals.

We found that PRD does not currently use data from ManagerPlus[®], its work order system, to comprehensively assess the performance of all Citywide maintenance functions. We also found other areas where potential changes to the system could improve the work order process in general. Specifically, PRD should align its Park Maintenance Standards to its work order system to better track progress toward meeting these goals. To do this, PRD should develop or refine work order completion time standards—or, when appropriate, response time standards for assessing work orders—for all Citywide maintenance functions so that these standards can be tracked in ManagerPlus[®].

According to maintenance guidance, transforming data (facts and records) into meaningful information—such as statistics, reports, and management knowledge of key issues—is increasingly necessary to ensure accurate predictions of maintenance needs.³ Database management software programs can be used as a tool to develop performance standards, which can in turn be used to measure how well maintenance practices are achieving results. Measuring a

³ Robert E. Sternloff and Roger Warren, *Park and Recreation Maintenance Management* (Boston: Allyn and Bacon, 1998).

maintenance organization's performance can paint a good picture of how effectively it supports the department's mission.

Multiple factors contributed to PRD's inability to comprehensively assess its maintenance program. First, we mainly attribute data use and quality issues to the recent implementation of PRD's work order system. Secondly, PRD has not established completion time standards for all of the maintenance functions conducted by its Citywide Maintenance Team (CMT). Thirdly, some of the existing park standards are not trackable in PRD's work order system because these standards assign more than one requirement for each maintenance function.

Without quality data management, PRD misses an opportunity to identify trends for different work types and respond accordingly. Additionally, by not using the work order system to assess performance, PRD cannot determine the practicality of its Park Maintenance Standards and make the appropriate adjustments. Finally, PRD cannot assess performance and potentially identify trends and problem areas, which can then inform how to best deploy resources—including staff, equipment, and materials—in a way that is effective.

To improve PRD's ability to measure its performance, we recommended that PRD develop or refine work order completion time standards—or, when appropriate, response time standards for assessing work orders—for all Citywide maintenance functions so that these standards can be tracked in ManagerPlus®. We also recommended that PRD regularly assess CMT's performance by tracking work order completion times and determining whether they comply with PRD's Park Maintenance Standards.

What We Found

We found that PRD does not currently use data from ManagerPlus®, its work order system, to comprehensively assess the performance of all Citywide maintenance functions. We also found other areas where potential changes to the system could improve the work order process in general.

For example, PRD does not currently use its system to assess whether its meeting its standards of care for all Citywide maintenance functions and whether those standards are reasonable. We reviewed FY 2016 work order completion times

and found that PRD is meeting its standard of care for certain types of repair but not others. However, this assessment cannot be performed for all types of repair, either because a standard of care does not exist or because it is not tracked in the work order system. **Exhibit 4** shows average completion times for each of CMT's maintenance functions and compares those to the target completion times outlined in PRD's Park Maintenance Standards. **Exhibit 4** also indicates those standards that are not tracked in the system with the term "varies."

Exhibit 4:

Summary of Fiscal Year 2016 Work Orders by Maintenance Function

Maintenance Function	Number of Work Orders	Average Completion Time (in Business Days)	Standard of Care (in Business Days)
Irrigation	1,113	7	14
Pest Management*	692	19	Varies*
Park Forestry – Safety	208	15	2
Park Forestry – Non-safety	359	19	20
Playgrounds*	461	15	Varies*
Hardscape/Facility	470	20	N/A
Turf Services	147	12	N/A
Aquatics	85	20	N/A
Totals	3,535	14	N/A

*The standards of care for the Pest Management and Playgrounds maintenance functions require different completion times, depending on different scenarios. These different scenarios are not tracked in the work order system, making it difficult to count the number of work orders or calculate average completion times for each scenario. Therefore, the table above presents average completion times for Pest Management and Playgrounds regardless of differing scenarios within their respective standards of care.

Source: OCA generated based on data extracted from the Park and Recreation Department's work order system, ManagerPlus®.

Note: The analysis excludes work orders that took longer than 100 business days to complete because these represented 3 percent of the total work orders and skewed the data significantly.

*Other Data Issues
Complicate PRD's Ability
to Assess its Performance*

While reviewing work order data, we found two additional issues that complicate PRD's ability to assess its performance.⁴ First, work order completion times in some cases preceded creation times in the data. In these cases, the way the data is entered presents a data validity concern because it represents an inaccurate record.

Additionally, CMT informed us that PRD staff may not record data correctly. According to CMT, some staff submitted work orders as safety concerns—which garner the highest priority by CMT—in order to get the fastest response possible. However, in reality, the work orders may have been of a routine nature. During our discussions with PRD, the system administrator told us that the department provided training for all users of the system to ensure that staff selects the appropriate priority for each service request. Further, the system administrator stated that he advises users of the system for proper data entry on an ongoing basis.

What Should Have Occurred

According to maintenance guidance, transforming data (facts and records) into meaningful information—such as statistics, reports, and management knowledge of key issues—is increasingly necessary to ensure accurate predictions of maintenance needs.⁵ When used correctly, database management software programs can be used as a tool for managing maintenance tasks, monitoring budgets, and tracking expenditures. Moreover, an important benefit provided by using a maintenance management program is the ability to develop performance standards, which can be used to measure how well maintenance practices are achieving results. Measuring a maintenance organization's performance can paint a good picture of how effectively it supports the department's mission.

Why This Occurred

Multiple factors exist for PRD's inability to comprehensively assess its maintenance program. First, we mainly attribute data use and quality issues with ManagerPlus® to the system's recent implementation within the department. According to PRD, the department originally acquired ManagerPlus® over 10 years ago for the Developed Regional Parks' equipment repair shop.

⁴ We removed data with these limitations from our analysis.

⁵ Robert E. Sternloff and Roger Warren, *Park and Recreation Maintenance Management* (Boston: Allyn and Bacon, 1998).

It was introduced to CMT in July 2015 to replace the previous paper-based work order tracking system and, because it is relatively new, is still in the process of refinement.

Secondly, as shown in **Exhibit 5**, PRD has not established completion time standards for all of CMT's maintenance functions. According to PRD, this is because some of the maintenance tasks that the work order system tracks are non-routine service requests that require a specialized response and are not conducive to having a standard for completion time. In addition, PRD management stated that not all maintenance tasks have a completion time standard because their completion may depend on the work done by other departments. In these cases, completing the work order is not within PRD's purview or control, making it difficult to assign a standard of care for these maintenance tasks.

Exhibit 5:

The Park and Recreation Department Has Not Established Completion Time Standards for All of the Citywide Maintenance Team's Functions

Maintenance Function	Standard of Care (for Completion Time)
Irrigation	✓
Pest Management	✓
Park Forestry	✓
Playgrounds	✓
Hardscape/Facility	None
Turf Services	None
Aquatics	None

Source: OCA based on the Park and Recreation Department's Fiscal Year 2017 Park Maintenance Standards.

Thirdly, some of the existing standards of care are not currently tracked by PRD's work order system. While it is important for standards to be specific, the standards for two of the maintenance functions—Pest Management and Playgrounds—shown in **Exhibit 6** are not readily tracked in ManagerPlus® because these standards assign more than one requirement for each maintenance function.

Exhibit 6:

The Park and Recreation Department Does Not Track all of the Existing Park Maintenance Standards Within ManagerPlus®

Maintenance Function	Maintenance Task	Standard of Care	Tracked in ManagerPlus®?
Irrigation	Irrigation Repair	Within 14 working days of request	Yes
Pest Management	Priority 1 Weed Control (for large areas)	Within 21 working days of request	No
	Priority 2 Weed Control (for small areas)	Within 45 working days of request	No
Park Forestry	Planting, Trimming, Pruning, Removing	Safety hazards within two working days	Yes
		Non-safety within 20 working days	Yes
Playgrounds	Equipment Repair that requires procurement	Within 14 working days after obtaining replacement equipment/parts	No
	Equipment Repair that Citywide Park Maintenance determines it cannot complete	Close request and notify on-site staff within 14 working days	No
	Equipment Repair that requires a Capital Improvement Project	Remove playground safety hazard within 21 working days	No
	Equipment Repair to eliminate a safety hazard	Within 14 working days (some caveats indicated in guidance)	Yes
	Equipment Repair to eliminate a non-safety hazard	Within 14 working days (some caveats indicated in guidance)	Yes

Source: OCA based on the Park and Recreation Department's Fiscal Year 2017 Park Maintenance Standards.

In regards to the other data issues, according to PRD, completion times in some cases precede creation times because the maintenance crew may have identified and fixed a maintenance concern in the field prior to the official creation of a work order. As for incorrectly assessing priorities, PRD asserts that the ManagerPlus® system administrator continually reminds users of the proper way to complete service requests as needed. However, if this practice continues in the future, and if PRD begins using work order data for performance assessment, the risk will remain that the data could portray performance inaccurately.

If Uncorrected, What Could Occur

Without quality data management, PRD misses an opportunity to identify trends for different functions and respond accordingly. For example, in **Exhibit 4**, Park Forestry Safety work orders took an average of 15 business days to complete, even though the standard is 2 business days. By not using the work order system to assess CMT's performance, PRD cannot determine the practicality of its Park Maintenance Standards and make the appropriate adjustments. Finally, PRD cannot assess performance and potentially identify trends and problem areas, which can then inform how to best deploy resources—including staff, equipment, and materials—in a way that is effective.

Recommendation #1

The Park and Recreation Department (PRD) should develop or refine maintenance standards for all Citywide park maintenance functions so that they can be tracked in the ManagerPlus® work order system.

- a) For park maintenance tasks that depend on outside departments for completion, or that are not routine, PRD should develop maintenance standards that capture its response time instead of completion time. (Priority 3)

Recommendation #2

The Park and Recreation Department should continue to regularly assess the Citywide Management Team's performance by analyzing data from its work order system, ManagerPlus®. Specifically, PRD should track work order completion times and whether they comply with Park Maintenance Standards. (Priority 3)

Finding 2: PRD's Methods for Deploying Staff Would Benefit from Incorporating More Systematic Feedback on Grounds Maintenance

In order to meet its mission of providing healthy, sustainable, and enriching environments for park users, PRD employs approximately 140 Grounds Maintenance Workers (GMWs) in its Community Parks Divisions to complete routine grounds maintenance and custodial tasks at recreational facilities and parks. In order to understand how to more effectively deploy these workers, PRD should systematically review its staffing mechanisms and solicit feedback from users to adjust staffing assignments based on available resources and the identified needs of park sites.

We found some limitations with PRD's current efforts at both staffing deployment and feedback. To address operational staffing deployment, PRD affords managers discretion in adjusting their current staff assignments for its existing park assets. However, the adjustments to staffing are typically not documented. Also, PRD affords maintenance staff discretion in completing maintenance tasks at park sites. Given the informal method of deploying maintenance staff and the discretion afforded to both managers and maintenance staff, we examined public feedback mechanisms to determine if the existing deployment mechanisms resulted in outcomes that satisfied park users.

We found that PRD has made efforts to assess, track, and report on the effectiveness of its grounds maintenance outcomes throughout the park system. However, these efforts have either been discontinued or do not specifically ask survey respondents about their satisfaction with grounds maintenance outcomes.

According to maintenance guidance, entities should establish a procedure to gauge the adequacy of maintenance programs, such as assessing if there is too much staff for limited work or not enough staff for an abundance of work at existing park sites. Additionally, maintenance guidance suggest that entities should have a coordinated approach for maintaining ongoing

customer relations and satisfaction, including soliciting customer feedback, among other things.

The use of discretion in staffing deployment is a result of many factors that affect the intensity of grounds maintenance work, such as the park acreage, presence of comfort stations, homeless use, graffiti, driving time between parks, undeveloped parkland, and/or other park-specific factors. Although PRD is aware of the need to formally assess its operational staffing methodology for its existing park assets, it has not been able to conduct a review to date, citing the effort as an extensive undertaking.

By limiting its staffing formula to new parks and relying on managers to adjust operational staffing for existing park assets, PRD risks that it is not deploying its GMW staff resources to the park areas that need the most attention. Without incorporating systematically aggregated citizen feedback, there is a risk that PRD is overconfident in the results of its park maintenance efforts. We recommend that PRD incorporate more systematic citizen feedback in its staff deployment decisions to adjust maintenance staff in a more effective and responsive manner.

What We Found

When PRD adds new facilities and maintenance positions into its operating budget, Budget Analysts use a staffing formula to recommend staffing assignments for the new parks to the Deputy Directors. This staffing formula for new parks is based on acreage, comfort stations, and tot lots.

However, this formula is limited in that it is a budgetary tool for new parks only and not an operational tool for staffing existing park assets. By only considering the staffing needs for new parks, the formula does not ensure adequate or equitable maintenance staffing coverage for existing parks.

Instead, to address operational staffing deployment, PRD affords managers discretion in adjusting their current staff assignments for existing park assets. District Managers and several Area Managers we spoke with stated that they maintain open communication by meeting regularly to discuss ever-changing area operations, including staffing issues. The reported frequency of the meetings varied from every week to every month or as needed. Additionally, these operational adjustments to staffing are typically not documented.

Furthermore, in our ride-alongs, we observed that GMWs also possess a high degree of discretion with the use of their time in the field.

Given this informal method of deploying maintenance staff and the discretion afforded to both managers and maintenance staff, there is a risk that maintenance outcomes may not be equitable throughout the City or effective from the perspective of a park user. Thus, we also examined other department efforts to ensure effective maintenance outcomes from a customer perspective.

The department has made efforts to assess, track, and report on the effectiveness of its grounds maintenance outcomes throughout the park system. Most notably for Community Parks' grounds maintenance, such efforts have included quarterly inspections, weekly inspections, and a yearly customer satisfaction survey. However, we found some limitations with these efforts.

*The Park and Recreation
Department Discontinued
its Quarterly Internal
Inspections*

For example, PRD previously conducted quarterly inspections assessing a range of actual grounds maintenance conditions at parks throughout the City. The department used some of its non-maintenance employees to conduct the inspections at a sample of parks throughout the City. The department provided training materials and a standardized inspection checklist used to evaluate the conditions at parks. **Exhibit 7** provides an example of the inspection checklist for waste and recycling receptacles.

Exhibit 7:

Example of a Quarterly Inspection Checklist for Waste and Recycling Receptacles

9. Waste and Recycling Receptacles (Sample Size-Receptacles within Park Features Inspected)			Feature Not Applicable <input type="checkbox"/>
#	Element to be Measured	Standard	Inspection Result
9.1	Cleanliness	Area is substantially free of litter and debris. Substantially free means no more than 10 pieces of litter (trash, food waste, etc.) and debris are visible. Leaves are not considered debris. The standard will not be met if needles or broken glass are present.	Met Standard <input type="checkbox"/> Did Not Meet Standard <input type="checkbox"/> Not Inspected <input type="checkbox"/>
9.2	Functionality of Structures	90% of all receptacles are not overflowing.	Met Standard <input type="checkbox"/> Did Not Meet Standard <input type="checkbox"/> Not Inspected <input type="checkbox"/>
9.3	Graffiti	Area is 90% free from graffiti.	Met Standard <input type="checkbox"/> Did Not Meet Standard <input type="checkbox"/> Not Inspected <input type="checkbox"/>
9.4	Structural Integrity	90% of all receptacles are free of large cracks or other damages that impact use.	Met Standard <input type="checkbox"/> Did Not Meet Standard <input type="checkbox"/> Not Inspected <input type="checkbox"/>

Fencing will not be rated under this feature. See other features for the appropriate category.

Comments: _____

Source: The City of San Diego Park and Recreation Department's discontinued Quarterly Park Maintenance Inspection Form.

The inspections encompassed multiple aspects of grounds maintenance conditions, including but not limited to: athletic fields; lawns; ornamental gardens and shrubs; waste receptacles; playgrounds; trees; restrooms; and off-leash dog areas. The results of these elements were averaged to produce overall scores. Overall scores were published as part of the department's Key Performance Indicators (KPIs) in the FY 2015 and FY 2016 Adopted Budgets.

However, according to department staff, PRD has stopped performing these in-depth quarterly inspections. Now, PRD relies on weekly inspections by Area Managers, but these are less systematic evaluations and do not provide the same level of information as the more in-depth quarterly inspections.

The Park and Recreation Department's Yearly Customer Satisfaction Survey Does Not Ask Respondents About their Satisfaction with Grounds Maintenance Outcomes

PRD also completes a yearly customer satisfaction survey, which is a commendable effort covering a range of topics and respondents from different geographical areas within the City. However, this survey does not ask respondents about their satisfaction with grounds maintenance outcomes. In the survey that was conducted in FY 2016, out of a list of 20 suggested funding priorities, citizens voluntarily identified "more maintenance" as their fifth highest priority. Moreover, while the survey does not include a question that specifically asks about satisfaction with park maintenance, some respondents

provided relevant feedback in the "additional comments" section of the survey. For example, several comments addressed restroom cleanliness, trash removal, and the quality of turf areas, as well as park appearance and maintenance in general.

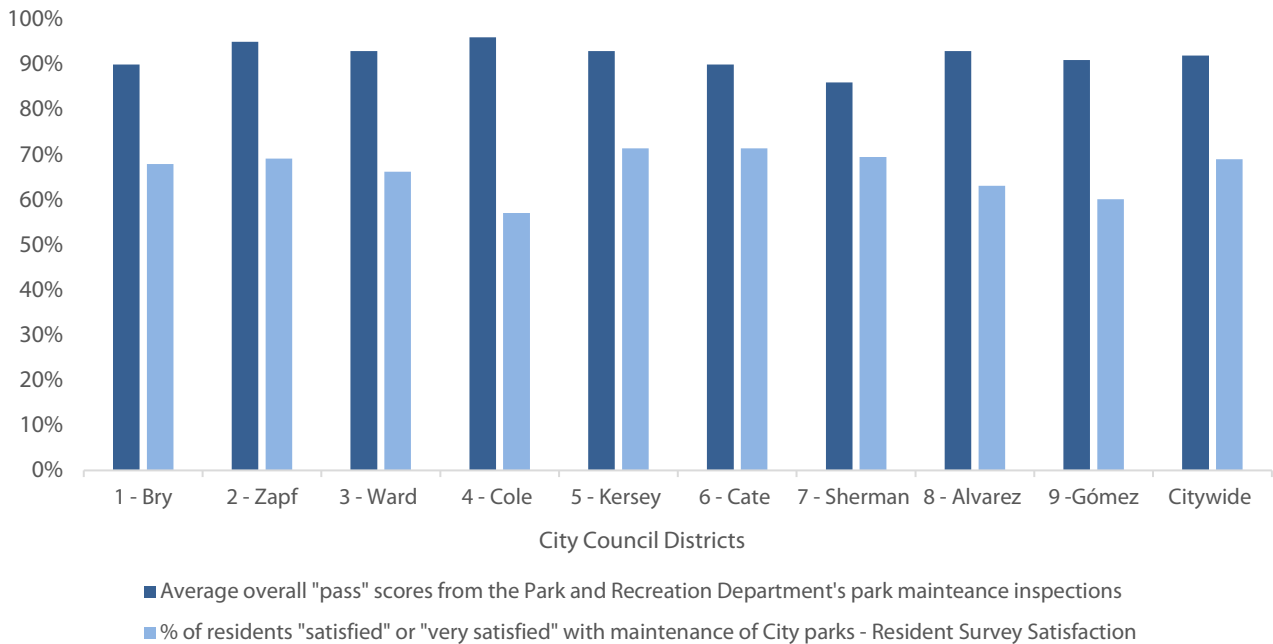
The Park and Recreation Department's Own Park Maintenance Inspections Generated High Scores, While Citizens' Satisfaction with Park Maintenance was Lower

In a similar survey conducted on behalf of the City of San Diego to assess customer satisfaction with City programs and services, less than 70 percent of respondents said they were satisfied with the maintenance of City parks.

We observed considerable difference between the results of PRD's own park maintenance inspection results and San Diego residents' satisfaction with park maintenance. **Exhibit 8** displays a comparison of these results by Council District as well as for the City as a whole.⁶

Exhibit 8:

The Park and Recreation Department's Own Park Maintenance Inspections Generated High Scores, While Citizens' Satisfaction with Park Maintenance was Lower



Sources: OCA based on December 2015 Park and Recreation Department Quarterly Maintenance Inspection results and December 2015 Citywide Resident Satisfaction Survey.

⁶ PRD's own assessments provided significantly more in-depth inspection information in a pass/fail format, whereas the Resident Satisfaction Survey simply asked citizens how satisfied they were with the maintenance of City parks on a five point scale.

In **Exhibit 8**, PRD's highest park inspection scores were for District 4 (Cole). Yet that district scored the lowest in the Resident Satisfaction Survey conducted during the same period.

What Should Have Occurred

According to maintenance guidance, entities should gauge the adequacy of maintenance program staffing to assess if there is too much staff for limited work or not enough staff for an abundance of work at existing park sites. Maintenance guidance also suggests that performance standards can be developed through direct observation of various work tasks, through an examination of historical data, or from informed or skilled estimates. However, in the absence of resources necessary to undertake such an effort, a more outcome-based approach can help the department mitigate the risk of deploying GMWs inefficiently, with maintenance results that are inequitable or ineffective.

While discretion and variation in staffing deployment is allowable, these factors contribute to an informal system of management controls. In these conditions, continuous monitoring of actual outcomes from the perspective of a park user is an intelligent, customer-focused approach that can help mitigate some of the risks of inefficient staffing and inequitable results.

According to the Commission for Accreditation of Park and Recreation Agencies (CAPRA), agencies should have systematic processes for evaluating the efficiency and effectiveness of its programs and services. Additional maintenance guidance suggests that entities should have a coordinated approach for maintaining ongoing customer relations and satisfaction. Coordination should include responding to customer requests, helping customers resolve problems, and soliciting feedback, among other things. Moreover, the first goal of the City's Strategic Plan is to "provide high quality public service by promoting a customer-focused culture that prizes accessible, consistent, and predictable delivery of services." Such feedback can be useful in identifying strengths of the existing maintenance program as well as aspects that need improvement from the perspective of park users.

Why This Occurred

The use of discretion in staffing deployment is a result of many factors that affect the intensity of grounds maintenance work, such as park acreage, presence of comfort stations, homeless use, graffiti, driving time between parks, undeveloped parkland, and/or other park-specific factors.⁷

We reviewed PRD's efforts to analyze grounds maintenance staffing needs. Based on our conversations, PRD staff indicated that they would like to complete a staffing analysis for its existing park assets. However, PRD has not been able to conduct a review to date, citing the effort as an extensive undertaking. When we asked PRD management how they staffed their existing parks, they referred to the staffing formula for new parks. Area Managers that we spoke with stated they largely inherited their staffing levels and staffing structure from their predecessors.

PRD discontinued its quarterly inspections because the effort was labor intensive, prone to subjectivity, and it did not produce enough of a benefit to justify the continued use of staff resources.

If Uncorrected, What Could Occur

By limiting its staffing formula to new parks and relying on managers to adjust operational staffing for existing park assets, PRD risks that it is not deploying its GMW staff resources to the park areas that need the most attention.

Equitable and efficient deployment of GMW staff should remain a consideration because PRD's mission is to provide "healthy, sustainable, and enriching environments for all." The efficient deployment of GMW staff will be especially important as PRD assumes maintenance responsibilities for approximately 30 joint-use park sites over the next five to ten years under the Mayor's Play All Day initiative.

The fact that a manager cannot be physically present at all park sites at all times increases the risk of unsupervised work and ineffective outcomes. Discontinuing the quarterly grounds maintenance inspections diminishes PRD's ability to assess the effectiveness of its own grounds maintenance outcomes. Additionally, input from the public would allow PRD to more credibly report on its monitoring of grounds maintenance

⁷ We observed some of these other factors such as driving time, homeless use, and graffiti during our ride-alongs.

effectiveness and equitability. In our interviews with the department, PRD consistently emphasized the importance of citizen feedback. According to PRD, the department commonly receives feedback via phone calls and complaints that are relayed through City Council offices or by concerned citizens. These and other such comments, however, are more difficult to aggregate and analyze than structured survey responses.

Without incorporating systematically aggregated citizen feedback into grounds maintenance staffing decisions, there is a risk that PRD is overconfident in the results of its park maintenance. By incorporating more systematic citizen feedback, PRD can deploy and adjust its maintenance staff in a more effective and responsive manner.

Recommendation #3

The Park and Recreation Department should improve its assessment and monitoring of grounds maintenance outcomes by developing and/or reinstating additional systematic evaluations that solicit public feedback on park maintenance. (Priority 3)

Recommendation #4

The Park and Recreation Department should incorporate the outcome-based results from either its inspections or the public survey as a factor in its staff deployment decisions within the Community Parks I and Community Parks II Divisions. (Priority 3)

Conclusion

The City of San Diego's Park and Recreation Department (PRD) operates and maintains a diverse and valued park system that serves millions of residents and visitors each year. The City's parks and recreational facilities provide spaces for physical activity, communal gatherings, and respite. With over 400 parks, encompassing over 40,000 acres of park area, a systematic approach to maintenance operations and staff deployment is essential.

In order to assess the performance of its maintenance functions, PRD should use a data-driven approach. Specifically, PRD should define maintenance goals and continue to regularly assess its progress toward meeting those goals. PRD has established work order completion time standards for most—not all—of its Citywide park maintenance functions, but some of those are not tracked in PRD's work order system. This makes it difficult for PRD to comprehensively assess how well it completes work orders on time. Developing or refining performance standards for all Citywide park maintenance functions so that they can be tracked in PRD's work order system will strengthen PRD's ability to measure its performance.

PRD employs approximately 140 Grounds Maintenance Workers (GMWs) within its Community Parks I and Community Parks II Divisions to complete routine grounds maintenance and custodial tasks at parks and recreational facilities. Given PRD's operational structure, which relies on PRD management and staff discretion, it is important that PRD have a mechanism to solicit public feedback from users on park conditions. Such feedback provides guidance on how to more efficiently deploy staff and meet the needs of park users, maintain safe spaces and equipment, and ensure that parks remain aesthetically pleasing for visitors.

By using a comprehensive data-driven approach and seeking public feedback, PRD can enhance its ability to identify maintenance trends and evaluate the practicality of their Park Maintenance Standards. Moreover, it can become better informed on how to best deploy resources—including staff, equipment, and materials—in a way that is effective.

Recommendations

- Recommendation #1** The Park and Recreation Department (PRD) should develop or refine maintenance standards for all Citywide park maintenance functions so that they can be tracked in the ManagerPlus® work order system.
- a) For park maintenance tasks that depend on outside departments for completion or that are not routine, PRD should develop maintenance standards that capture its response time instead of completion time. (Priority 3)
- Recommendation #2** The Park and Recreation Department should continue to regularly assess the Citywide Management Team's performance by analyzing data from its work order system, ManagerPlus®. Specifically, PRD should track work order completion times and whether they comply with Park Maintenance Standards. (Priority 3)
- Recommendation #3** The Park and Recreation Department should improve its assessment and monitoring of grounds maintenance outcomes by developing and/or reinstating additional systematic evaluations that solicit public feedback on park maintenance. (Priority 3)
- Recommendation #4** The Park and Recreation Department should incorporate the outcome-based results from either its inspections or the public survey as a factor in its staff deployment decisions within the Community Parks I and Community Parks II Divisions. (Priority 3)

Appendix A: Definition of Audit Recommendation Priorities

DEFINITIONS OF PRIORITY 1, 2, AND 3 AUDIT RECOMMENDATIONS

The Office of the City Auditor maintains a priority classification scheme for audit recommendations based on the importance of each recommendation to the City, as described in the table below. While the City Auditor is responsible for providing a priority classification for recommendations, it is the City Administration's responsibility to establish a target date to implement each recommendation taking into considerations its priority. The City Auditor requests that target dates be included in the Administration's official response to the audit findings and recommendations.

Priority Class ⁸	Description
1	Fraud or serious violations are being committed. Significant fiscal and/or equivalent non-fiscal losses are occurring. Costly and/or detrimental operational inefficiencies are taking place. A significant internal control weakness has been identified.
2	The potential for incurring significant fiscal and/or equivalent non-fiscal losses exists. The potential for costly and/or detrimental operational inefficiencies exists. The potential for strengthening or improving internal controls exists.
3	Operation or administrative process will be improved.

⁸ The City Auditor is responsible for assigning audit recommendation priority class numbers. A recommendation which clearly fits the description for more than one priority class shall be assigned the higher number.

Appendix B: Objectives, Scope, and Methodology

Objectives The overall objective of this audit was to assess the efficiency and effectiveness of the Park and Recreation Department's (PRD) grounds maintenance efforts. To achieve this objective, we:

- Assessed whether PRD met its Park Maintenance Standards for work orders created in FY 2016; and
- Evaluated park maintenance operations by assessing PRD's mechanisms for staff deployment of Grounds Maintenance Workers in the Community Parks Divisions and by shadowing park maintenance crews at several park sites.

Scope and Methodology Our audit focused primarily on the period of FY 2017 for the department's staffing deployment strategies and practices and FY 2016 for the assessment of PRD's work order data.

We evaluated response times for service requests completed in FY 2016 by reviewing a sample of maintenance service requests to determine if PRD is meeting its Park Maintenance Standards. We did this by exporting all recorded work orders created in FY 2016 from PRD's electronic work order system, ManagerPlus®, and filtering the list for work orders pertaining most directly to grounds maintenance issues at local park sites. For example, we removed in-house equipment repair, archived results of past playground inspections, and other records that do not reflect grounds maintenance services requested via ManagerPlus®.

We evaluated PRD's mechanisms for Community Parks' staff deployment by interviewing PRD Management and Budget Analysts in the Community Parks I and II Divisions to determine how they ensure adequate staffing levels for grounds maintenance. Additionally, we reviewed PRD's quarterly park maintenance inspections results from December 2015 and compared results to those of the Citywide Resident Satisfaction Survey from December 2015. We also reviewed the FY 2016 summary results from PRD's own yearly customer satisfaction survey.

We also evaluated park maintenance operations by accompanying on-site grounds maintenance staff and Citywide Maintenance Team workers on full-day ride-alongs to directly observe staffing deployment, grounds maintenance worker perspectives, and actual operational maintenance issues in the field.

Additionally, to establish the criteria under which we conducted our audit, we reviewed PRD's FY 2017 Park Maintenance Standards and various maintenance management frameworks that offer methodical approaches to planning, budgeting, and implementing an effective maintenance program.

We limited internal control testing to determine if PRD's staff deployment mechanisms for park maintenance were relevant, comprehensive, and periodically reviewed. We also tested whether PRD developed policies and procedures that articulate maintenance expectations and whether PRD uses its work order system to monitor progress towards meeting those expectations.

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on the audit objectives.



THE CITY OF SAN DIEGO
M E M O R A N D U M

DATE: October 5, 2017

TO: Eduardo Luna, City Auditor

FROM: Herman D. Parker, Director, Park and Recreation Department

SUBJECT: Response to the September 25, 2017 Performance Audit of The Park and Recreation Department's Maintenance Operations

This memorandum serves as a response to the Performance Audit of the Park and Recreation Department's Maintenance Operations which was issued on September 25, 2017. The report has two (2) findings with four (4) recommendations. Please accept the following as our response:

Finding 1: PRD Should Use a Data-Driven Approach to Assess its Maintenance Performance

Recommendation #1

The Park and Recreation Department (PRD) should develop or refine maintenance standards for all Citywide park maintenance functions so that they can be tracked in the Manager Plus work order system.

- a) For park maintenance tasks that depend on outside departments for completion, or that are not routine, PRD should develop maintenance standards that capture its response time instead of completion time. (Priority 3)

Management Response: Agree. The Department will develop or refine (response time/completion time) maintenance standards for all Citywide park maintenance functions so that they can be tracked in the Manager Plus work order system. Implementation will begin immediately and completion is expected in March 2018.

Recommendation #2

The Park and Recreation Department should continue to regularly assess Citywide Maintenance Team's (CMT) performance by analyzing data from its work order system, ManagerPlus®. Specifically, PRD should track work order completion times and whether they comply with Park Maintenance Standards. (Priority 3)

Management Response: Agree. The Park and Recreation Department has already and will continue to assess CMT's performance on a monthly basis by analyzing

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data from its work order system, ManagerPlus®. Work order completion time data will be shared with CMT's supervisory staff to ensure CMT is meeting Park Maintenance Standards. Implementation is complete since the CMT evaluates this information monthly.

Finding 2: PRD's Methods for Deploying Staff Would Benefit from Incorporating More Systematic Feedback on Grounds Maintenance

Recommendation #3

The department should improve its assessment and monitoring of grounds maintenance outcomes by developing and/or reinstating additional systematic evaluations that solicit public feedback on park maintenance. (Priority 3)

Management Response: Agree. The Park and Recreation Department will include park maintenance questions in public surveys beginning summer 2018 to evaluate or assess park maintenance. Implementation of the expanded survey is expected in July 2018.

Recommendation #4

The department should incorporate the outcome based results from either its inspections or the public survey as a factor in its staff deployment decisions within the Community Parks I and Community Parks II divisions. (Priority 3)

Management Response: Agree. The Park and Recreation Department will review public survey results beginning summer 2018 as an assessment of park maintenance. Implementation is expected in July 2018.

If you have any questions, please contact me at (619) 236-6643 or hparker@sandiego.gov.



Herman D. Parker, Director
Park and Recreation Department

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