City of Riverside

Public Works Department Performance Assessment and Financial Expenditures Review

October 2018

Management Partners

Management Partners

October 2, 2018

Mr. Al Zelinka
City Manager
City of Riverside
3900 Main Street
Riverside, CA 92522

Dear Mr. Zelinka:

Management Partners is pleased to transmit this report, which details the results of the performance assessment of the Riverside Public Works Department. The recommendations in the report were derived from interviews with the department director, senior managers and employees, a review of numerous documents, analysis of existing operating and financial data, and a peer benchmarking survey.

This report identifies opportunities to improve the department's performance in areas related to organizational structure and staffing, interdepartmental communication and collaboration, technology use, performance measures, and performance improvement opportunities specifically in the solid waste, wastewater, streets and street sweeping divisions. The higher priority recommendations are to provide adequate funding of wastewater operations, obtain proposals from third-party vendors to provide street sweeping and solid waste collection services, and enhance the selection of performance measures that would allow the department, the City Council and the community to better understand trends and future improvement opportunities in service delivery for the department.

The scope of our work also included a financial review of certain overtime and non-personnel expenditures. Public Works is experiencing a significant amount of overtime in the Solid Waste Division, but is closely monitoring these trends, causation, operational impacts and financial efficiency. We found no issues of non-compliance in our testing of non-personnel expenditures.

We appreciate the opportunity to have served the City of Riverside and wish the City success in implementing these recommendations to enhance the department's service delivery.

Sincerely,

Gerald E. Newfarmer
President and CEO

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Executive Summary

The Riverside Public Works Department provides a host of services to maintain the health, safety and reliability of the City's infrastructure for those that live, work and recreate in Riverside. The Great Recession in 2008 impacted all the City's operating departments, requiring reductions in services and the workforce and challenging departments to "do more with less." The department has attempted to maintain the City's infrastructure and services to the fullest extent possible. Department personnel are committed and motivated to provide the level of services that the community and the City Council expect. However, it must be noted that funding of critical infrastructure and equipment needs in the areas of streets, wastewater collection and treatment, and solid waste continues to present challenges to the department's ability to meet service delivery expectations.

Our analysis of the performance of critical areas within the organization identified 49 recommendations for the department to improve cost effectiveness and efficiency in providing services to the community. The highest priority recommendations for implementation are detailed below.

- Obtain proposals from solid waste providers to provide solid waste collection services for all residential customers to potentially reduce costs for ratepayers and provide opportunities to improve service delivery.
- Obtain proposals from street sweeping contract service providers to reduce the City's costs for providing this service and reduce potential impact to storm water collection and mitigation efforts.
- Enhance solid waste diversion efforts through changes in solid waste contracts, services, marketing, and collaboration between collection, transfer and disposal providers.
- Incorporate a comprehensive strategic plan to maximize the production and distribution of recycled water into the 2016 Wastewater Master Plan, in cooperation with the Utilities Department.

- Develop and implement a Wastewater Resources Recovery Plan with the goal of receiving organic material, increasing biomethane production, and maximizing energy production.

There are several innovative options we would encourage the City to pursue, some of which are already being considered. These innovative practices are rapidly becoming industry best practices in the public works profession.

- Develop cross-functional teams consisting of key staff in energy, water, wastewater, waste management and any other departments addressing environmental sustainability-related initiatives to explore, develop and implement cooperative programs to meet the state's organics requirements.
- Develop sustainable economic development strategies to encourage companies to use recyclables as a primary component of their manufacturing or distribution of goods.
- Maximize renewable energy output in support of City facilities and power use through wastewater treatment, solar and wind infrastructure.
- Identify solid waste and street sweeping service providers that could provide enhanced service levels at lower costs, reducing rates charged to consumers/property owners.
- Implement "internet of things" technology through a network of internet-accessible devices such as sensors, actuators, thermostats, and other devices to reduce energy costs and integrate into computerized maintenance management systems in support of maintenance efforts. The City could leverage its investment in its citywide Wi-Fi Hotspot program as well as wi-fi installations in its facilities to effectuate this implementation.

The Riverside Public Works Department delivers services that residents and property owners require daily 24/7, but much of the work is easy to overlook because it takes place out of sight and in the background of the residents' daily lives. It is, however, literally the foundation on which everything that takes place in the City is built.

Most of our recommendations are oriented around maintaining sustainable public works services and meeting the biggest challenge that the department faces: diminished resources available for the documented needs. The department has embraced the challenge of doing more with less, but it is important that policy makers understand that this often will require changes in service delivery approaches and investments in people and technology. Fortunately, the Riverside Public Works Department has

a vast reservoir of institutional knowledge and expertise that positions the City well as it navigates the current challenging environment local governments in California face.

In some cases, the recommendations offered will be organizationally difficult and challenging, but all of the suggestions have been done in similar settings in California and can be accomplished in Riverside. Indeed, many of the basic ideas contained in our recommendations come from the men and women working in the department.

Attachment A contains a summary of all recommendations.

Project Approach

Management Partners gathered and analyzed information using a variety of means. While reviewing and analyzing data and documents, our project team relied on our experience working with over 250 jurisdictions in California and our knowledge of best practices in local governments around the country to identify the most important areas that require improvement in the department. We used the following techniques to gather information:

- Conducted interviews and a focus group with Public Works Department staff;
- Reviewed and analyzed a variety of data and documents from the City; and
- Created and deployed a peer agency survey to compare budgeted resources, staffing, and services among seven agencies.

These techniques are described in more detail below.

Interviews

An important component of this study was obtaining employee input about the organization. We conducted 10 individual interviews with City staff that included those indicated in Table 1.

Table 1. List of City Staff Interviewed

Public Works	Finance	Office of Organizational Performance & Audit
• Public Works Director • Deputy Public Works Director (Field Operations) • Deputy Public Works Director (Engineering) • Deputy Public Works Director (Wastewater) • Field Services Operations Manager (Solid Waste) • Urban Forest Manager • Senior Field Services Operations Manager (Street Services)	• Chief Financial Officer	• Manager of Organizational Performance & Audit

The interviews gathered information about:

- Strengths of and opportunities for improving the department;
- Organizational structure;
- Tools, resources, and training; and
- Interdepartmental collaboration and communication.

The feedback received from employees informed our analysis of organizational structure, staffing, and operational improvements that should be prioritized in the next few years. Employees consistently stated the City has a hardworking and resourceful group of staff. They said that operating during and after the recession required staff to work together and maintain a collaborative attitude to provide quality service. The predominant comment from employees was that staffing is inadequate.

Review and Analysis of Documents

Management Partners' team members reviewed a variety of documents and data to inform our observations and recommendations. We reviewed the department organization chart, division budgets, position listings and turnover data to assess reporting relationships, spans of control and information regarding overall staff capacity. We looked at program descriptions, policies, and the range of functions being performed by different staff groups to verify that functional alignment is consistent with best practices.

To better understand the department's services and potential areas for cost savings, we reviewed the following:

- Policies, procedures and operational plans;
- Budget information;
- Billing reports for solid waste;
- Rate schedules and reports to City Council regarding rate increases;
- Organization charts;
- Copies of contracts and agreements;
- Department maintenance schedules;
- Methods of cost recovery;
- Capital improvement and infrastructure management plans; and
- Information technology use.

Employee Survey

Management Partners administered an online employee survey. The link was sent to all employees in the department. Hard copies of the survey were also made available to field staff without computer access. The

results of the employee survey are detailed in the Employee Engagement Results section below.

Focus Groups

A total of 14 employees from the department, representing a cross-section of employees in terms of divisions and levels, were invited to participate in a focus group. Twelve individuals participated in the two-hour workshop. It was focused in determining what was working well within the organization, areas of improvement, service level gaps, interdepartmental collaboration and communication and performance measures used in their respective divisions. The results from the workshop are detailed in the Employee Engagement Results section below.

Comparative Research of Peer Agencies

Peer comparisons provide a perspective to help understand how Riverside's resources, workload, and performance compare with similar jurisdictions. They help department leaders inform decisions and provide opportunities for improvement and prompt further research.

Criteria for selecting peers are included in the section below. Management Partners drafted and administered a peer survey to all seven identified peers. To the extent that surveys were not returned, Management Partners attempted to supplement data based on publicly available information.

Organization of Report

This report is organized generally around the City's scope of services and it presents general observations first, followed by programmatic specifics and recommendations. The report begins with a section on employee engagement, which discusses the results of an employee survey, a focus group, and specific areas. This section details how the employees feel about their work and such issues as the resources, communication and leadership. It sets the stage for understanding department dynamics and more specific programmatic analysis and recommendations, since it is critical to consider the organizational environment in developing recommendations that can be successfully implemented.

Next the report contains a discussion of comparative peer research results. This sets the context for how Riverside is placed relative to industry standards and benchmarks in comparison with similar municipal settings. It includes sections on criteria for developing comparisons, service levels, recreation and community programming, staffing and finance and maintenance and development standards.

Next, we review the organization structure and staffing levels in the department, analyzing how the department performs the functions and services; spans of control of leaders, managers and supervisors; and the level of staffing to accomplish its objectives. We also reviewed existing staffing tenure to determine the extent to which succession planning is necessary and is currently in place.

Next are sections entitled Performance Assessment, focused on four service delivery areas: 1) solid waste, 2) wastewater, 3) streets, and, 4) street sweeping. These sections contain the bulk of our recommendations and supporting analysis. The sections document our operational assessment dealing with programs and services, management systems and asset management, technology, as well as performance indicators and benchmarks. For solid waste and wastewater, we provided an analysis of rate structure and revenue generating opportunities. Finally, we have an overall discussion of the department's interdepartmental communication and collaboration actions.

The report concludes with a section on the Financial Expenditures Review. This focuses on the management of overtime and service contracts.

Employee Engagement Results

We performed two activities to engage employees within Public Works to gain their perspectives on the department's performance. The first is an online employee survey, a link of which was sent to all public works employees. The second is an employee focus group, which was attended by 12 employees in a workshop setting.

The results from our engagement are summarized below.

Employee Survey Results

Management Partners prepared an employee survey to gather feedback on the topics of communication; service delivery and customer service; performance measurement; strategic and business planning; technology; staffing and workload; talent management; and organizational culture. This document summarizes the results of that survey. A total of 209 employees responded between April 5 and April 16, 2018.

For most of the survey, respondents were provided with a statement and asked to indicate whether they strongly agree, agree, disagree, strongly disagree or don't know. Other questions contained information on respondents' tenure with the department and other demographics. Respondents also had the opportunity to provide open ended responses to some of the questions.

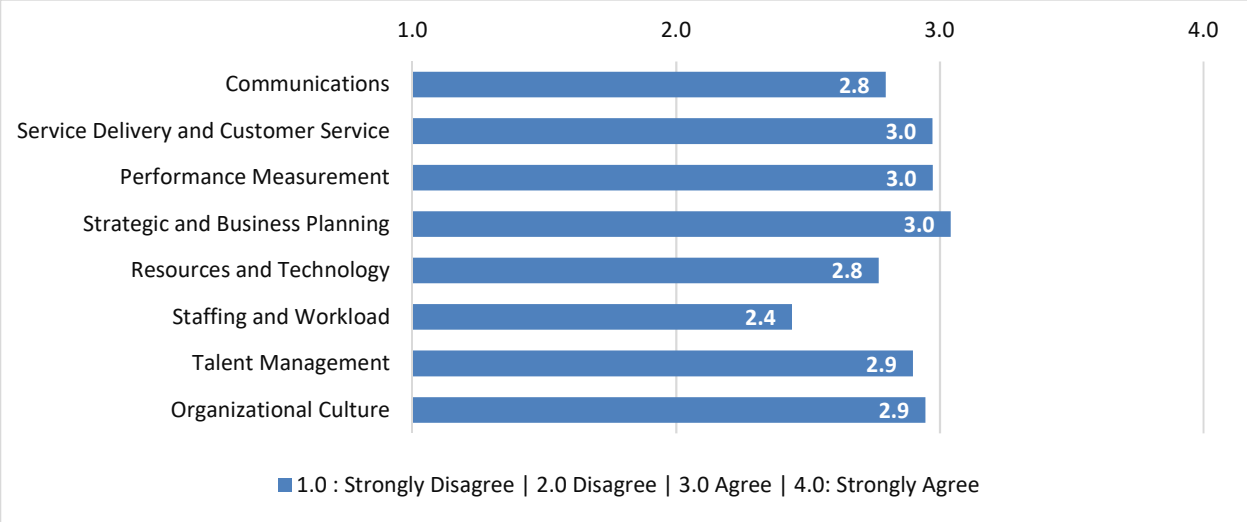
The complete survey results are included as Attachment B to this report. A brief summary of the responses from employees is provided below.

- Overall, survey respondents indicated satisfaction in seven of the eight subject areas surveyed.
- Although respondents indicated they receive training and professional development opportunities and performance evaluations are timely, there is concern about workload, recruitment of staff, and readiness for future retirements and employee turnover.

- Respondents indicate they believe the department has a strong customer service orientation and there is a clear understanding of how individual jobs fulfill the mission of the department.
- Respondents from the Engineering Division and Urban Forest Management Division consistently indicated the most favorable responses. Less favorable responses varied based on the subject area.

Management Partners calculated a composite score to assess employee satisfaction in the eight areas covered by the survey (Figure 1) as well as by division for each area. The composite score is the average (arithmetic mean) for all responses in a given area. For example, in the performance area of communication survey respondents indicated if they strongly agree, agree, disagree or strongly disagree for six different statements. The composite score averages the responses across all statements to create a single score for that topic. The survey's four-point scale has 2.5 at the midpoint. Scores higher than 2.5 are above the average and scores lower than 2.5 are below the average.

Figure 1. Overall Employee Survey Results by Each Section (Composite Score)



Generally, these results show employees are generally satisfied. The responses concerning workload should be taken as a warning sign, since a significant number of employees feel staffing levels are not adequate to meet minimum service levels, especially in street maintenance, tree service, and graffiti removal.

Employee Focus Group

Fourteen employees representing all divisions within the department and serving in classifications ranging from maintenance workers and clerical staff to supervisors and managers were invited to participate in an employee focus group workshop held on April 11, 2018. Twelve employees were able to participate in the two-hour session. A summary of common themes from the survey is presented in the following sections.

What is working well in the department?

The themes voiced about what was working well in the department were:

- Staff work cooperatively across organizational lines within the department to "get the job done." The extent of coordination, communication, and resource sharing has increased as resources have decreased.
- The department's norm is to deliver timely and quality services.
- When asked to describe the department in a single word or short phrase, the positive responses included:

  - Responsive
  - Accountable
  - Educational
  - Dependable
  - On call 24/7
  - Pride in our work
  - Helpful
  - Multi-faceted

What is not working well in the department?

Themes voiced about what is not working so well in the department were:

- Funding has not kept pace with increased expectations for service.
- Continuing requirements to do "more with less" combined with the message that Public Works is not as important as other city services takes a toll on staff morale.
- Goals and priorities are not consistent or clear, partly due to citywide organizational management changes. As a result, the department operates in a reactive rather than a proactive mode.
- Front-line employees feel excluded from key department decisions related to resource allocation and policies that directly affect their workload.
- When asked to describe the department in a single word or short phrase, the negative responses included:

  - Constrained
  - Back seat to others
  - Underfunded
  - Understaffed
  - Aging fleet
  - Never highest priority

Areas Needing Improvement

Focus group participants identified the following five areas they felt were in greatest need of improvement in the department.

1. **Budget Process**
   - The current budget process is not working well because it is constantly in flux and contains funding inequities within the department.
   - Specifically, the frequent changes in fiscal guidance and priorities create problems for budget development and implementation. For example, managers in the department cannot easily track spending because accounting cannot "keep up" with the changes.
   - Funding inequities result from the fact that services are treated differently in the budget process based on their funding source. For example, services funded by the General Fund are not treated the same as services funded by an Enterprise Fund.
2. **Hiring and Retention**
   - The process of recruitment, hiring, and retaining quality employees is difficult. One result is that the department is consistently understaffed.
   - Specific problems with recruitment include: it takes too long (i.e., at least six months) to hire a new employee; employee compensation is not competitive enough to attract enough qualified candidates (both compared with other city departments and other jurisdictions); and recruitment outreach is neither creative nor sufficient.
   - A major problem with retention is that employees hired in the Public Works Department transfer to comparable but higher paying jobs in other city departments that also offer better opportunities for career advancement.
   - The current system for conducting exit interviews (to find out why employees leave the department) is not robust enough to inform managers about changes needed to improve retention.
3. **Other Personnel Issues**
   - Current discipline practices are inconsistent and "too lax". In turn, this unfairly increases the workload placed on the other employees.
   - Policies governing issues such as long-term leave, workers' compensation, and use of overtime are not clearly and consistently communicated to staff. In some cases, these policies are also in need of review and reform.

4. **Procurement**
   - The City purchasing process is so cumbersome that it interferes with the department's capacity to work efficiently.
   - Specific problems include: the review and approval of purchases takes "too long;" rule changes (which are frequent) are not communicated in a timely way; tracking the status of purchase requests is difficult to impossible; and the delays in purchasing distort the department's spending picture.
5. **Technology**
   - The department's IT needs are not met adequately.
   - Specific obstacles mentioned are the department's IT requests do not receive priority consideration for funding, and staff turnover has resulted in a lack of in-house IT expertise.

Focus Areas

As part of the workshop, employees were asked to reflect on three critical areas that were topics of our assessment: 1) performance measurement, 2) customer satisfaction, and 3) ideas for generating revenue. The common themes discussed in each of these areas are indicated below.

1. **Performance Measurement**
   - Some data relevant to evaluating the department's performance are already collected, such as trends in service requests, outputs (e.g., miles cleaned, permits issues), response times, length of time to complete projects, revenue collected, staff turnover, and industry awards received.
   - However, the data compiled are not reliably analyzed, interpreted, or integrated into department's managers decision making on policies or resource allocations.
2. **Customer Satisfaction**
   - The department's customers are city residents, members of the business community, visitors, co-workers in the department, staff in other City departments, the City Manager, and the City Council.
   - The predominant source of customer feedback comes in the form of complaints. The department's customers rarely provide positive feedback because they expect performance to be timely and of high quality.
   - Employees appreciate the occasional positive customer comments. Examples include when graffiti is removed and when a resident thanks an employee for his/her prompt response.

- A routine frustration is when customers either exaggerate a problem or go around the established intake process in an effort to accelerate the department's response.

3. **Ideas for Generating Revenue**
   - Revise the formulas for allocation costs between departments.
   - Continue efforts to examine the possibility of accepting new streams of refuse (e.g., add a second receiving station).
   - Increase the portion of bail (on parking tickets) that the Parking Division retains.
   - Examine the possibility of reducing the frequency of street sweeping while remaining compliant with National Pollutant Discharge Elimination System (NPDES) standards.
   - Increase the cost of a ticket for violating the street sweeping parking regulations.

Comparative Peer Research

As part of this project, Management Partners developed and deployed a peer survey to collect information from seven peer cities. The survey was focused on budget and staffing levels, organizational structure, performance/workload measures and general operating practices for street and sidewalk maintenance, street sweeping, wastewater collections and solid waste. Comparison of public works functions across agencies is challenging as agencies use different funding techniques and organizational alignment for service delivery.

Anaheim and Moreno Valley were the only cities to respond to the survey, which did not form a reasonable basis upon which to compare services. Their responses to this survey are included as Attachment C to this report.

Organization Structure and Staffing

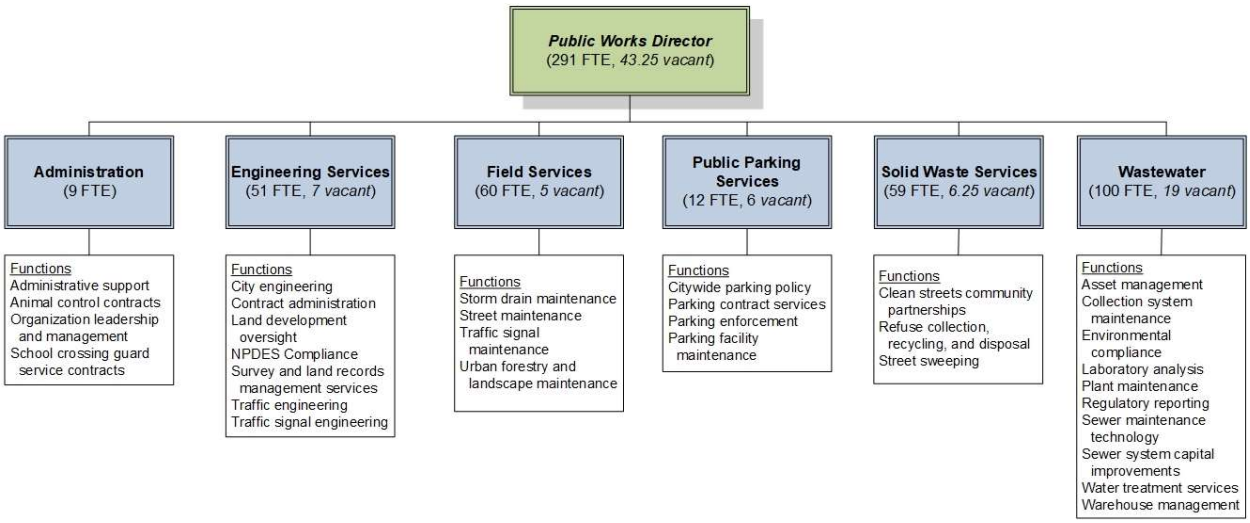
The Riverside Public Works Department delivers a wide variety of essential services to the residents and businesses of the City. The suite of services includes the highly visible refuse collection, street maintenance, street sweeping, storm drain maintenance, and urban forestry; as well as the less directly visible but equally critical wastewater collection, wastewater treatment, and engineering.

The Public Works budget has been reduced from $183 million in FY 2014-15 to $146 million in FY 2017-18, a 20% reduction. Resources for many of these services have been significantly reduced in recent years while costs for labor, services, and contracts have increased. Failure to adequately fund public works assets will have a detrimental impact on the City's quality of life and economic health, and in most cases, deferring maintenance comes with a much higher cost when the asset ultimately fails.

Organizational Structure

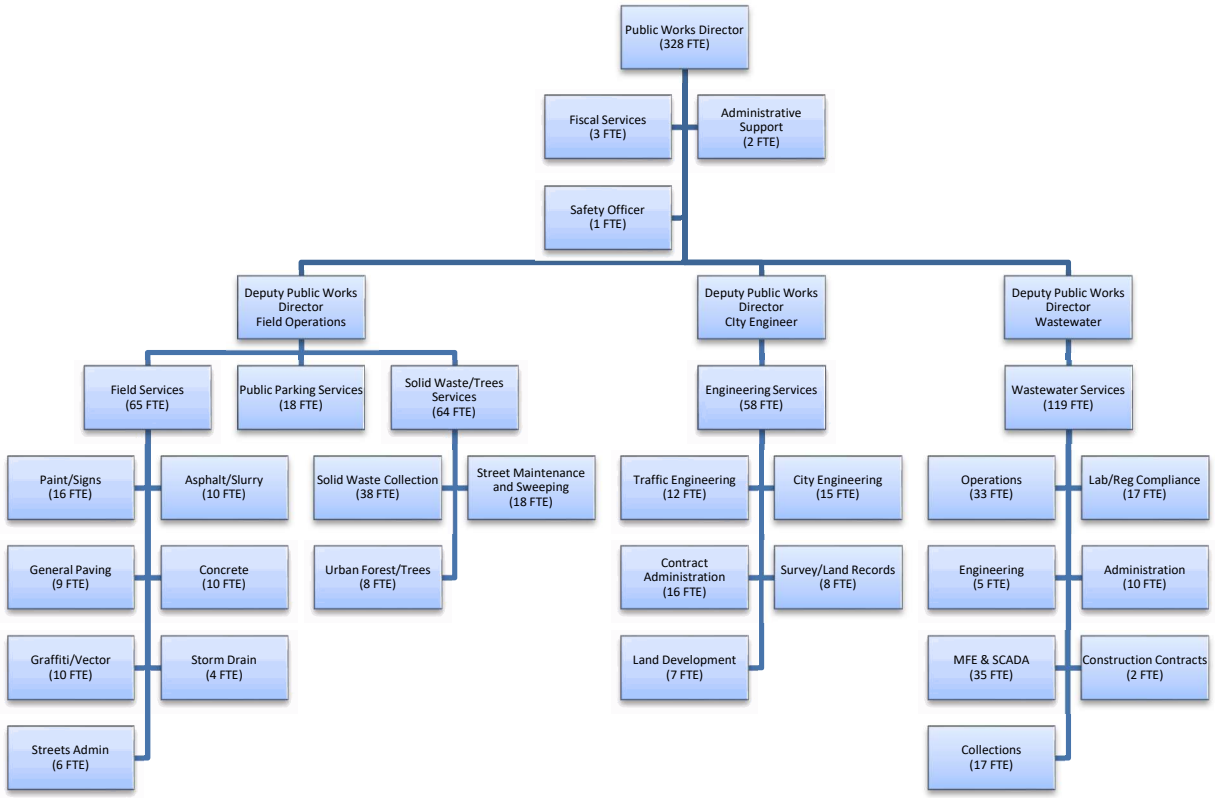
The Public Works Department consists of 291 full-time equivalent (FTE) employees, plus an additional 43.25 positions that were vacant at the time of our analysis. A functional organization chart for the department is shown in Figure 2.

Figure 2. Public Works Department Functional Organization Chart



The department organizational structure is overseen by the public works director. As Figure 3 shows, there are a series of deputies, management and supervisory staff that oversee workgroups within each division.

Figure 3. Public Works Department Organization Chart (with positions)



Workgroups have been established based on functional area, which is typical of public works departments in other cities. Some of the maintenance workgroups have lead workers who exercise limited supervisory functions in the field. In our experience, a proper span of control would include three to eight employees reporting to a supervisor, manager or director.

We reviewed the span of control throughout the Public Works Department's organization. Supervisor and lead workers have a span of control ranging from three to eight direct reports. Managers also have direct reports within that range. The nature of the work they are overseeing seems to be within the typical managerial oversight responsibilities.

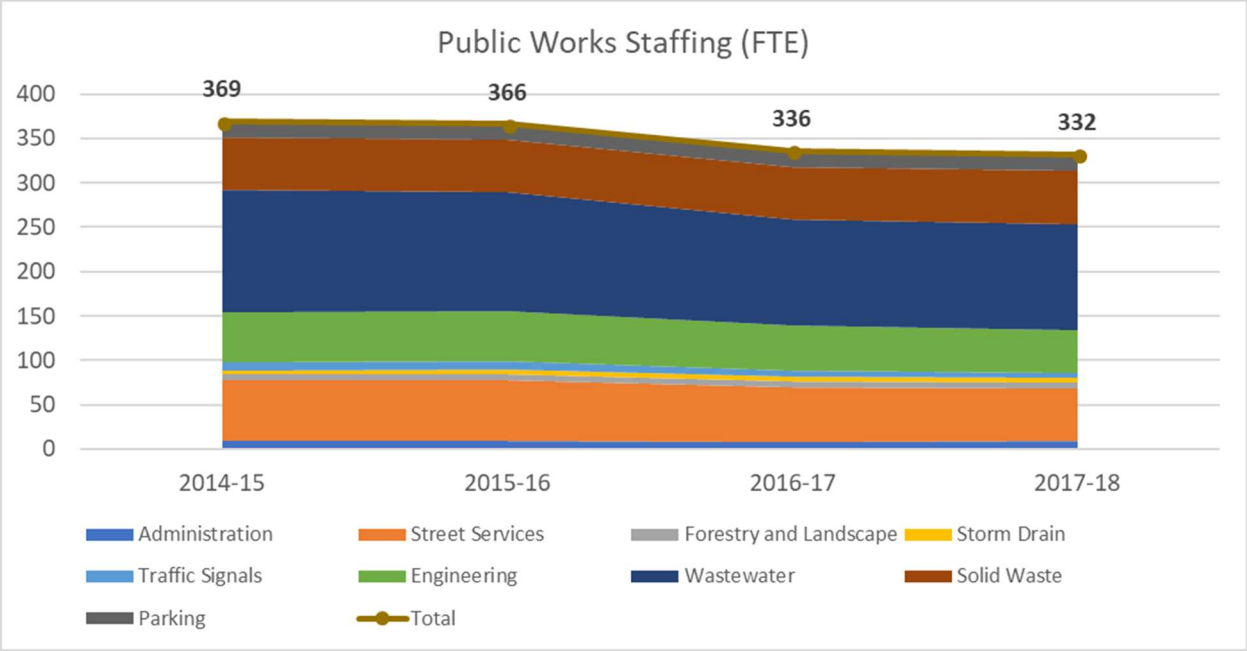
We did not hear indications in our interviews or through surveys or the focus group that there were concerns about oversight or allocation of personnel related to reporting relationships. Public Works appears to have the proper spans of control and organizational structure that allow workgroups to perform the necessary functions to achieve the department's objectives.

Administrative support functions such as fiscal management and safety report directly to the public works director position, which is common in large public works agencies. There are administrative support staff within various divisions and/or workgroups to support their clerical and administrative requirements. We believe this administrative structure makes sense and provides the administrative support needed within the workgroups. We did not perform a workload study to determine if the workload is properly allocated, however no concerns were raised in interviews with staff, in the focus group, or the employee survey to suggest a significant imbalance exists.

Staffing

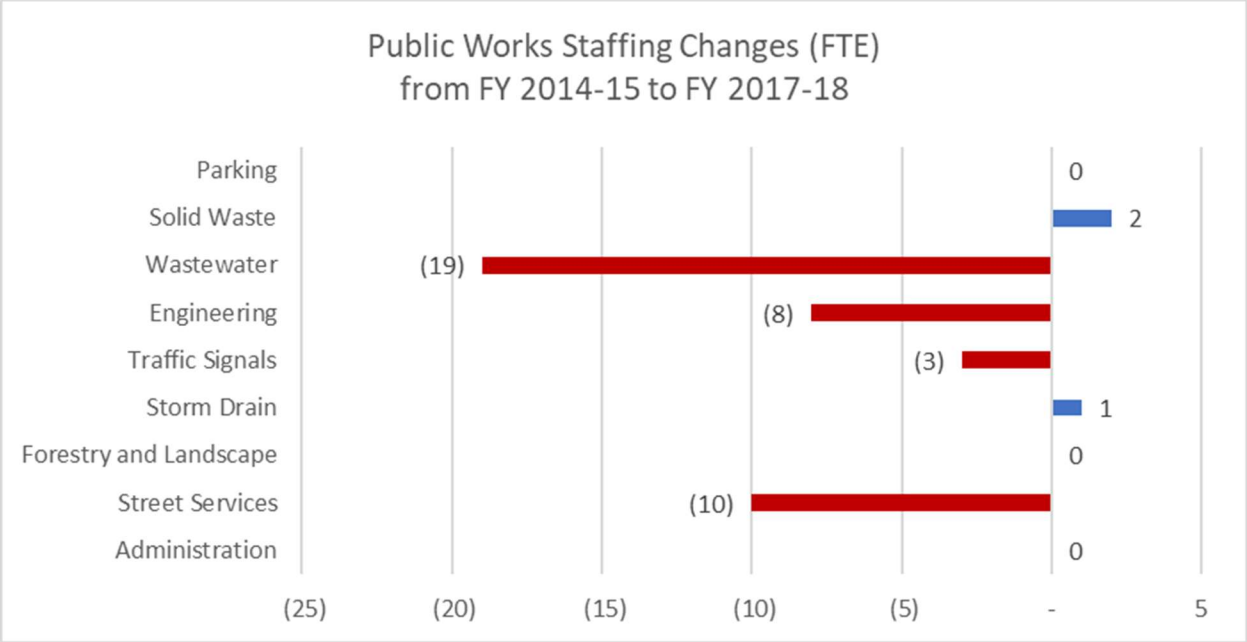
Universal concern was expressed among staff about low staffing levels, most acutely in streets and urban forestry. Low staffing levels were identified as the area of highest concern in the employee survey. Figures 4 and 5 show staffing levels and changes in the Public Works Department from FY 2014-15 to FY 2017-18. During that time staffing levels decreased by 37 FTE, or 10%. The largest reductions have come from the Wastewater, Streets and Engineering Divisions, which in most cases was reflective of the reduced resources available in the City's General Fund and streets maintenance funding sources.

Figure 4. Public Works Staffing Levels for FY 2014-15 to 2017-18



Source: Riverside Annual Budget (FY 2015-16), and Biennial Budgets (FY 2016-18 and 2018-20)

Figure 5. Public Works Staffing Changes from FY 2014-15 to 2017-18



Source: Riverside Annual Budget (FY 2015-16), and Biennial Budgets (FY 2016-18 and 2018-20)

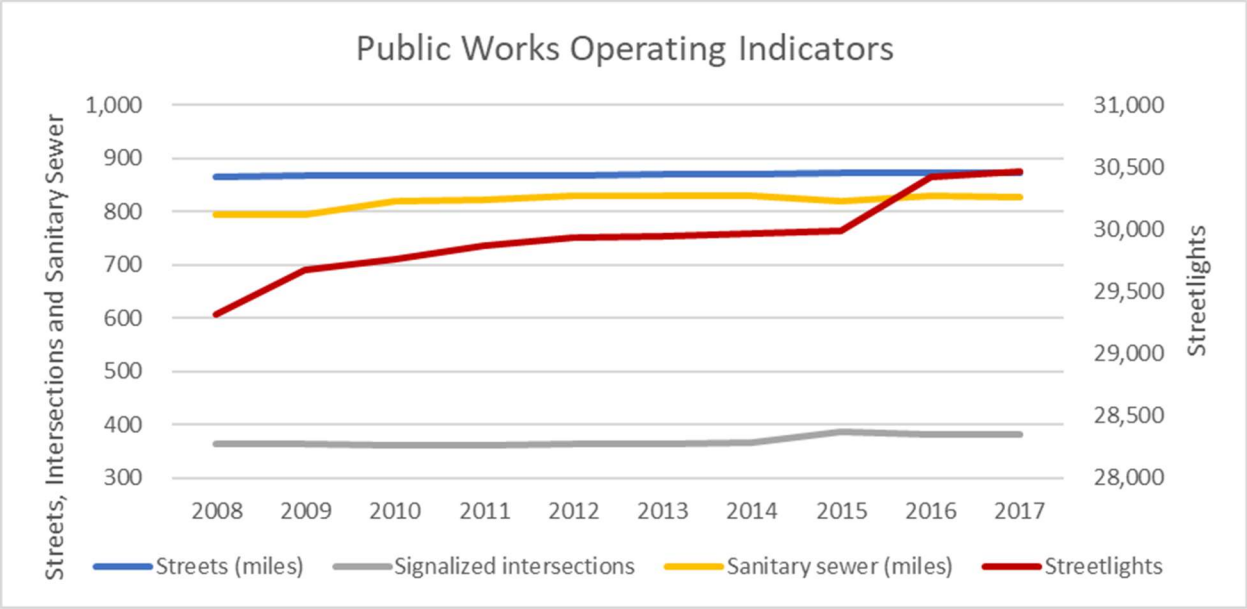
Staff indicated they are being asked to "do more with less". However, discussions regarding service delivery gaps indicate they are keeping up with the expected levels of service. It appears that the department is

accomplishing what is required of it; however, the quality of work being accomplished, workplace safety measures, and other operating performance measures will need to be watched closely to determine if staffing levels should be increased in light of available fiscal resources.

We have assessed the operations of key divisions in the department in the sections that follow, reflecting on opportunities for workflow efficiencies and improvements as well as service delivery changes that may offset the need for increased staffing levels.

Figure 6 shows key operating indicators for the Public Works Department.

Figure 6. Public Works Key Operating Indicators for FY 2007-08 to 2016-17

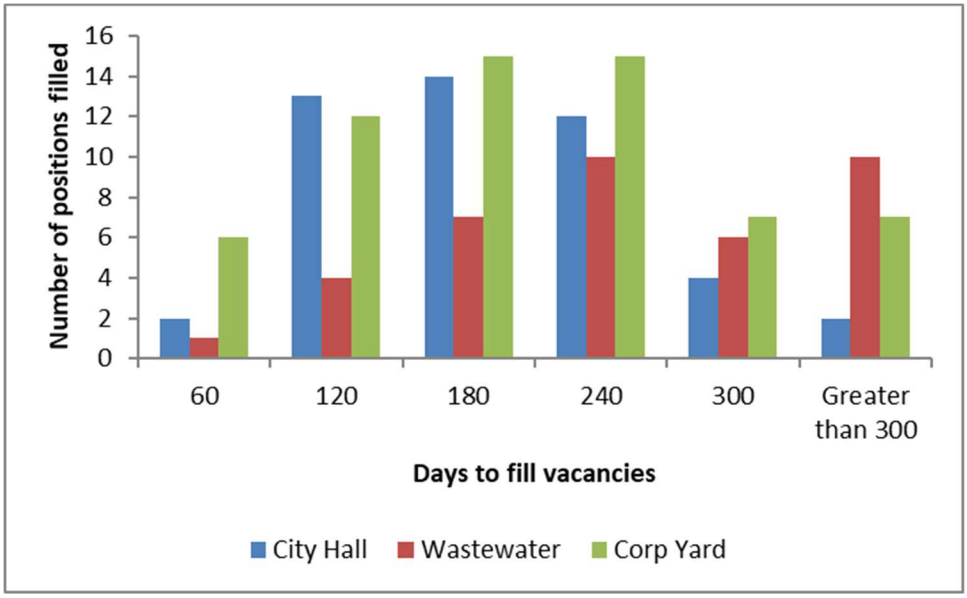


Source: Riverside Comprehensive Annual Financial Report – Statistical Section (FY 2016-17)

Staff indicated concern regarding the length of time it takes to fill vacant positions. The highest percentages of vacancies in the divisions are in the areas of public parking services (33%) and wastewater (16%). At the time of our analysis, the department had 43 vacancies out of a total of 334 eligible positions, or nearly 13% of the authorized workforce.

An analysis prepared by department staff regarding the length of time it took to fill vacant positions in the department from FY 2014-15 to FY 2017-18 indicated an average of 195 days to fill 147 positions. Nearly half of those positions took greater than eight months to fill. These are presented in Figure 7 below.

Figure 7. Days to Fill Vacant Public Works Positions for FY 2014-15 to FY 2017-18



Source: Riverside Public Works Department analysis

Many suggestions were offered by staff to expedite filling vacancies, including double filling of soon-to-be-vacant positions, continuous recruitment of certain positions with frequent vacancies (e.g., maintenance workers), additional training to prepare staff for promotions, more cross training, and additional career ladders. A specific concern was the stringent background check policy that precludes hiring many candidates for what are perceived to have minor offenses. These issues fall within the auspices of the Human Resources Department.

Recommendation 1. Review personnel policies, practices, and procedures with Human Resources Department personnel to reduce the time to fill vacant positions.

Succession Planning

A second staffing concern is the aging workforce and the lack of succession planning. The department currently has no formal succession plan in place. Based on the data provided by the City there were 79 retirements from the Public Works Department from January 1, 2012 through April 10, 2018. In some cities, we have seen approximately half of the employees retire below the age of 60 while the remaining staff wait until the age 60 or older.

Table 2 shows the age and years of service for current Public Works Department employees that are eligible to retire.

Table 2. Public Works Employees Currently Eligible to Retire

Age as of March 30, 2018	Number of Management Employees	Number of Non-Management Employees	Probability of Retirement in Next Five Years
50 to 54	10	31	Moderate
55 to 59	13	20	High
60 to 64	10	18	Very High
65+	0	6	Very high
Employees Eligible to Retire	33	75	
Total Employees	72	219	
Percentage of total employees eligible to retire	46%	34%	

Source: Riverside Human Resources Department

An additional 18 managers and 30 non-management employees will reach the age of 50 and have five years of service credit in PERS in the next five years and will become eligible to retire when they reach the age of 50.

The Human Resources Department has been assigned the authority and responsibility for developing a comprehensive succession plan throughout the City and for each of its departments. Instituting a formal succession plan will help the department maintain a seamless transition of operations, enhance retention of institutional knowledge, and prepare staff for opportunities to grow professionally. Such a plan should focus on critical positions expected to be vacant over the next five years. More broadly it should include cross training, rotation of assignments, formal and informal training opportunities, and implementation of a management/supervisory academy. Career ladders can also be effective in retaining and developing internal staff talent, as employees can move to a higher-level classification once they receive the required performance, experience, education, and technical certification.

Recommendation 2. Request that the City's Human Resources Department develop a formal succession plan and career ladders for the Public Works Department.

Performance Assessment and Analysis – Solid Waste Division

Riverside provides solid waste services with a strong customer focus. However, the City has opportunities to make some changes that will decrease its costs and improve the effectiveness of its programs, including increases to its landfill diversion requirements. Because the state has established more aggressive landfill diversion goals for the future, maximizing opportunities in several program areas will be needed to meet those goals. The City would also benefit from additional strategic planning.

Contracting Refuse Collection Services

Riverside continues to provide many core service functions to the public using its employees. With the continued escalation of employee retirement costs under CalPERS, the cost of providing services using city staff has increased compared with the cost of providing services through contract services.

Riverside uses city crews for two-thirds and contracted solid waste providers for one-third of its residential collection. The trend in California in recent decades has been away from using city crews for refuse collection due to the costs of government employees and benefits. Moreover, private haulers that serve multiple jurisdictions bring economies of scale in several areas including capital acquisition, fleet maintenance, workers' compensation, employee recruitment, safety and training programs, customer service/billing, technology, and management.

Recent examples include the City of Hemet, which in 2011 contracted its solid waste service to CR&R. Newport Beach is another example, contracting its residential solid waste services (commercial service had already been contracted) in 2013 (also to CR&R). San Bernardino contracted its solid waste, street sweeping, and right-of-way cleanup in 2016 as a single package of services to Burrtec, as a requirement for reducing costs and exiting bankruptcy.

Most cities in the Inland Empire provide solid waste services through a contract. With state recycling requirements that have been in place for over 25 years, refuse haulers have gradually expanded their businesses to include materials sorting, recycling, public education, and in some cases, street sweeping and other related services, working in partnership with individual cities and counties. In addition, the more sophisticated companies use specialized routing systems to reduce travel times. They track and closely monitor performance measures based on their experience.

Given the expertise developed in many jurisdictions and by these waste companies, and the economies of scale that large operations can provide, it is likely that contracting these services to a private company will result in lower or similar costs to provide the service, new and/or higher franchise fees, along with fees for an exclusive agreement to the City.

Another advantage of contracting refuse collection services is that it reduces the operational complexity and scale of services the City must manage. By contracting for these services, the City would reduce its day-to-day responsibilities. In addition, contracting would insulate the City from the pension increases that it will face in the coming years. Most cities have found that the fully burdened costs of labor (including long-term pension costs) and the full cost of maintaining an up-to-date fleet exceed the cost of contracted operations.

Table 3 presents an initial estimate of the cost per resident for solid waste services for City of Riverside crews compared with the contracted areas. Total cost for city areas includes the allocation of costs from streets, public utilities (electric) and other utilization charges. These would need to be further studied to determine the impacts of cost avoidance to those other funds and the solid waste enterprise fund if the City were to contract all residential areas. If the two-thirds of the City that is currently collected by City crews were to be contracted at similar prices to the areas that are contracted out, the savings to the City could be over $1.5 million annually, which would save money for residents through reduced rates.

Table 3. Initial Comparison of Cost per Residence for Solid Waste Services by City vs. Contract Service Providers for FY 2017-18

	City Areas	Contracted Areas
Total cost (estimate)	$9,840,000	$4,130,000
Number of residences served (estimate)	41,295	25,657
Cost per residence (per month)	$19.86	$13,41

Considering the challenges related to the City's budget, the likelihood of continued rapidly increasing personnel costs driven largely by CalPERS increases, and the significant savings that can be realized by contracting with private companies, we believe City leaders should investigate options for contracting solid waste services to private providers.

The decision to contract a service as critical as solid waste collection requires policy discussions, a preliminary cost analysis and careful planning. Because one-third of the residential service is already provided under contract, many of the relevant issues and costs are identifiable. Further, in deciding to contract, City managers are able to determine the terms of the relationship with its contractor, requirements for employing City staff, the cost for use of City streets, and diversion standards and requirements. The best way to evaluate the potential cost savings of contracting and cost impacts to customers is to prepare a request for proposals and seek competitive proposals from private companies.

Article 10 of the current memorandum of understanding with the Service Employees International Union Riverside Chapter Local 721 (Refuse) indicates that the City may "not privatize its current refuse collection routes so as to displace or reduce the total number of current regular staff" during the life of the MOU. The MOU expires June 30, 2020. This would be an appropriate time for City leaders to review their service options in anticipation of the expiration of that contract. If contracting for this service is considered, a typical provision would be to require the contractor to offer employment to the current City staff.

Recommendation 3. Hold policy discussions with upper management to determine guidelines for contracting solid waste services.

Recommendation 4. Issue a request for proposals (RFP) and seek competitive proposals for solid waste collection and recycling services beginning July 2020.

Rate Structure and Revenue Generation Opportunities

The current solid waste fee level of peer cities for select services is presented in Table 4. As the table shows, Riverside's fees are somewhat higher than the peer average for residential services, but lower for commercial services. In comparing rates between cities, it should be noted that cities fund different suites of services with solid waste fees. Some cities include street sweeping, illegal dump cleanups, and landfill closure costs, while others do not. And some cities subsidize using other sources such as the general fund.

Table 4. Solid Waste Monthly Rates Among Peer Agencies for FY 2017-18

City	Single Family Residential 96 gallon	Single Family Residential 64 gallon	Single Family Residential Recycling	Commercial two-cubic yard weekly pickup
Riverside	$23.68	Not available	No charge	$77.00
Anaheim	$21.43	$20.51	No charge	$136.33
Bakersfield	$16.67	$16.67	No charge	$126.71
Chula Vista	$20.00	$17.00	No charge	$69.95
Fontana	$26.34	$26.34	No charge	$124.12
Long Beach[1]	Unknown	Unknown	Unknown	Unknown
Moreno Valley	$22.68	$22.68	No charge	$125.34
Peer Average	**$21.42**	**$20.64**	**No charge**	**$116.49**

Source: City websites

[1] Long Beach solid waste monthly rates are not available online; the city has not responded to our request for this information.

Riverside uses its solid waste fees to fund a variety of services as part of its waste management program. Compared to the FY 2014-15 budget, the FY 2017-18 overall solid waste collection expenditure budget has increased 8.3%, but during this same period, personnel costs in solid waste collection have increased by 25.7%. The steep cost increase in personnel services has forced reductions in other budget areas.

The pressure to maintain rates at low levels has placed a burden on the solid waste fund. In 2017, 14 of the 30 collection trucks were older than the industry standard of seven years. With the purchase of six new trucks in 2018, eight of the 30 vehicles in the solid waste fleet remain beyond the recommended lifespan.

According to staff, public education and enforcement programs have been significantly reduced during this period. Public education is essential for solid waste programs to ensure that people understand which materials to place in the various containers, and some level of enforcement is needed to deal with those who choose not to follow the rules. The budget situation has also made it difficult to fund "zero waste" initiatives designed to reduce landfill disposal.

Staff indicate that fees have been held at low levels partly due to increases in water fees and power fees in the Riverside Public Utilities Department (which place additional burdens on residents). However, the financial needs of each utility enterprise are independent of each other and fees should be set at the levels needed regardless of other burdens.

As indicated earlier, contracting collection for the entire City could provide budget relief and allow rates to stay lower. However, additional funds will still likely be required to meet new diversion and organics management requirements.

Riverside's commercial services are similar in nature to the peer agencies, in that they establish rates based on the size of the container and the number of times collection is scheduled per week. Riverside's fee structure differentiates multi-family service from single-family residential service, which is a common practice. However, Riverside provides additional services such as driveway or backyard service. Other cities in the peer agency group require cans to be placed curbside and, thus, do not provide increased rates for non-curbside services.

In addition, Riverside provides a 96-gallon garbage container and charges all residents the same price. Many cities have implemented a "Pay-As-You-Throw" rate structure where residents pay less for a smaller container (usually in 20-, 32- and/or 64-gallon sizes) and more for larger containers. While this type of rate structure requires additional administrative and enforcement work to monitor and deal with contamination, it has several benefits:

- It encourages residents to minimize the contents of the garbage container by placing all eligible recyclables in the recycling container.
- It encourages overall waste reduction, which is initiated with purchase decisions and can reduce overall disposal costs.
- It can generate additional fee revenue from those generating excess garbage.

Riverside's solid waste fees are used to fund basic residential and commercial waste management programs. However, the City also uses these fees to support other efforts such as street sweeping, illegal dump clean-ups, homeless encampment clean-ups, and closed landfill maintenance. A common practice used by other cities is to identify different funding sources, such as grants and franchise fees, to fund ancillary waste management services. The eligibility of franchise fees needs to be carefully researched for each proposed use.

Based on our analysis, a fee study is needed to ensure the City's fees are generating the revenues necessary to fund its waste management services and programs in the long term. This should include rates needed to cover the revised program requirements and pay-as-you-throw rates (e.g., how

much more is charged for larger containers) should be determined by the City staff utilizing the results of the fee study.

Recommendation 5. Transition to a "pay-as-you-throw" program where residents pay more for larger garbage containers.

Recommendation 6. Review the solid waste collection fee structure to ensure revenue generated is properly allocated to eligible services.

Recommendation 7. Conduct a fee study to identify revenue required over the next five years and revise rates accordingly.

Recommendation 8. Identify new revenue sources where possible to support waste reduction, waste diversion, and cleanup efforts.

Solid Waste Contracts

As shown in Table 5, Riverside has contracts in place for residential collection, materials sorting and transfer, and ultimate landfill disposal, as well as non-exclusive franchises for commercial waste management.

Table 5. Active Solid Waste Contracts

Contractor	Last Amended	Purpose of Contract
Agua Mansa MRF	November 2012	Materials sorting and transfer services
Arakelian Enterprise dba Athens Services	January 2018	Commercial waste hauling services (non-exclusive)
Burrtec Waste Industries	December 2017	Residential solid waste collection services (non-exclusive)
Riverside County	August 2008	Hazardous waste collection

Management Partners reviewed the contracts and franchise agreements shown above. The contracts and franchise agreements do not contain requirements or incentives for diversion improvements beyond the 50% AB 939 requirements of 2000.

Diversion requirements have changed significantly in the last five years. A best practice used by other agencies is to incorporate diversion performance goals and requirements into solid waste contracts so that contractors are held to the same standard as the City and that they are focused on helping the City meet its diversion goals and requirements.

Recommendation 9. Specify diversion performance goals in future requests for proposals and/or contract amendments for all solid waste contracts.

The materials recovery facility (MRF) and landfill agreement with Agua Mansa MRF is separate from the collection agreements with Athens and Burrtec. Commercial customer collection agreements expire in 2022 and the MRF/landfill agreement runs through 2029. The residential contract expires in December 2018 and could be extended to July 2020 to align with the MOU renewal date. Ideally, all contracts should expire on the same date to give the City the best opportunity for designing its future programs.

To achieve maximum diversion, the collection system should work in concert with the processing technology and market requirements. This can most easily be achieved with a single contractor handling both collection and processing (vertical integration). For example, the suite of materials collected in the containers should be compatible with the design of the sorting technology and marketability after sorting.

Recommendation 10. Transition to a comprehensive and vertically integrated waste management contract that includes collection, sorting, and marketing.

The existing contracts contain provisions wherein the City can implement new operational programs and the contractor can suggest operational modifications to improve diversion. Changes require contract amendments. The City could, for example, work with the contractors to implement source separated collection of food scraps that could then be processed and marketed rather than taken to the landfill. These provisions have not been invoked. Discussions with contractors for ways they can assist the City in meeting its diversion goals would allow the parties to work collaboratively towards increasing diversion efforts in Riverside and help the City achieve its diversion goals.

Recommendation 11. Amend the current solid waste contracts to incorporate additional diversion enhancement concepts as contractual commitments and develop a plan to implement additional diversion enhancement programs.

Performance Improvement Opportunities

Management Partners' review of the City's diversion efforts identified several opportunities to improve the performance of the Solid Waste Division, which are noted in the following sections.

Zero Waste Planning

The performance of a solid waste management system is measured by cost and diversion. Riverside was a leader in solid waste diversion leading up to the "50% by 2000" requirement, but the City does not have a plan to meet the 75% state diversion goal for 2020 or to meet the state landfill organics ban. The City has recently retained a consultant to develop the organics plan and, ultimately, a comprehensive plan covering the entire solid waste program. The Riverside 2012 Green Action Plan includes a goal of 75% diversion by 2020.

According to Riverside's 2017 Annual Report to CalRecycle, residents generated 6.9 pounds per person per day (ppd) in 2016. This is a 23% increase from 2012 when Riverside generated 5.6 ppd and significantly more than other cities in the region, many of which generate less than 3.5 ppd. Some of the leading cities in Southern California are Los Angles, San Diego, Long Beach, Burbank, Rancho Cucamonga, Moreno Valley, and Temecula. Zero waste plan recommendations typically include waste reduction measures, additional source separation measures, new policies (such as plastic bag bans), and operational enhancements related to collection and material sorting.

Recommendation 12. Develop and adopt a zero-waste plan that will achieve a minimum 75% diversion by 2020.

Markets for recyclable materials have been negatively impacted recently by a variety of sources, especially China's new policies banning import of recycled waste. Markets for organic materials are still emerging and can be problematic. One solution for the weak and uncertain market conditions is to establish local markets for these materials. Given Riverside's industrial base and location, there is the potential for the City to be a regional leader in developing such markets. Examples could include a mini-paper mill, a processing plant for construction and demolition materials, and an anaerobic digestion facility for "dry" organic materials.

Recommendation 13. Implement economic development strategies that encourage creation of local facilities for

processing and/or using recyclable materials and organics.

Organics

In October 2014 Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. (Multifamily dwellings are not required to have a food waste diversion program.)

Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

The approach taken by other cities in managing organics varies with local conditions such as existing facilities and local market conditions. For example, some cities are relatively close to composting facilities that are permitted to receive food waste. Other cities may be relatively close to a private anaerobic digestion facility.

Riverside is one of the few cities in the state that directly manages solid waste and wastewater treatment as well as an energy and water utility. This provides a special opportunity to realize the synergies among these functions to meet the state requirements under AB 1826 by participating on a cross-functional team to explore, develop and implement cooperative programs to meet state organic requirements. (See further discussion of this issue in the Wastewater Services Section.)

Solid Waste Outreach Campaign

An essential element in successful solid waste diversion programs is a robust and multi-faceted outreach campaign. Residents and businesses must understand how the program works to minimize unintentional contamination in the recycling containers and recyclable materials in the trash container. Based on publicly available information, the MRF receiving the City materials receives 2,700 tons of materials per day and landfills 2,060 tons for a diversion rate of 23%.

Riverside has significant trash residuals in the recycling containers and significant recyclables in the trash containers. According to the 2017 Riverside Annual Report to CalRecycle, the contamination in residential recycling containers was 46%. This is an extremely high level; many cities are achieving under 10% contamination. An effective education campaign is the most important method of reducing contamination. An effective enforcement program and a well-designed program are other key elements.

While it is often seen as an easy budget fix to reduce the outreach budget, the long-term implications are increased contamination and reduced diversion. Cities that are leading in solid waste diversion have achieved success in large part through a comprehensive outreach campaign targeting all customers. Some cities have also addressed contamination by implementing a red tag program in targeted neighborhoods with focused public outreach whereby the City tags contaminated containers and requires resorting before they will be collected. A certain number of red tags can result in administrative fines.

Recommendation 14. Develop and implement a comprehensive solid waste outreach program.

Riverside Municipal Code

The current Solid Waste and Recyclable Material provisions in Chapter 6.04 of the Riverside Municipal Code address the typical health-related concerns seen in other cities. However, the current provisions need to be updated to strengthen requirements and enforcement options related to diversion requirements. While education is the most important element used to increase diversion, enforcement is also needed, especially to deal with chronic violators. New code provisions should include the following requirements for property owners:

- Participation in the City's recycling and composting programs,
- Material placement at curbside,
- Penalties for violations,
- Establishment of recycling facilities and education programs at multi-family units, and
- Compliance with state requirements for commercial facilities.

Recommendation 15. Update the Solid Waste and Recyclable Material section (Chapter 6.04) of the City's Municipal Code.

Multi-Family Service

State law requires recycling programs for multi-family residential properties. Achieving diversion in multi-family areas with common trash containers is especially difficult, but some cities have developed effective programs that combine conveniently located containers for recyclable materials with intensive and ongoing education programs. Coordination with apartment owners and continual education is important as multi-family residents are often more transient.

Recommendation 16. Develop and implement a multi-family diversion strategy.

Sorting of Garbage Stream

In Riverside, materials collected in the recycling containers are sorted, but materials collected in the garbage container are hauled unsorted to a transfer station, loaded into larger trucks, and then transferred to the landfill. Additional diversion can be achieved by sorting this material at the MRF and pulling out recyclables. Only a few cities have taken the bold move of sorting garbage bin contents, but the results have been outstanding, largely because since most of the refuse material is placed in the garbage container, pulling out even a relatively small quantity can significantly improve diversion. For example, the City of Sunnyvale diverts 31% of the materials placed in garbage containers delivered to its MRF, on top of 99% of its green waste stream and 92% of its recycling stream. Sorting of this material can be costly but should be evaluated as a method for improving diversion.

Recommendation 17. Meet with the MRF contractor to identify opportunities, challenges, and a cost-effective strategy to implement sorting of the garbage stream.

Solid Waste Fleet

Earlier in this report we recommended the City explore contracting all solid waste services to private contractors. To the extent solid waste services continue to be provided in house, the City must update the fleet used to support collection services.

The industry standard for the useful life of refuse vehicles is seven to ten years. Refuse vehicles operate in an abusive environment and after seven to ten years, the cost of maintenance typically exceeds the cost of replacement. In addition, older vehicles pollute more and are less safe to operate. Many cities require contractors to maintain a fleet with no vehicles older than seven or eight years.

The age of the City's refuse vehicle fleet ranges from one to eleven years. Several of the vehicles used by City crews are beyond their useful life. Riverside purchased no vehicles in 2017; however, it did purchase six refuse vehicles in 2018 and was able to retire the oldest vehicles. Eight of the 30 vehicles are over 8 years old, and one is 22 years old.

If solid waste continues to be provided by inhouse staff, a formal solid waste fleet replacement funding program should be established that sets aside funds each year for the replacement of the collection fleet. The costs associated with replacement are currently incorporated into the solid waste fee study, however no funding is set aside in the Solid Waste Enterprise Fund. This is a best practice used by fleet management professionals in many other cities and is utilized by many enterprise fund managers.

Recommendation 18. Formalize the vehicle replacement policy and schedule the replacement of solid waste collection trucks consistent with industry best practices

Of the 30 vehicles currently in the fleet, all except 6 are Mack Trucks. It is desirable to have a fleet consisting of one make of vehicles to minimize inventory needs and maintenance skills requirements.

Recommendation 19. Standardize the manufacturer of the solid waste fleet and implement a phased approach to convert all vehicles to that brand.

Incentive Schedules

Earlier in this report we recommended that the City use private contractors to provide solid waste services. To the extent residential services continue to be provided in house, changes should be made to the incentive schedules currently used.

City crews now can conclude their day whenever they finish their route. While this system discourages work slowdowns and long breaks, it has several flaws. It can encourage workers to drive too fast, which can result in safety problems. Trash collection is one of the top ten most dangerous jobs in the US. The accident rate in Riverside's Solid Waste Division is about 19.6 injuries per 100 employees compared with a national rate of 5.3.

The crews are on a 4/10 schedule. In interviews with supervisory staff, crews often leave after working between seven to eight hours of a ten-hour shift. This means productivity could be greater. While this incentive program is understandably very popular with crews, this practice is an

unnecessary loss of productivity borne by the City. Routes should be examined to better utilize available staff hours.

Recommendation 20. Eliminate the incentive program in the new MOU and realign the route structure to provide better alignment with the work hours being paid for by the City during the upcoming labor negotiations.

Technology

Modern solid waste fleet operations are equipped with routing technology and GPS systems to ensure efficient equipment and manpower utilization. Routing technology is a valuable tool needed to optimize collection routes. GPS systems can provide real time monitoring of the fleet as well as maps showing route completion and timing. This information can verify route coverage, improve employee productivity, and identify traffic delays. It is also useful in determining whether a customer complaint relates to a missed pick-up or a late set-out. Riverside is not currently using any of these tools.

Recommendation 21. Equip all refuse vehicles with GPS technology to ensure efficient equipment utilization and allow for tracking of routes through GPS management software.

Performance Measures

Table 6 presents the performance measures used by Anaheim and Riverside.

Table 6. Solid Waste Performance Measures

City	Performance Measures
Anaheim	1. Number of impounded drop-off boxes/illegal drop-off boxes 2. Number of addresses collected for Target Areas (sweep) 3. Number of multi-family addresses collected for bulky Items 4. Number of residential addresses collected for bulky Items 5. Number of Neighborhood Clean-Up bins (by calendar year) 6. Actual number of commercial contracts 7. Actual number of residential contracts 8. Number of Anaheim Anytime requests 9. Number of Recycle Anaheim events 10. Residential Recycling Diversion Percentage 11. Residential Yard Waste Diversion Percentage 12. Commercial Bulk Diversion Percentage

City	Performance Measures
Riverside	1. Pounds per person per day (per CalRecycle) 2. Refuse program customer services 3. CURE event collection tonnages 4. Customer service requests (Call Center 311) 5. Annual report/AB 939 compliance

Riverside is currently tracking several measures that would be considered key indicators of performance. As mentioned earlier, the most significant issue facing the performance of the Solid Waste Division is the City's efforts towards meeting the state goals for diversion. The division must track these key measures and report them annually to the City Council, public and staff as a means of gauging performance and as an incentive towards meeting diversion goals. Tracking other measures such as diversion percentage by custom category would be helpful in identifying areas where diversion campaign efforts should be placed.

Recommendation 22. Develop performance standards and measurements focused on solid waste diversion efforts, collecting performance data and preparing quarterly and annual reports on meeting the standards.

Earlier in this report we recommended that the City outsource solid waste collection services for residential customers currently serviced by staff. If the City continues to provide solid waste services internally, the performance measures should also include operational metrics such as the number of missed collections, collections completed on schedule, complaints, and safety measures.

Performance Assessment and Analysis – Wastewater Services

The Wastewater Management Division manages the sanitary sewer collection system and the Riverside Water Quality Control Plant (RWQCP). Riverside contracted with Carollo Engineers and MWH to complete the 2008 Wastewater Master Plan update and the 2014 rate development study. This was a comprehensive assessment of the Sewer Enterprise Fund capital infrastructure needs at the RWQCP and the sewer collection system, and the proper methodology for establishing rates.

From this work, the City Council approved a capital improvement plan and a five-year sewer rate plan for FY 2014-15 to 2018-19. Recently, the City Council rescinded the FY 2018-19 rate increase based on the overall condition of the Sewer Enterprise Fund.

The division is implementing the engineers' recommendations. The City has recently completed a major $200 million renovation and upgrade to the RWQCP and has made upgraded to the sewer collection system.

The RWQCP is in transition from a "wastewater treatment" facility to a "resource recovery" facility and many efforts are in progress to facilitate this transformation. Significant benefits will likely accrue from expediting initiatives related to generating significantly more recycled water, more renewable energy, and more high-value organic material (biosolids).

Rate Structure and Revenue Generation Opportunities

Riverside's rate structure is consistent with most other wastewater agencies. The rate structure has been in place for several years, recently updated through the rate study by Carollo/MWH, as mentioned above. The City has developed separate rates/charges for residential and commercial customers.

Residential customers are separated based on single- and multi-family uses. Commercial customers have different rates depending on type of use (e.g., retail stores, hotels, restaurants, etc.). Each type of customer has a different volume of discharge and strength, all of which are factors that

make up an effective and fair rate structure. Management Partners believes the City's rate structure is consistent with other agencies and that the rate structure implemented based on the Carollo/MWH report is reasonable.

Funding the RWQCP and the Sanitary Sewer Collection System as the 2008 Wastewater Master Plan and 2014 Carollo/MWH report documented, there is a lot of work to be done (nearly $800 million of improvements between now and 2035). Projects include new pump stations, aeration basin improvements, filter rehabilitation, improvements to the air flotation thickeners and biosolids dewatering systems, additional improvements to the cogeneration system, levee improvements, building improvements, and possibly capacity enhancements.

As mentioned previously, the City Council recently decided to rescind a planned 8.5% fee increase in Sewer Enterprise Fund wastewater fees. The increase was recommended as part of the long-range wastewater fee study that would allow for the completion of the capital improvement projects at the RWQCP. The current budget allows for successful operation and maintenance of the RWQCP, but not the needed capital improvement investments. If sewer fees are not increased, there will be insufficient funding to implement the required capital improvement plan at the treatment plant.

While the RWQCP renovation has, as noted above, largely addressed the near-term capital needs at the treatment plant, there remain significant unaddressed and unfunded needs in the sewer collection system to address aging pipelines and pump stations that have reached the end of their useful life. The total cost of the necessary yet underfunded replacements totals $500 million. The collection system needs are being prioritized based on the age of the asset, potential reduction in maintenance needs, and removal of hydraulic constraints.

Currently, the 2016 Wastewater Master Plan is in progress, which will update the 2008 Master Plan, the capital improvement plan, and the rate development study. The Master Plan is scheduled to be complete by the summer of 2019.

Recommendation 23. Implement the recommendations in the Wastewater Master Plan and rate development study work to establish a sewer service fee that supports the Sewer Enterprise Fund's operations, maintenance and capital improvement funding.

Performance and Operational Improvement Opportunities

Various opportunities for performance and operational improvements in wastewater services are described below. The cost, equipment, and staffing levels at the RWQCP and sewer system unit were found to be within the range of efficiently operating programs. These opportunities would allow for a more efficient and effective delivery of wastewater services to the community.

Recruitment and Retention

The operation and maintenance of a wastewater treatment facility and sewer collection system requires a wide range of highly skilled and specialized staff ranging from mechanics, operators, environmental compliance inspectors, regulatory compliance analysts, project engineers, construction inspection, technicians, and electricians to administrative staff that handle procurement, accounting, and financial oversight. Many of these positions require technical certifications from either the state or industry.

As is common throughout California, attracting and retaining staff with these skills and certifications at the typical compensation level offered by local governments is a significant challenge. Failure to maintain qualified staff puts at risk meeting state staffing mandates, permit requirements, operating the wastewater division at top efficiency, and maintaining a safe work environment.

The Wastewater Division uses several contractors for various tasks such as specialized testing, hauling, and large-engine maintenance. No changes are recommended to the current outsourcing strategy.

Staff expressed concern with the length of time it takes to fill vacant positions. Managers expressed concern that the compensation and benefits package offered for wastewater employees is below other agencies in the area and may be a leading cause of the inability to recruit skilled workers. Staff also indicated that it takes months to fill vacant positions.

Conducting a compensation study was beyond the scope of this engagement; however, it would be advisable for the City to review its compensation strategies and competitiveness of its salaries and benefits for its wastewater workers. This could occur during the next negotiation cycle with the SEIU bargaining unit (which expires in 2020), or earlier if recruitment becomes a chronic problem.

As indicated previously, classification career ladders (series) should be considered for appropriate positions to recruit, retain, and develop internal staff talent. With position classification career ladders, employees can move to a higher-level classification once they achieve performance, experience, education, and technical certification.

Recommendation 24. Consult with the Human Resources Department to review recruitment processes to streamline the time it takes to fill vacant positions.

Recommendation 25. Perform a market analysis of the compensation for critical job classifications at the plant and adjust compensation sufficient to recruit and retain qualified staff.

Sewer Laterals

In 2009 City leaders approved changes to the Municipal Code whereby the City now owns the sewer lateral lines from a resident's property line to its connection to the main sewer line in the street. Residential property owners are responsible for the private lateral from the home to the property line. Commercial businesses continue to own the sewer line from the property building to the main sewer line. Since the approval of this change, City staff have noted that an inordinate amount of staff time and resources are committed to responding to overflowing and plugged sewer laterals. Responding to calls related to private sewer laterals takes resources away from work crews' primary responsibility, which is the City-owned sewer system, including main sewer lines, lateral lines, and 19 sewer pump stations.

A best practice used by other agencies is to establish clear policies regarding city and property owner responsibilities for the sewer system components, and specifically responsibility for sewer laterals. These policies should then be communicated to property owners with tips on how they can successfully address issues in their laterals before and when they arise. Customer service training is also needed for wastewater staff members answering phones, responding to emails, and for crews while out in the field, to tactfully yet firmly address the City's policy for sewer laterals.

Recommendation 26. Propose changes to the Riverside Municipal Code and the sewer lateral program to improve resource efficiency, accelerate lateral repairs, and reduce City liability costs.

Recommendation 27. Develop a communications plan to explain the City's policy for responses to sewer laterals and train staff to implement it.

Synergy Among Environmental Related Programs

Riverside is in a special position of managing its energy and water in the Public Utilities Department, and wastewater and solid waste in the Public Works Department. This presents an opportunity for the City to address multiple components of its environmental sustainability programs. The two departments have been working together on common issues, but there is significantly more potential for generating synergies among the various functions.

The City is at the beginning stages of developing an integrated "One Water-One Riverside" integrated water planning approach for water supply, wastewater, recycled water, storm water, and habitat conservation. Developing formal communication pathways between departments that focus on strategic initiatives and implementation plans would allow the City to go beyond the separate capabilities and achieve greater benefits to the community.

Recommendation 28. Form a cross-functional team consisting of key staff in the energy, water, wastewater, and waste management units to explore, develop, and implement synergistic environmental programs.

Recycled Water

Riverside has a small non-potable recycled water system, but it has not aggressively developed its recycled water potential due to economic requirements and the water supply attributes of the City getting all its supply from the groundwater aquifer. Nevertheless, water is a valuable commodity in Southern California and future growth patterns and potential for future droughts will make it that much more precious.

City leaders are in the position to develop a comprehensive recycled water plan that would first be designed to meet the needs of Riverside, taking into account the extent to which the existing water supply meets the City's needs for both potable and non-potable uses. The plan should, after fulfilling the long-term needs of Riverside, explore the possibility of supplying surrounding communities for which Riverside could receive significant revenue. With the plan in place, the City will be able to take advantage of opportunities that may arise such as state grants or large

customers willing to cost-share to expand the recycled water infrastructure.

Recommendation 29. Incorporate a comprehensive strategic plan into the 2016 Wastewater Master Plan to maximize the production and distribution of recycled water for both non-potable and potable uses in coordination with the Public Utilities Department Water Division.

Renewable Energy and Organics

The RWQCP facility generates energy (methane gas which is used as fuel for fuel cells) through the biological decomposition of organic material. The organics generated by the plant are being supplemented by organic material from other sources, including restaurant grease, food scraps, and food waste products. The plant site also has potential for additional solar and wind energy generation.

Opportunities exist to enhance the output of renewable energy from the plant. Studying the opportunities in greater detail would allow the City to implement a renewable energy platform for the community, potentially generating revenues that capitalize on the by-product of wastewater treatment.

Recommendation 30. Develop and implement a Wastewater Resources Recovery Plan to achieve the goal of receiving organic material, increasing bio-methane production, and maximizing energy production.

Biosolids Material

The RWQCP treatment process generates biosolids that have historically been considered a waste material. In recent years, a "Class B" compost has been generated for use on farmlands in Arizona. Many technologies are being marketed for processing of organics, such as anaerobic digestion, pyrolysis, and composting. While these technologies are promising, they all have experienced problems related to cost competitiveness and operational reliability, and success is dependent on local conditions such as alternative markets, local demand for the products generated, land availability, the regulatory environment, and acceptance by the community.

Riverside should explore these technologies but be wary of possible pitfalls, especially companies that over-promise. The first task is to identify and analyze the options that may best fit Riverside's situation.

Recommendation 31. Conduct an analysis to determine the highest and best use of the biosolids generated at the RWQCP.

Salinity

Riverside has identified increasing salinity (salts in wastewater) as a long-term concern relative to industry uses and the water supply. In the 2008 Master Plan and the 2014 Carollo/MWH report, salinity control measures costing nearly $200 million were recommended to be implemented over the next 20 years. This is an important component of the Wastewater Treatment's Master Plan that should be implemented in a timeframe ahead of when it is needed. Increased salinity levels can cause several problems, including impacting the City's ability to approve new industrial customers.

Recommendation 32. Prioritize implementation of salinity measures in the 2016 Wastewater Master Plan and rate development study, including necessary funding through water and wastewater rates.

Technology

As noted, the 2008 Master Plan and the 2014 Carollo/MWH report thoroughly analyzed the technology condition and needs at the RWQCP. Riverside is using traditional technology systems such as supervisory control and data acquisition (SCADA), telemetry, GIS, and quality control monitoring systems. Riverside is also making use of modern closed-circuit television (CCTV) equipment to assess the condition of the sewers and is implementing a modern asset management system for wastewater. We believe that the division is on the right path regarding its technology use.

Performance Measures

Table 7 shows the performance measures used by Anaheim, the only agency that responded to this section of our peer survey.

Table 7. Wastewater Collection and Maintenance Performance Measures

City	Performance Measures
Anaheim	1. Percentage of sewer spill calls responded to within one hour 2. Number of storm drain inlets inspected/cleaned 3. Number of miles of open/closed storm drains cleaned 4. Number of miles of sanitary sewers cleaned 5. Number of miles of sanitary sewer lines inspected (CCTV)

Riverside did not report the specific performance measures they track related to wastewater; however, we know that one of the key measures tracked is average daily sewer demand in millions of gallons per day (mgpd) as well as percentage of treatment system capacity used for capacity planning purposes. Several performance measures applicable to wastewater collection and treatment plant operations that Riverside should consider are:

- Sewer overflows per 100 miles of pipe,
- Percent of sewage bypassing treatment,
- Percent of customer complaints/inquiries responded to within two business hours,
- Percent of emergency calls responded to within 60 minutes during working hours and 120 minutes during non-working hours,
- Average emergency response time,
- Percent of odor complaints responded to within 24 hours,
- Percent of samples in compliance with NPDES permit limits,
- Percent of biological oxygen demand (BOD) and total suspended solids (TSS),
- Sewer main blockages per 100 miles of sewer line, and
- Number of miles of sewer line inspected per year.

The department should develop a comprehensive list of performance measures and standards that are reflective of the issues that are faced in service delivery to the community and develop methods to collect and report on those data on a quarterly basis.

Recommendation 33. Develop meaningful performance measures and standards for wastewater collection and treatment.

Recommendation 34. Collect performance data and report compliance with and trends on a quarterly basis, making the reports available to City Council, the city manager, department staff and the public.

Performance Assessment and Analysis – Streets Division

The Streets Division is responsible for maintaining 875 miles of streets and making sidewalk repairs, with its 55 FTE. The division oversees maintenance of the City's rights of way, and is also responsible for barricading, sandbagging and removing storm debris. Maintenance activities include:

- Sidewalk, curb and gutter installation and repair;
- Pothole and asphalt rehabilitation (paving);
- Street and curb painting;
- Traffic control signage;
- Graffiti removal;
- Guardrail repair;
- Weed abatement;
- Mud, palm fronds and debris removals from streets; and
- Water conveyance ditches in front of drains and culverts.

In our discussions with staff and our review of the City's operating and capital budgets, the Streets Division is suffering from a severe shortage of funds necessary to maintain streets to established city standards. The additional funding provided by SB1 and Measure Z, which are further discussed later, has helped the City mitigate its severe underfunding of streets infrastructure. However, the division struggles to meet community demands placed on roadways and provide a sufficient level of service.

Performance Improvement Opportunities

Street maintenance is well developed in Riverside which has a sophisticated system of prioritizing street maintenance needs. The growing concern in Riverside as well as communities throughout California is that street maintenance is underfunded, given the fiscal resources available through tax revenues and federal funding programs, growing population and use of vehicles, and wayfinding applications that divert traffic onto city streets to reduce commute times (the "Google Maps effect"). During our analysis, we identified several opportunities

for the Streets Division to improve performance and implement programmatic changes to provide efficiencies.

Street Maintenance Funding

The overriding issue with respect to street maintenance is its severe underfunding. As the fiscal resources of Riverside have decreased, funding and staffing for street maintenance has declined. Funding provided from gas tax revenues has not kept pace with the demands for infrastructure repair and rehabilitation. The passage of SB1 by the California Legislature in 2017 is providing an additional revenue source; however, this funding will only be available if it survives the threat of a referendum to repeal it.

It is well established that failure to adequately maintain streets results in much higher costs in the future since major street renovation will be needed and is much costlier when the street has deteriorated. Staff report that at current funding levels, there will be only enough funds for slurry sealing and no ability to fund needed resurfacing. If this continues, the pavement condition will worsen each year and the streets will eventually deteriorate to unusable conditions.

In this situation, where money spent now will be more effective than money spent later, bond financing is a consideration. Riverside, like several other jurisdictions, has securitized future gas tax revenues by issuing revenue bonds to complete work. The bonds would have to be paid off with interest, but there may be significant advantages to maintaining them sooner rather than later.

In November 2016, City voters approved Measure Z, a one-cent sales tax measure to help restore services that were reduced during and in the wake of the Great Recession. Of the nearly $52 million in annual revenues generated by Measure Z, about $2.9 million is dedicated to funding streets improvement projects. Should SB1 be repealed by voters, the City Council may need to assess how it will use Measure Z funds for street improvements.

Recommendation 35. Conduct a cost-benefit analysis to assess the merits of using bond financing for street rehabilitation projects, securitizing those bonds with future gas tax revenues.

Recommendation 36. Consider reallocating additional Measure Z monies to pay for needed street maintenance.

Pavement Condition Index

The measurement for street condition is the pavement condition index (PCI), a numerical index between 0 and 100, used to indicate the general condition of roadway pavement. Riverside has set a PCI goal for City streets that ranges from 62 to 67. Staff are working with Infrastructure Management Services (IMS), a pavement management consulting firm, to complete the pavement management surveys for the City's roadway network. IMS is preparing a baseline report that was recently presented to the City Council in the fall. The final report will be utilized by staff to determine the funding requirements necessary to meet the City's PCI standard.

The City should adjust its budget priorities to fund street maintenance at a level that reduces the backlog of roads with a PCI of less than 40, increases the percent of roads with a PCI of more than 85, and maintains a PCI level of 65 as recommended by City staff. Based upon the recommended PCI level of 65, staff's recommendation to double the budget (at a minimum), which is currently at $13.5 million, seems to be on target.

Based on the preliminary analysis performed by staff, there is currently a citywide average PCI rating of 61 for the roadway network. For local and collector streets below the targeted range, rehabilitation is recommended within five years. Delaying reconstruction beyond this timeframe will result in the need for major reconstruction that is far costlier.

Recommendation 37. Establish an appropriate long-term PCI standard for maintaining the City's roadway network that would achieve a PCI of not less than 65. City leaders should set a target PCI index between 70 and 75, based on best practices**.**

Recommendation 38. Develop a funding and implementation strategy to achieve the PCI standard over a ten-year period.

Potholes

Riverside has established a goal of filling 90% of reported potholes within one day. According to the most recent performance measurement report, only 56% of potholes were being filled within this timeframe. Staff report that the reason for not meeting the standard is lack of staffing, funding constraints, and competing priorities.

Other agencies that have significant pothole issues seek the assistance of contractors to repair potholes. Riverside currently relies on contractors to perform larger paving projects but does not use outside companies to assist with its pothole operation. While funding for streets maintenance remains an issue, the City should review its street maintenance budget to identify options to fund contracted services to repair potholes. Department managers should also develop a written policy regarding the prioritization of pothole repairs considering size, location (e.g., arterial, collector, neighborhood roads), and season.

Recommendation 39. Establish a policy regarding pot-hole repair timeframes.

Recommendation 40. Review street maintenance budgetary resources to identify funding options to hire contractors for pothole repairs in accordance with the pothole repair standards.

Street Maintenance Equipment

The Street Maintenance Division has 46 vehicles and pieces of maintenance equipment based on the City's equipment inventory. Of those, only 10 pieces of equipment are 2015 models or newer. Thirty-six vehicles (or 78%) are models from 2000 to 2011. These are close or have already exceed their useful life and are in need of replacement. As mentioned previously, the City has no formal equipment replacement fund.

Without enterprise fees to support street maintenance operations, replacement of the equipment would have to come from the general fund, where there are many competing demands for resources. As a result, monies to replace needed street maintenance equipment have not been available.

Many cities are moving to contracting a variety of street maintenance activities. If done in Riverside, this could avoid replacing some of the equipment that is overdue for replacement. However, for those operations that managers determine should continue to be provided by City staff, proper equipment is needed. Establishing an equipment replacement fund for street maintenance vehicles and equipment is needed.

Recommendation 41. Establish and fund a vehicle/ equipment replacement fund for street maintenance equipment.

Technology

The Engineering Division uses Lucity, an in-depth analysis tool to analyze various infrastructures including the city's roadway network. It provides the tool to calculate the PCI level of the city's roadways and provides a historical analysis of roadway degradation trends. It provides the necessary information to evaluate the best roadway improvement strategies based on budgetary resources available. This is a best practice for street maintenance.

Another commonly used pavement management tool is a geographic information system (GIS) to maintain information on city infrastructure and maintenance. The division uses GIS to manage and report on the city's roadway infrastructure.

The City is in the process of upgrading its GIS platform. Upon completion, the Engineering Division will be able to use this tool to provide map-based analysis of the infrastructure to be maintained. Data integration with Lucity will provide a strong platform to analyze and evaluate pavement management performance.

Recommendation 42. Complete the implementation of GIS, integrating the pavement condition data from Lucity, designating employees with responsibility for its continued updating and use.

Performance Measures

Table 8 below presents the performance measures used by Riverside and the two agencies that responded to the peer survey.

Table 8. Streets Maintenance Performance Measures

City	Performance Measures
Anaheim	1. Percent of hazardous road repair complaints responded to within in 24 hours 2. Percent of citizen requests for pothole repairs completed within one (1) working day 3. Number of square feet of deteriorated pavement replaced grind/cap 4. Number of square feet of deteriorated pavement for removal 5. Number of square feet of deteriorated pavement slurry sealed (streets) 6. Number of potholes repaired 7. Number of square feet of pavement skinned/repaired (streets) 8. Number of square feet of pavement skinned/repaired (alleys) 9. Number of linear feet crack filled 10. Number of access ramps installed 11. Number of sidewalk grinds 12. Linear foot of sidewalk grinds

City	Performance Measures
	13. Number of sidewalk ramps installed 14. Number of sidewalk inspections related to trees 15. Number of square feet of sidewalks removed and replaced in-house 16. Number of curb/gutters flow lines ground down 17. Number of square feet of completed Utility Cut Sheet Projects
Moreno Valley	1. Sidewalk inventory for inclusion in City GPS (lineal miles) 2. Potholes repaired 3. Cracks sealed (lineal miles of pavement) 4. Sprayed herbicide (acres of right-of-way) 5. Constructed damaged sidewalk (square feet) 6. Mitigated sidewalk tripping hazards
Riverside	1. Pavement condition index (PCI) 2. Percent of potholes filled within one business day from receiving notification 3. Current Network Average Pavement Condition Index 4. Current Network Backlog 5. Arterials PCI 6. Arterials Backlog 7. Collector PCI 8. Collector Backlog 9. Locals PCI 10. Locals Backlog 11. Current Network Surface Distress Index (SDI) 12. Current Network Roughness Index (RI) 13. Current Network Structural Index (SI)

The set of performance measures used by the Streets Division appears to be a quality set of performance measures that will provide managers with an understanding of trends and effectiveness of the program.

Performance Assessment and Analysis – Street Sweeping

Riverside performs street sweeping using its own crews. Residential, commercial and industrial areas are all swept twice per month which corresponds with requirements of the City's NPDES permit. The City's permit may allow for revision of the street sweeping frequency based on the annual evaluation of its effectiveness. This is a higher level of service compared with some other jurisdictions. For example, San Diego sweeps its streets just six times per year.

Recommendation 43. Evaluate possible revisions to the NPDES permit that may allow for less frequent street sweeping within the context of the other permit requirements.

Funding Shortfalls

The FY 2017-18 budget includes 13 authorized full-time positions for street sweeping services plus a portion (.68 full-time equivalent) of administrative and management staff's time allocated to the sweeping program. All the positions at the time of this report are filled. Sweeping activities are funded by the solid waste/street sweeping fund. Revenues for these services are derived from the solid waste fees paid by residents and businesses.

There are basically two options to address program funding needs: increase revenues or decrease expenditures. Increasing solid waste fees to levels sufficient to fully fund the programs in the fund, including street sweeping, has not been supported by policymakers. Another alternative is to allocate General Fund monies to support the refuse/sweeping program. This is not likely feasible considering current demands on the General Fund.

One alternative for decreasing expenditures may be to lease-purchase new sweepers. This would eliminate the need to allocate such a large sum for new sweeping equipment. Alternatively, Riverside may be able to reduce its expenditures through the use of alternative service delivery methods.

Outsourcing/Contracting Street Sweeping Services

Many municipal services are provided by private industry. Contracting for them has become an alternative service delivery model utilized throughout California. In many cases contracting has resulted in lower costs, as the services are subject to market competition. This trend has increased over the last 30 years and is expected to continue as the cost of public employees in California rises (especially considering higher retirement costs).

Many jurisdictions in Southern California are largely contract cities where most, if not all, basic services (including police and fire services) are provided by another public agency or a private provider. As mentioned previously, contracts are commonly used by cities for refuse collection, street sweeping, traffic signal maintenance, landscape and tree maintenance, water treatment and distribution, construction plan checking, building inspection, planning, engineering, payroll and investment management.

Introducing competition to municipal service delivery has consistently shown that outsourcing often results in efficiencies. Costs are reduced and better contained over time if they are influenced by the competitive marketplace. A competitive environment and the economies of scale of a contractor that serves multiple clients often results in greater savings compared with the cost of municipal service delivery. The prudent use of contracted services can save considerable costs and are a viable way to get important work done expediently.

Street sweeping is a service offered by the private sector at competitive rates and many cities provide them through a contract with a private company. Given limited funds for the replacement of vehicles, along with increasing retirement costs for city staff, this is an optimal time to consider outsourcing the sweeping operation, thus allowing the City to avoid the cost of purchasing and maintaining new equipment.

Riverside has 18 sweepers which are retained for 12 to 13 years, far beyond the standard 6- to 7-year useful life of these vehicles. Currently, 15 sweepers are overdue for replacement. The City has not established a vehicle replacement fund so there are no funds set aside for the replacement vehicles as they wear out. At an estimated replacement cost of $375,000 each, the City will need to spend $5,625,000 to bring its fleet to recommended operating levels.

Department managers should consider contracting its street sweeping services. Before this can be done, it will be important to identify all the

costs of the sweeping operation and those costs that the City can and has avoided that are required to support a fully funded operation. This should be followed with development of a request for proposals seeking competitive costs to provide the services. To reduce the effects that outsourcing has on existing employees, the RFP can require that city staff be offered positions with the contractor.

Recommendation 44. Develop and issue a request for proposals for street sweeping services.

Successful contracting requires a shift in the role of key city employees, who will transition from managing daily operations to inspection and oversight of contracted services. The contracting process begins with clearly defining the goals, problems to be resolved or services to be provided; developing specifications and measurable indicators required for successful service delivery; and selecting a responsive and responsible contractor.

Once a contractor is in place, staff will be responsible for monitoring and inspecting the contractor's work and managing the contract to ensure the contractor meets performance standards. This will require that city personnel be trained in contract management.

The need for staff training in contract management and for ensuring proper staffing for contract management cannot be underestimated. There are many examples of contractors that have not performed in cities due to poor oversight, poorly worded scopes of work or contracts, lack of accountability, and poor communication.

Recommendation 45. Arrange for contract management training for the individuals who will be responsible for managing the sweeping contract.

If Riverside moves forward with contracting these services, it is also important for the city manager and department director to provide their expectations for consistent contract oversight, communication and reporting systems.

Recommendation 46. Establish guidelines for consistent contract management practices, regular reporting systems, and clear communications.

Best Management Practices

Management Partners' team members have identified best management practices related to street sweeping through our previous work with

jurisdictions that have evaluated sweeping operations. Implementing them may reduce costs (regardless of whether the operation is contracted) and increase program effectiveness. The most successful operations have the following attributes.

1. ***Policy and Program Objectives.*** Policies and program objectives established for the following:
   - Appearance (debris and trash removal) of streets and alleys,
   - Air quality,
   - Roadway maintenance and cleanup,
   - Safety,
   - Water quality,
   - Turnaround time to address service requests from the public, and
   - Sweeping schedules and equipment support storm water quality outcomes.
2. ***Equipment Selection.*** The equipment selected for use that:
   - Maximizes program objectives,
   - Has the ability to pick up debris efficiently,
   - Is appropriate for the street surface type,
   - Has the hopper capacity needed and preferred dumping style,
   - Meets alternative fuel requirements, and
   - Has been evaluated to identify the cost to service the equipment over its life.
3. ***Operator Training.*** Operator training that includes:
   - A review of sweeping program objectives;
   - Factory-provided training of equipment, when possible;
   - Training for new hires and backup operators;
   - Implementation of daily operations and checklist procedures;
   - Troubleshooting minor repairs;
   - A review of daily cleanup requirements; and
   - Preventive equipment maintenance.
4. ***Equipment Maintenance.*** Ongoing equipment maintenance practices that include:
   - Adherence to scheduled maintenance, and
   - A requirement that equipment be taken off-line when repairs are indicated.
5. ***Program Costs.*** Monitoring of program costs that includes:
   - Revenue and expenditure analyses to ensure a balanced fund,
   - A comprehensive cost allocation program,
   - An adequate replacement fund to replace sweeping equipment,

- Labor hours and cost monitoring, and
- Designation of alternative debris disposal method(s).

6. ***Performance Management.*** Performance measures and standards for the operation of the program are maintained that include:
   - Number of scheduled routes completed,
   - Curb miles swept,
   - Debris disposal locations and volume of debris disposed,
   - Catch basin monitoring,
   - Route monitoring (GPS and visual monitoring),
   - Program supervision,
   - Monitoring of interdepartmental coordination with police department for parking enforcement,
   - Monitoring of coordination with refuse hauler for refuse collection,
   - Tracking of customer complaints, requests for service and resolution of requests, and
   - Periodic customer surveys to determine level of customer satisfaction

Performance Measures

Table 9 below shows the list of performance measures used by Riverside compared to the two agencies that responded to the peer survey.

Table 9. Streets Sweeping Performance Measures

City	Performance Measures
Anaheim	1. Number of street miles swept 2. Number of alley miles swept 3. Number of tons of debris removed by street sweepers 4. Number of commercial curb miles swept 5. Number of Anaheim Anytime requests 6. Number of miles swept by night sweepers 7. Number of parking lots swept
Moreno Valley	1. Streets/median (curb miles)
Riverside	1. Number of street miles swept 2. Number of tons of debris removed by street sweepers

Riverside's two performance metrics are probably the most important metrics to be captured, miles swept and tons of debris removed. One additional performance measure that would be important to capture would be cost per mile swept. Such cost information could be presented quarterly, and at least annually.

In addition, Anaheim provides greater granularity of types of surfaces swept (e.g., streets, alleys, parking lots) and miles swept during the evening hours. These types of metrics may not be important for Riverside's operating environment but are indicative of the types of measures that may provide additional value and insights into the performance of the system.

Recommendation 47. Develop and track performance metrics regarding cost per mile for street sweeping services.

Interdepartmental Communication and Collaboration

Communication and collaboration were identified as strong positives in both the staff interviews and focus group. Riverside appears to have a culture that encourages open communication and collaboration among departments. Management staff in other departments such as General Services and Parks, Recreation and Community Services indicated overall positive remarks regarding Public Works' overall responsiveness to issues, concerns, or when working together on cross-departmental projects. Nothing came to our attention to indicate any concerns in this area.

Financial Expenditures Review

Management Partners was requested to perform a review of certain financial expenditures to assess compliance with relevant policies and internal controls in two areas:

1. Review of overtime expenditures over the three-year period of fiscal years 2014-15, 2015-16 and 2016-17; and
2. Specific non-personnel expenditure transactions over the three-year period of fiscal years 2014-15, 2015-16 and 2016-17 for the following:
    a. Professional services contracts, and
    b. Maintenance and service contracts.

Disclaimer Concerning Generally Accepted Government Auditing Standards

The City requested that we perform our review in accordance with generally accepted government auditing standards (GAGAS). The basis for such standards is the 2018 Revision of Government Auditing Standards as issued by the United States Government Accountability Office, collectively referred to as "the Yellow Book." The specific testing requested is consistent with what the Yellow Book refers to as an agreed-upon procedures engagement.

Management Partners, as a management consulting firm, is not a licensed certified public accounting firm and none of the staff on this engagement are licensed CPAs. Accordingly, we are not providing the City with an agreed-upon procedures engagement report as specified in the Yellow Book. Nevertheless, in the conduct of our work we incorporated GAGAS principles in reviewing the City's compliance with its policies and internal controls concerning overtime pay and processing non-personnel expenditure purchases. We did not, as part of our work, assess the City's compliance with provisions of laws, regulations, contracts or grant agreements, nor did we assess any internal control deficiencies that may exist in the City's purchasing or payroll processes. Instead, our work reports upon the sample selected, whether the internal control policies

were followed for those transactions selected, and observations regarding common themes identified in our testing of those transactions.

Overtime Expenditures Review

Overtime Approval Process Overview and Compliance Features

The city uses a centralized payroll system that is administered by the Finance Department. Employees use the system to report hours worked and leaves such as vacation, sick, and jury duty. The memoranda of understanding with the city's various bargaining units indicate the circumstances under which overtime is paid. For the employees eligible for overtime in the department, overtime is paid for hours worked in excess of eight hours per day and 40 hours in a work week. Hours worked includes consideration of sick, vacation and compensatory leaves used.

Supervisors are required to approve any overtime hours worked. This occurs as part of the payroll cycle. The payroll system requires that supervisors approve hours worked, including overtime and leaves, when the pay period is closed and before payroll is processed. Documentation of overtime approval is captured in the payroll system.

Sample Selection, Testing Results and Observations

Management Partners received a listing compensation earned by each employee in FY 2014-15, 2015-16 and 2016-17. From that listing, we selected a sample of six employees from FY 2014-15, 10 employees from FY 2015-16, and 14 employees from FY 2016-17 in order to focus on more recent payroll transactions. For each employee selected, we requested a listing be provided of paychecks for those employees for the year selected that indicated overtime paid in each pay period. From those paycheck listings, we then selected one pay period for each employee and requested a printout of the employee's electronic timecard indicating supervisor approval of the timecard that would include approval of the overtime hours worked.

The results of our testing are presented in Table 10. Out of the 30 transactions tested, all overtime hours paid for the paychecks selected were approved by the employee's supervisor.

Table 10. Overtime Expenditures Sample Selection and Testing – Public Works

Fiscal Year	Employee Selected for Sample	Pay Period End Date	Overtime Hours Worked	Overtime Compensation Paid	Supervisor Approved
2014-15	Employee 1	11/20/14	25.50	$1,020	Y
2014-15	Employee 2	6/4/15	19.50	$669	Y
2014-15	Employee 3	6/8/15	22.00	$1,180	Y
2014-15	Employee 4	11/20/14	19.00	$572	Y
2014-15	Employee 5	1/1/15	38.00	$1,184	Y
2014-15	Employee 6	9/25/14	21.50	$1,270	Y
2015-16	Employee 7	8/13/15	12.00	$264	Y
2015-16	Employee 8	12/3/15	38.00	$1,214	Y
2015-16	Employee 9	10/22/15	9.50	$446	Y
2015-16	Employee 10	2/25/16	31.00	$1,203	Y
2015-16	Employee 11	11/19/15	27.00	$834	Y
2015-16	Employee 12	11/19/15	33.90	$792	Y
2015-16	Employee 13	11/5/15	24.50	$1,455	Y
2015-16	Employee 14	1/14/16	34.50	$1,670	Y
2015-16	Employee 15	2/25/16	30.00	$1,317	Y
2015-16	Employee 16	12/3/15	9.00	$462	Y
2016-17	Employee 17	11/17/16	18.00	$1,444	Y
2016-17	Employee 18	4/6/17	27.40	$1,104	Y
2016-17	Employee 19	2/23/17	10.00	$313	Y
2016-17	Employee 20	11/17/16	13.00	$401	Y
2016-17	Employee 21	5/4/17	28.30	$1,086	Y
2016-17	Employee 22	12/15/16	29.50	$1,669	Y
2016-17	Employee 23	12/1/16	20.00	$815	Y
2016-17	Employee 24	3/9/17	14.00	$324	Y
2016-17	Employee 25	1/12/17	20.00	$807	Y
2016-17	Employee 26	12/29/16	20.60	$830	Y
2016-17	Employee 27	12/15/16	45.50	$2,202	Y
2016-17	Employee 28	3/23/17	13.50	$643	Y
2016-17	Employee 29	12/15/16	29.50	$1,709	Y
2016-17	Employee 30	12/29/16	20.00	$681	Y

Table 11 provides a summary of overtime and regular pay by division for FY 2014-15, 2015-16 and 2016-17. On average, overtime has grown from 5.4% of regular pay in FY 2014-15 to 6.8% in FY 2016-17.

It is not uncommon in our experience for properly staffed maintenance related divisions responsible for 24x7 response to have overtime usage of up to 10%. Public Works operates a 24/7 dispatch control center. Staff that are on call and respond after hours to calls to the City's 311 system or to the 911 system per City policy get overtime. Overtime is also paid for after-hours responses for operational and maintenance problems that require immediate attention to remediate public safety hazards or that could impact environmental/regulatory compliance.

There are some organizational benefits to modest overtime usage as it is more cost effective to the organization than hiring more staff, and desired by at least some employees. However, research conducted in 2008 in a study by the American Journal of Epidemiology indicated that when overtime exceeds more than 10 hours per week there are negative consequences on productivity, morale and workers compensation costs.

Divisions that consistently had overtime in excess of 10% over the three-year period included Traffic Signals, Wastewater SCADA and Solid Waste Collections. The Wastewater Cogeneration/Landfill Division was particularly high, having overtime compensation equal to 44.8% and 54.3% of regular pay in FY 2014-15 and 2015-16, respectively.

Table 11. Overtime and Regular Pay by Division for FY 2014-15, 2015-16 and 2016-17

Division	FY 2014-15			FY 2015-16			FY 2016-17		
	Overtime Pay	Regular Pay	%	Overtime Pay	Regular Pay	%	Overtime Pay	Regular Pay	%
Administration	$ -	$809,363	-%	$ -	$1,066,717	-%	$ -	$1,127,005	-%
Streets	$130,444	$3,070,009	4.2%	$187,977	$3,163,146	5.9%	$179,540	$3,051,298	5.9%
Landscape Maintenance	$28,814	$357,890	8.1%	$29,269	$381,329	7.7%	$29,812	$390,131	7.6%
Storm Drain	$16,252	$220,610	7.4%	$15,976	$222,241	7.2%	$14,617	$149,289	9.8%
Traffic Signals	$52,803	$429,789	12.3%	$50,402	$464,752	10.8%	$54,830	$445,419	12.3%
City Engineer	$43,097	$3,342,521	1.3%	$97,824	$3,081,274	3.2%	$93,195	$3,129,611	3.0%
Traffic Engineer	$771	$400,005	0.2%	$385	$439,035	0.1%	$339	$443,241	0.1%
Wastewater									
• **Administration**	$14,764	$840,497	1.8%	$786	$1,066,401	0.1%	$ -	$1,129,267	-%
• **Collection**	$85,363	$952,782	9.0%	$77,383	$768,262	10.1%	$76,728	$796,206	9.6%
• **Treatment**	$161,898	$2,136,954	7.6%	$220,117	$2,184,886	10.1%	$218,123	$1,988,502	11.0%

Division	FY 2014-15			FY 2015-16			FY 2016-17		
	Overtime Pay	Regular Pay	%	Overtime Pay	Regular Pay	%	Overtime Pay	Regular Pay	%
• Industrial Waste	$1,036	$659,743	0.2%	$1,341	$636,205	0.2%	$3,018	$677,731	0.4%
• Plant Maintenance	$45,031	$873,133	5.2%	$50,233	$935,271	5.4%	$42,427	$989,191	4.3%
• Electric	$48,686	$534,825	9.1%	$57,918	$578,085	10.0%	$67,798	$536,247	12.6%
• SCADA	$22,434	$205,045	10.9%	$24,367	$197,684	12.3%	$32,144	$215,091	14.9%
• Cogeneration/ Landfill	$33,921	$75,736	44.8%	$36,059	$66,370	54.3%	$7,082	$66,433	10.7%
• Others	$16,400	$1,241,023	1.3%	$36,357	$1,226,879	3.0%	$10,588	$1,329,132	0.8%
Solid Waste									
• Administration	$1,750	$330,703	0.5%	$1,980	$315,057	0.6%	$289	$325,823	0.1%
• Collections	$251,944	$1,772,583	14.2%	$331,336	$1,943,271	17.1%	$385,479	$1,856,750	20.8%
• Street Cleaning	$54,483	$660,967	8.2%	$62,604	$720,793	8.7%	$87,491	$683,189	12.8%
NPDES	$ -	$170,681	-%	$ -	$171,716	-%	$ -	$176,395	-%
Parking	$44,204	$542,559	8.1%	$46,353	$543,683	8.5%	$56,299	$599,303	9.4%
TOTALS	**$1,054,095**	**$19,627,418**	**5.4%**	**$1,328,667**	**$20,173,057**	**6.6%**	**$1,359,799**	**$20,105,254**	**6.8%**

The City establishes a threshold of reviewing overtime expenditures for any employee with overtime time compensation as a percentage of regular pay that exceeds 20% in any one year. Table 12 presents a list of employees whose overtime pay as a percentage of regular pay was higher than 20% in any one year from FY 2014-15, 2015-16 and 2016-17. Eleven employees exceeded the 20% threshold in all three years, with an additional fourteen employees that exceeded the threshold in two of the three years. A total of 324 employees in the department received paychecks in FY 2016-17.

Table 12. Employees with Overtime Pay Exceeding 20% of Regular Pay for FY 2014-15, 2015-16 and 2016-17

Employee	Division	FY 2014-15	FY 2015-16	FY 2016-17
Employee 1	City Engineering	3.4%	25.1%	26.4%
Employee 2	City Engineering	9.9%	20.4%	24.4%
Employee 3	Landscape Maintenance	17.2%	26.8%	23.5%
Employee 4	Parking Enforcement	6.4%	19.9%	28.5%
Employee 5	Parking Enforcement	25.1%	31.1%	26.1%
Employee 6	Parking Enforcement	N/A	0.3%	25.9%

Employee	Division	FY 2014-15	FY 2015-16	FY 2016-17
Employee 7	Parking Enforcement	22.3%	10.8%	2.6%
Employee 8	Parking Services	28.3%	25.8%	34.6%
Employee 9	Solid Waste Collection	33.5%	40.3%	59.6%
Employee 10	Solid Waste Collection	11.3%	40.9%	49.3%
Employee 11	Solid Waste Collection	32.4%	34.9%	44.1%
Employee 12	Solid Waste Collection	21.2%	38.5%	43.6%
Employee 13	Solid Waste Collection	13.0%	26.9%	38.6%
Employee 14	Solid Waste Collection	19.9%	25.4%	33.0%
Employee 15	Solid Waste Collection	17.1%	20.2%	27.4%
Employee 16	Solid Waste Collection	19.6%	23.1%	27.1%
Employee 17	Solid Waste Collection	14.8%	19.7%	26.0%
Employee 18	Solid Waste Collection	15.4%	17.3%	24.8%
Employee 19	Solid Waste Collection	14.9%	21.0%	24.1%
Employee 20	Solid Waste Collection	16.6%	24.4%	22.6%
Employee 21	Solid Waste Collection	12.0%	17.7%	22.4%
Employee 22	Solid Waste Collection	12.9%	14.7%	21.1%
Employee 23	Solid Waste Collection	11.0%	15.0%	20.6%
Employee 24	Solid Waste Collection	N/A	20.7%	12.9%
Employee 25	Solid Waste Collection	20.4%	28.5%	9.6%
Employee 26	Solid Waste Collection	19.3%	21.7%	8.7%
Employee 27	Solid Waste Collection	20.5%	12.1%	N/A
Employee 28	Solid Waste Street Cleaning	22.7%	23.0%	37.0%
Employee 29	Solid Waste Street Cleaning	8.7%	12.3%	20.1%
Employee 30	Street Maintenance	10.5%	18.5%	21.3%
Employee 31	Street Maintenance	14.8%	21.8%	19.4%
Employee 32	Street Maintenance	16.6%	23.9%	19.3%
Employee 33	Street Maintenance	20.7%	17.3%	2.0%
Employee 34	Traffic Signal Maintenance	1.0%	11.1%	21.4%
Employee 35	Traffic Signal Maintenance	25.8%	16.1%	14.5%
Employee 36	Wastewater Cogeneration/Landfill	47.8%	54.3%	10.7%
Employee 37	Wastewater Cogeneration/Landfill	27.2%	N/A	N/A
Employee 38	Wastewater Collection	31.7%	24.1%	31.7%
Employee 39	Wastewater Collection	31.6%	32.7%	29.1%
Employee 40	Wastewater Collection	11.9%	24.6%	20.6%
Employee 41	Wastewater Collection	20.8%	23.3%	13.2%

Employee	Division	FY 2014-15	FY 2015-16	FY 2016-17
Employee 42	Wastewater Electric	22.4%	29.2%	29.7%
Employee 43	Wastewater Electric	17.2%	17.0%	23.7%
Employee 44	Wastewater Plant Maintenance	18.4%	19.1%	21.1%
Employee 45	Wastewater Treatment	29.8%	39.9%	46.3%
Employee 46	Wastewater Treatment	28.5%	41.4%	42.4%
Employee 47	Wastewater Treatment	6.0%	11.8%	22.9%
Employee 48	Wastewater Treatment	14.7%	22.5%	22.2%
Employee 49	Wastewater Treatment	16.7%	22.0%	19.1%
Employee 50	Wastewater Treatment	5.5%	23.0%	12.7%
Employee 51	Wastewater Treatment	4.2%	21.1%	10.3%
Employee 52	Wastewater Treatment	23.6%	N/A	N/A

Management reviews overtime trends on a quarterly basis as part of the management system to determine the cause of excessive overtime by a division and for individual employees. In the past three years, the department has had to address staff vacancies and 311 calls for service through the use of overtime. In addition, the department has been challenged with the responsibility of addressing trash collection and clean up of homeless areas in the City every Wednesday.

The excessive overtime being experienced is due in large part to these new requirements for service and staffing shortages. Sustained levels of overtime can lead to potential burnout of individual employees and should be closely monitored, especially when service level increases are expected without additional staffing or funding resources provided.

Non-Personnel Expenditures Review

Purchasing Process Overview and Compliance Features

Each department is required to adhere to the city's purchasing policies in the acquisition of goods and services. During the period in which transactions were selected for testing, the purchasing policies in place were based on City Council Resolution #22576 (Purchasing Resolution). The Resolution specifies terms and conditions under which city departments may acquire goods and services, including provisions related to competitive bidding, emergency procurement, purchase requisition procedures, preferences for local vendors and recycled goods, open market and formal procurement procedures, and professional services selection procedures.

The focus of our testing was to determine if the department adhered to the policies and internal control provisions included in the Purchasing Resolution. Management Partners created a process map to identify the key purchasing policies and procedures impacting our testing. These process maps are included as Attachment D to this report.

One of the key provisions within the Purchasing Resolution is the circumstances under which the department may dispense with competitive bidding requirements in order to obtain the necessary goods and services in a timely manner. These exclusions are contained in Sections 201 and 602 of the Purchasing Resolution. Section 201 exclusions are summarized below:

a) Emergency purchases;
b) Purchases less than $2,500;
c) Sole source;
d) Replacement parts for city vehicles, aviation units and other city equipment;
e) Commodities with no significant price differential;
f) Cooperative purchasing with other agencies;
g) Vendors honoring lowest responsible pricing from prior competitive bids;
h) Federal, state or other public entity pricing contracts;
i) Certain public works contracts as specified in City Charter Section 1109;
j) Exclusions approved by the City Manager when in the city's best interests;
k) Library books, journals, maps, publications and other supplies;
l) Energy and water system related supplies or services for Riverside Public Utilities; or,
m) Design-build public works projects pursuant to City Charter Section 1114.

Section 602 exclusions are related to supplies, equipment and materials for Public Utilities and Public Works. A long list of product types includes such as chemicals, luminaries (lighting), meters and metering devices, pipes and fittings, and road and backfill materials. These exclusions were taken into consideration when testing the transaction samples in this review.

Based upon our review of the Purchasing Resolution, the following procedures were applied to each sampled transaction to determine if documented approvals occurred:

1. Requisition approval – preparation and approval of a purchase requisition by an authorized representative of the department.
2. Competitive bidding – documentation that competitive bidding procedures were followed, where applicable.
3. Section 201/602 exception – documentation that the purchase did not require competitive bidding under Section 201 and/or 602 of the Purchasing Resolution.
4. Bid notice – documentation that indicates that a notice was published to prospective vendors to bid on applicable goods or services.
5. Request for quotation (RFQ) – documentation that an RFQ was issued to vendors to quote on applicable goods or services.
6. Bid/quote evaluation – documentation to indicate that bids/quotes were evaluated and that the vendor selected was the lowest responsible bidder.
7. City Council/City Manager approval – documentation of approval of the appropriate purchasing authority:
    a. City Council – all purchases over $50,000, or
    b. City Manager – all purchases of $50,000 or less.
8. City Attorney contract approval – documentation that the City Attorney or designee approved the contract/agreement as to form where a contract/agreement was issued to the vendor.
9. City Manager contract execution – documentation that the City Manager executed the contract/agreement with the vendor.
10. Invoice approved – documentation that indicates that the invoice was matched to the purchase order and approved by the department for payment.

Sample Selection, Testing Results and Observations

Management Partners received a listing of all non-personnel expenditure transactions for all Public Works divisions to FY 2014-15, 2015-16 and 2016-17. From this listing we selected a random sample to test thirty transactions during those fiscal years, selecting 10 transactions per year to review compliance with the Purchasing Resolution.

The results of our testing are presented in Table 13. In all instances, we received sufficient documentation to indicate that the purchasing requirements were followed for the transactions selected for testing.

Table 13. Non-Personnel Expenditures Sample Selection and Testing for Public Works

Control Number	Check Date	Vendor	Amount	1 – Req. Approval	2 – Competitive Bidding	3 – Section 201/602 Exception	4 – Bid Notice	5 – RFQ	6 – Bid Evaluation	7a – Council Approval	7b – CM Approval	8 – City Attorney Contract Approval	9 – CM Contract Execution	10 – Invoice Paid
PW01	8/15/14	Edward S. Babcock & Sons Inc	$78.00	Y	Y	N/A	N/A	Y	Y	N/A	Y	N/A	N/A	Y
PW02	8/29/14	Avenue Electric Inc	$1,007.00	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW03	8/29/14	Inland Empire Landscape Inc	$1,989.00	Y	Y	N/A	N/A	Y	Y	N/A	Y	N/A	N/A	Y
PW04	9/19/14	Vulcan Materials Company	$1,689.17	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW05	11/14/14	Edward S. Babcock & Sons Inc	$84.00	Y	Y	N/A	N/A	Y	Y	N/A	Y	N/A	N/A	Y
PW06	1/2/15	Trimming Land Co Inc	$14,834.48	Y	Y	N/A	Y	N/A	Y	Y	Y	Y	Y	Y
PW07	3/6/15	Vulcan Materials Company	$914.11	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW08	4/17/15	Robertson Ready Mix	$309.76	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW09	5/15/15	Guardsmark Inc	$329.14	Y	N/A	Y	N/A	N/A	N/A	Y	Y	Y	Y	Y
PW10	5/22/15	Valleycrest	$54,046.45	Y	Y	N/A	Y	N/A	Y	Y	Y	Y	Y	Y
PW11	7/17/15	Traffic Management Inc	$46.44	Y	Y	N/A	N/A	Y	Y	N/A	Y	N/A	N/A	Y
PW12	8/21/15	Edward S. Babcock & Sons Inc	$6.00	Y	Y	N/A	N/A	Y	Y	N/A	Y	N/A	N/A	Y
PW13	8/28/15	Prof Svcs Regulatory Comp	$121.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW14	9/4/15	Vulcan Materials Company	$553.08	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW15	9/4/15	Robertson Ready Mix	$693.06	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW16	10/9/15	Crafco Inc	$1,914.84	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW17	11/13/15	Valleycrest	$13,173.00	Y	Y	N/A	Y	N/A	Y	Y	Y	Y	Y	Y
PW18	12/11/15	Test America Laboratories Inc	$82.00	Y	Y	N/A	N/A	Y	Y	N/A	Y	N/A	N/A	Y
PW19	12/11/15	Guardsmark Inc	$0.50	Y	N/A	Y	N/A	N/A	N/A	Y	Y	Y	Y	Y
PW20	5/6/16	Plumbers Depot Inc	$660.93	Y	N/A	N/A	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW21	8/5/16	Vulcan Materials Company	$421.72	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW22	9/2/16	Ergon Asphalt & Emulsions Inc	$14,586.63	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW23	9/16/16	Universal Protection Services	$458.92	Y	Y	N/A	Y	N/A	Y	Y	Y	Y	Y	Y
PW24	9/30/16	Basic Backflow	$170.04	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y

Control Number	Check Date	Vendor	Amount	1 – Req. Approval	2 – Competitive Bidding	3 – Section 201/602 Exception	4 – Bid Notice	5 – RFQ	6 – Bid Evaluation	7a – Council Approval	7b – CM Approval	8 – City Attorney Contract Approval	9 – CM Contract Execution	10 – Invoice Paid
PW25	9/30/16	Adams Landscaping Inc	$385.86	N	Y	N/A	Y	N/A	Y	Y	Y	Y	Y	Y
PW26	12/30/16	Burke Williams & Sorensen LLP	$258,838.93	Y	N/A	N/A	N/A	N/A	N/A	Y	Y	Y	Y	Y
PW27	1/6/17	Safety-Kleen Systems Inc	$598.20	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW28	1/20/17	Counts Unlimited Inc	$2,255.00	Y	N/A	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y
PW29	2/10/17	Enerspect Medical Solutions LLC	$266.95	Y	Y	N/A	N/A	Y	Y	N/A	Y	N/A	N/A	Y
PW30	5/12/17	Universal Protection Services	$458.92	Y	Y	N/A	Y	N/A	Y	Y	Y	Y	Y	Y

Legend: Y=Yes; N=No; N/A=Not Applicable

Conclusion

The Public Works Department is providing the levels of service expected by the community and the City Council. There are no significant signs of infrastructure decay that are creating health and safety concerns in the community. However, there are several areas where the department can become more efficient in its service delivery to the community.

- Opportunities exist to reduce costs related to solid waste collection in residential neighborhoods and street sweeping by privatizing those services with contractors.
- The City needs to focus on its waste diversion efforts by devoting greater resources and changes in service delivery methods.
- The department needs to enhance collection of performance measures that would provide information to the director, the department's leadership team, and staff to assess efficiency and effectiveness and overall performance.

Finally, the City Council will need to make critical decisions about pavement management standards and funding for wastewater services. They will need to establish fees and charges to ensure adequate resources to fund capital improvement projects necessary to keep the collection systems and treatment plant operating effectively.

Attachment A – List of Recommendations

Recommendation 1. Review personnel policies, practices, and procedures with Human Resources Department personnel to reduce the time to fill vacant positions.

Recommendation 2. Request that the City's Human Resources Department develop a formal succession plan and career ladders for the Public Works Department.

Recommendation 3. Hold policy discussions with upper management to determine guidelines for contracting solid waste services.

Recommendation 4. Issue a request for proposals (RFP) and seek competitive proposals for solid waste collection and recycling services beginning July 2020.

Recommendation 5. Transition to a "pay-as-you-throw" program where residents pay more for larger garbage containers.

Recommendation 6. Review the solid waste collection fee structure to ensure revenue generated is properly allocated to eligible services.

Recommendation 7. Conduct a fee study to identify revenue required over the next five years and revise rates accordingly.

Recommendation 8. Identify new revenue sources where possible to support waste reduction, waste diversion, and cleanup efforts.

Recommendation 9. Specify diversion performance goals in future requests for proposals and/or contract amendments for all solid waste contracts.

Recommendation 10. Transition to a comprehensive and vertically integrated waste management contract that includes collection, sorting, and marketing.

Recommendation 11. Amend the current solid waste contracts to incorporate additional diversion enhancement concepts as contractual commitments and develop a plan to implement additional diversion enhancement programs.

Recommendation 12. Develop and adopt a zero-waste plan that will achieve a minimum 75% diversion by 2020.

Recommendation 13. Implement economic development strategies that encourage creation of local facilities for processing and/or using recyclable materials and organics.

Recommendation 14. Develop and implement a comprehensive solid waste outreach program.

Recommendation 15. Update the Solid Waste and Recyclable Material section (Chapter 6.04) of the City's Municipal Code.

Recommendation 16. Develop and implement a multi-family diversion strategy.

Recommendation 17. Meet with the MRF contractor to identify opportunities, challenges, and a cost-effective strategy to implement sorting of the garbage stream.

Recommendation 18. Formalize the vehicle replacement policy and schedule the replacement of solid waste collection trucks consistent with industry best practices

Recommendation 19. Standardize the manufacturer of the solid waste fleet and implement a phased approach to convert all vehicles to that brand.

Recommendation 20. Eliminate the incentive program in the new MOU and realign the route structure to provide better alignment with the work hours being paid for by the City during the upcoming labor negotiations.

Recommendation 21. Equip all refuse vehicles with GPS technology to ensure efficient equipment utilization and allow for tracking of routes through GPS management software.

Recommendation 22. Develop performance standards and measurements focused on solid waste diversion efforts, collecting performance data and preparing quarterly and annual reports on meeting the standards.

Recommendation 23. Implement the recommendations in the Wastewater Master Plan and rate development study work to establish a sewer service fee that supports the Sewer Enterprise Fund's operations, maintenance and capital improvement funding.

Recommendation 24. Consult with the Human Resources Department to review recruitment processes to streamline the time it takes to fill vacant positions.

Recommendation 25. Perform a market analysis of the compensation for critical job classifications at the plant and adjust compensation sufficient to recruit and retain qualified staff.

Recommendation 26. Propose changes to the Riverside Municipal Code and the sewer lateral program to improve resource efficiency, accelerate lateral repairs, and reduce City liability costs.

Recommendation 27. Develop a communications plan to explain the City's policy for responses to sewer laterals and train staff to implement it.

Recommendation 28. Form a cross-functional team consisting of key staff in the energy, water, wastewater, and waste management units to explore, develop, and implement synergistic environmental programs.

Recommendation 29. Incorporate a comprehensive strategic plan into the 2016 Wastewater Master Plan to maximize the production and distribution of recycled water for both non-potable and potable uses in coordination with the Public Utilities Department Water Division.

Recommendation 30. Develop and implement a Wastewater Resources Recovery Plan to achieve the goal of receiving organic material, increasing bio-methane production, and maximizing energy production.

Recommendation 31. Conduct an analysis to determine the highest and best use of the biosolids generated at the RWQCP.

Recommendation 32. Prioritize implementation of salinity measures in the 2016 Wastewater Master Plan and rate development study, including necessary funding through water and wastewater rates.

Recommendation 33. Develop meaningful performance measures and standards for wastewater collection and treatment.

Recommendation 34. Collect performance data and report compliance with and trends on a quarterly basis, making the reports available to City Council, the city manager, department staff and the public.

Recommendation 35. Conduct a cost-benefit analysis to assess the merits of using bond financing for street rehabilitation projects, securitizing those bonds with future gas tax revenues.

Recommendation 36. Consider reallocating additional Measure Z monies to pay for needed street maintenance.

Recommendation 37. Establish an appropriate long-term PCI standard for maintaining the City's roadway network that would achieve a PCI of not less than 65.

Recommendation 38. Develop a funding and implementation strategy to achieve the PCI standard over a ten-year period.

Recommendation 39. Establish a policy regarding pot-hole repair timeframes.

Recommendation 40. Review street maintenance budgetary resources to identify funding options to hire contractors for pothole repairs in accordance with the pothole repair standards.

Recommendation 41. Establish and fund a vehicle/ equipment replacement fund for street maintenance equipment.

Recommendation 42. Complete the implementation of GIS, integrating the pavement condition data from Lucity, designating employees with responsibility for its continued updating and use.

Recommendation 43. Evaluate possible revisions to the NPDES permit that may allow for less frequent street sweeping within the context of the other permit requirements.

Recommendation 44. Develop and issue a request for proposals for street sweeping services.

Recommendation 45. Arrange for contract management training for the individuals who will be responsible for managing the sweeping contract.

Recommendation 46. Establish guidelines for consistent contract management practices, regular reporting systems, and clear communications.

Recommendation 47. Develop and track performance metrics regarding cost per mile for street sweeping services.

Attachment B – Employee Survey

As part of the performance assessment and financial expenditures review of the Public Works Department, Management Partners prepared an employee survey to gather feedback on the topics of communication; service delivery and customer service; performance measurement; strategic and business planning; technology; staffing and workload; talent management; and organizational culture. This document summarizes the results of that survey. A total of 209 employees responded between April 5 and April 16, 2018.

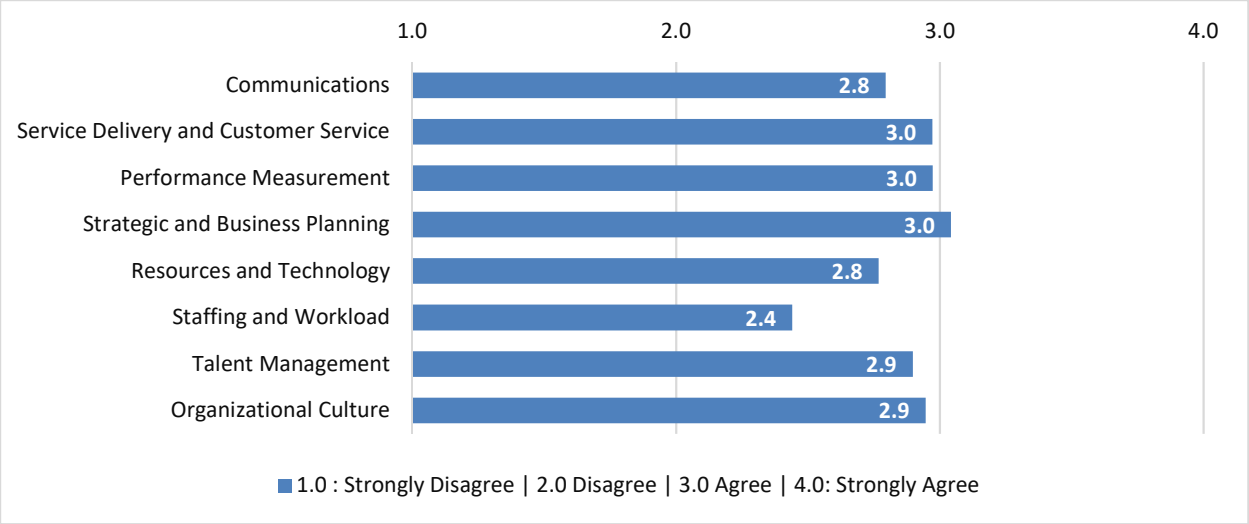
For most of the survey, respondents were provided with a statement and asked to indicate whether they strongly agree, agree, disagree, strongly disagree or don't know.

Summary of Responses

- Overall, survey respondents indicated satisfaction in seven of the eight subject areas surveyed.
- Although respondents indicated they receive training and professional development opportunities and performance evaluations are timely, there is concern about workload, recruitment of staff, and readiness for future retirements and employee turnover.
- Respondents indicate they believe the department has a strong customer service orientation and there is a clear understanding of how individual jobs fulfill the mission of the department.
- Respondents from the Engineering Division and Urban Forest Management Division consistently indicated the most favorable responses. Less favorable responses varied based on the subject area.

Management Partners calculated a composite score to assess employee satisfaction in the eight areas covered by the survey (Figure 8) as well as by division for each area. The composite score is the average (arithmetic mean) for all responses in a given area. For example, in the performance area of communication survey respondents indicated if they strongly agree, agree, disagree or strongly disagree for six different statements. The composite score averages the responses across all statements to create a single score for that topic. The survey's four-point scale has 2.5 at the midpoint. Scores higher than 2.5 are above the average and scores lower than 2.5 are below the average.

Figure 8. Overall Employee Survey Results by Each Section (Composite Score)

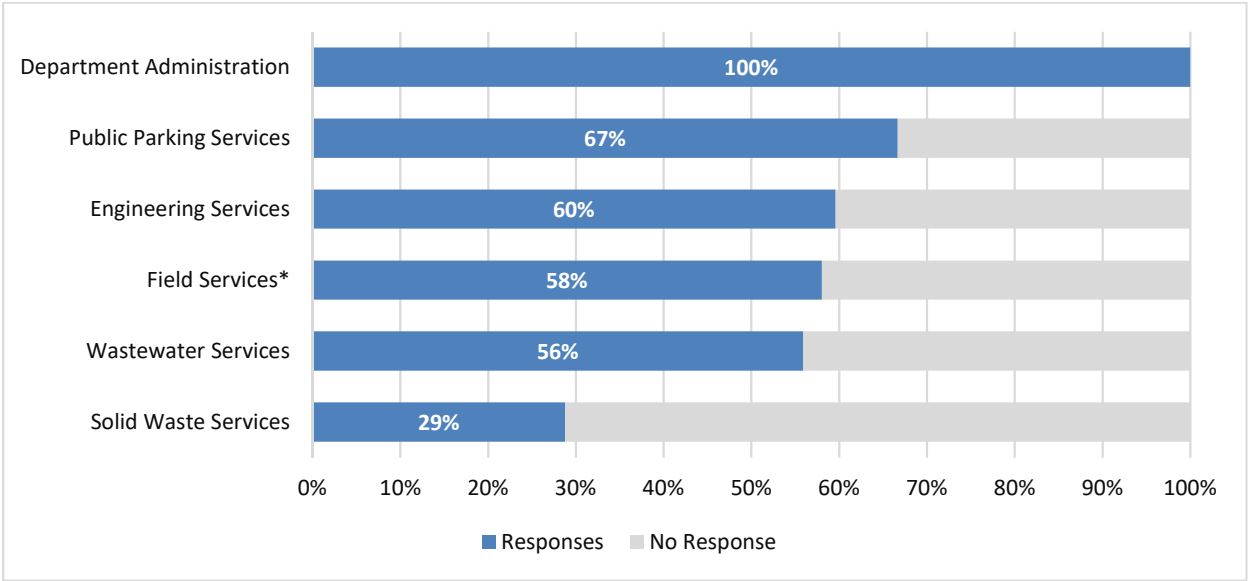


Respondent Data

The survey requested that all respondents identify their division, their position, and the number of years they have been with the department. Figure 9 and Tables 14, 15 and 16 show the results of these questions. Some highlights include:

- The survey collected responses from 209 employees (approximately 62% of the department's budgeted positions).
- Most divisions were well represented in the survey, with the exception of solid waste.
- A total of 94 survey respondents (45%) have been with the department over ten years.

Figure 9. Percent of Full-time Budgeted Positions that Responded



Note: Vacant positions have not been excluded from the calculation; therefore, the data may underreport the percent of employees from each division who responded to the survey.
**The FY 2017-18 adopted budget includes a division called "Field Services." In the figure above, Field Services includes the results for those employees who selected "street/storm drain maintenance" and "urban forest management" in the survey. It does not include any employees who identified their division as "other."*

Table 14. What is your current division?

Answer Choices	Response
Department Administration	9 (4%)
Engineering Services	31 (15%)
Solid Waste Services	17 (8%)
Wastewater Services	66 (32%)
Public Parking Services	12 (6%)
Street/Storm Drain Maintenance	42 (20%)
Urban Forest Management	5 (2%)
Other*	27 (13%)
Total Answered	**209**

**Most respondents who selected "other" identified one of the following divisions: land development, traffic, environmental compliance, signal maintenance, survey, etc.*

Table 15. Which of the following best describes your position?

Answer Choices	Response
Management	37 (18%)
Supervisory	33 (16%)
Non-Supervisory	112 (54%)
Other*	27 (13%)
Total Answered	**209**

**Most respondents who selected "other" are non-supervisory employees (technicians, inspectors, maintenance workers, etc.)*

Table 16. How long have you worked for the Riverside Public Works Department?

Answer Choices	Response
Less than 1 year	14 (7%)
1 to 5 years	51 (24%)
6 to 10 years	42 (20%)
11 to 15 years	51 (24%)
Over 15 years	43 (21%)
Prefer not to answer	8 (4%)
Total Answered	**209**

Employee Survey Results

The employee survey touched on eight topic areas. The results are presented in the following tables. As mentioned previously, the eight topics covered, include:

1. Communication
2. Service delivery and customer service
3. Performance measurement
4. Strategic and business planning
5. Resources and technology
6. Staffing and workload
7. Talent management
8. Organizational culture

Communication

Survey respondents were asked to rate how strongly they agree with six statements on the topic of communication. Overall a majority of respondents agree or strongly agree with all communication statements as shown in Table 17. However, 10% of respondents strongly disagree with the statements that communication is good among divisions and with other departments.

Table 17. Communication

Answer Choices	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
	Strongly Agree/Agree		Strongly Disagree/Disagree		
1. Communication within my division is good.	**41 (21%)**	**104 (53%)**	39 (20%)	12 (6%)	2
	145 (74%)		51 (26%)		
2. Important information about my division is provided to me in a timely manner.	**39 (20%)**	**104 (53%)**	42 (21%)	11 (6%)	2
	143 (73%)		53 (27%)		
3. Communication from department leaders to staff is good.	**44 (23%)**	**96 (49%)**	40 (21%)	14 (7%)	4
	140 (72%)		54 (28%)		
4. Communication among divisions is good.	**23 (12%)**	**105 (56%)**	40 (22%)	18 (10%)	12
	128 (69%)		58 (31%)		
5. Communication between my department and other departments is good.	**21 (11%)**	**101 (53%)**	49 (26%)	18 (10%)	9
	122 (65%)		67 (35%)		
6. Information provided on our website meets community needs.	**18 (12%)**	**109 (71%)**	17 (11%)	10 (6%)	44
	127 (82%)		27 (18%)		

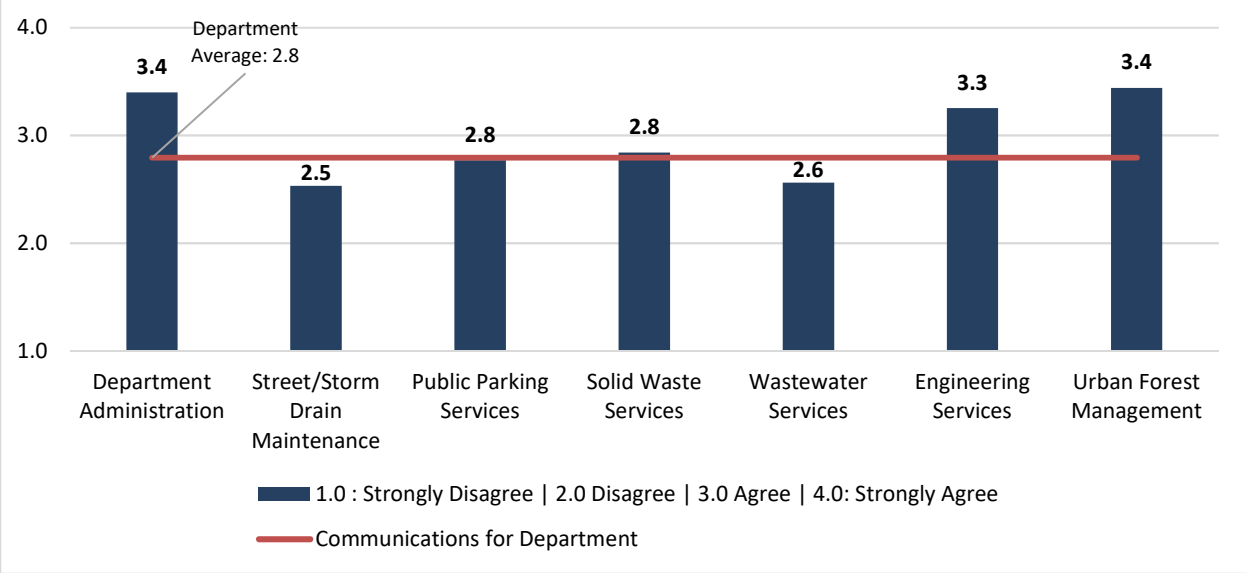
Survey respondents were invited to provide comments on why they *disagreed* or *strongly disagreed* with the above statements. Major themes include:

- Communication from management is limited, inconsistent, and not timely.
- Divisions work in silos and do not always notify other units about important actions or decisions (e.g., curb painting, street sweeper scheduling).

- Training opportunities are not made available to line staff.
- The website needs improvement (e.g., search function, design, structure, and content).
- Events/trainings are scheduled with short notice; lack of transparency about scheduling.
- Some department managers do not speak to employees professionally.
- Supervisors and managers are not available for questions and clarifications.

As shown in Figure 10 below, the Administration Division and Urban Forestry Management Division had the highest composite score for communication with an average rating of 3.4. The Street/Storm Drain Maintenance Division received the lowest composite rating (2.5). The statement receiving the highest overall percentage of agreement was, "Information provided on the website meets community needs".

Figure 10. Communication Composite Score by Division



Service Delivery and Customer Service

Table 18 shows the results of respondents' ratings with seven statements on the topic of service delivery and customer service. Overall a majority of respondents agree or strongly agree with all service delivery and customer service statements. Over 90% of respondents agree or strongly agree that their division provides prompt customer service and has a strong customer focus. Only 63% agree or strongly agree with the statement, "Policies are applied consistently to all employees in the department," suggesting opportunity for improvement.

Table 18. Service Delivery and Customer Service

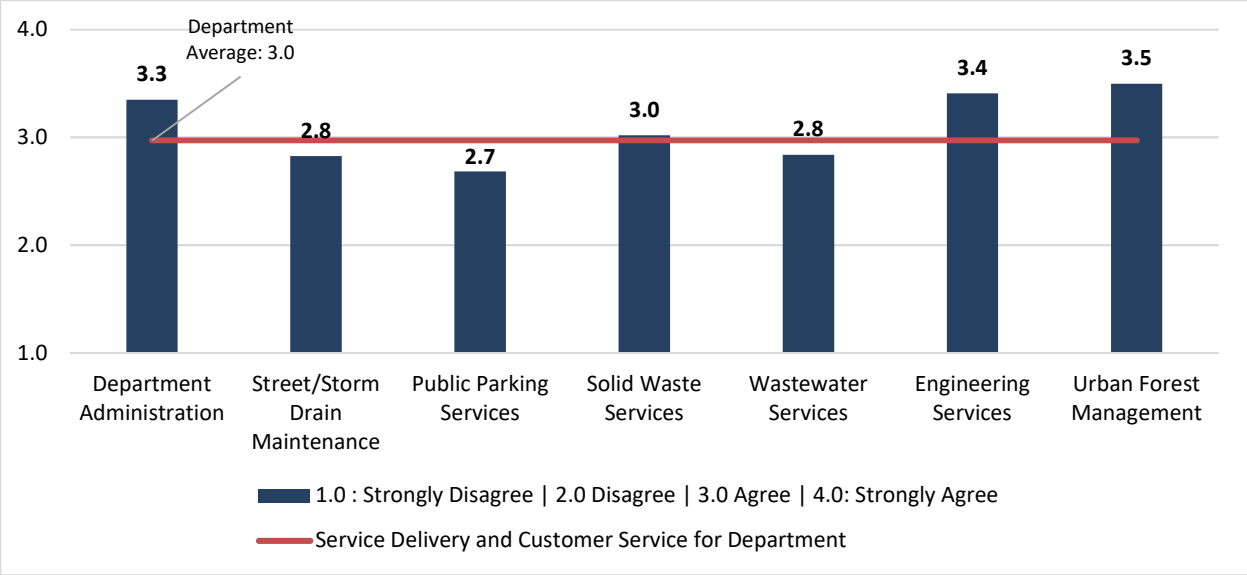
Answer Choices	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
	Strongly Agree/Agree		Strongly Disagree/Disagree		
1. The department is well organized to deliver the services we provide.	**29 (16%)**	**120 (64%)**	29 (16%)	9 (5%)	6
	149 (80%)		38 (20%)		
2. My division provides prompt customer service.	**70 (39%)**	**98 (54%)**	8 (4%)	5 (3%)	12
	168 (93%)		13 (7%)		
3. My division has a strong customer service focus.	**72 (40%)**	**91 (50%)**	15 (8%)	4 (2%)	11
	163 (90%)		19 (10%)		
4. I am allowed to make decisions to solve problems for customers.	**55 (32%)**	**90 (52%)**	24 (14%)	5 (3%)	19
	145 (83%)		29 (17%)		
5. We have an established process to receive feedback from our customers.	**27 (19%)**	**84 (60%)**	26 (18%)	4 (3%)	52
	111 (79%)		30 (21%)		
6. Policies are applied consistently to all employees in the organization.	**30 (16%)**	**87 (47%)**	40 (22%)	28 (15%)	8
	117 (63%)		68 (37%)		
7. Department policies and procedures are clear.	**33 (17%)**	**106 (56%)**	31 (16%)	20 (11%)	3
	139 (73%)		51 (27%)		

Survey respondents were invited to provide comments on why they *disagreed* or *strongly disagreed* with the above statements. Major themes include:

- Policies and procedures are not clear to staff before issues occur.
- Policies and procedures are not applied and enforced consistently across the organization (individuals, divisions, management levels), especially those pertaining to safety.
- Supervisors have too much discretion when implementing policies.
- Accountability and disciplinary actions are not consistently enforced throughout the organization.
- The organization is understaffed.
- The organization's communication and coordination need improvement.
- Consistent customer service is not always a top priority.

The Urban Forest Management Division and Engineering Division had the highest composite scores with an average rating of 3.5 and 3.4 respectively, as shown in Figure 11. The Public Parking Services Division had the lowest composite score with an average rating of 2.7.

Figure 11. Service Delivery and Customer Service Composite Score by Division



Performance Measurement

Survey respondents were asked to rate how strongly they agree with four statements on the topic of performance measurement. As Table 19 shows, overall, a majority of respondents agree or strongly agree with statements in this section. Eighty-seven percent of respondents report they are collecting data to measure performance and 92% report they understand the value of performance measurement.

Table 19. Performance Measurement

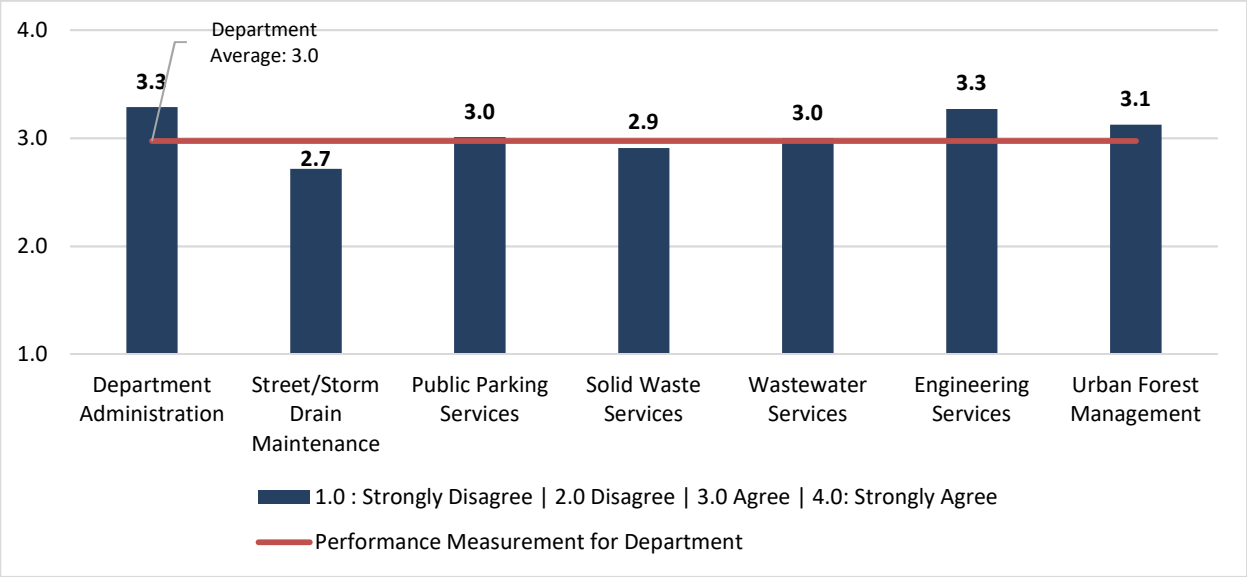
Answer Choices	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
	Strongly Agree/Agree		Strongly Disagree/Disagree		
1. Department staff are collecting data to measure performance.	**17 (11%)**	**114 (75%)**	14 (9%)	6 (4%)	40
	131 (87%)		20 (13%)		
2. Department staff are collecting the right data to measure performance.	**15 (10%)**	**99 (67%)**	24 (16%)	10 (7%)	43
	114 (77%)		34 (23%)		
3. Department managers use data to make decisions.	**21 (14%)**	**96 (66%)**	22 (15%)	6 (4%)	46
	117 (81%)		28 (19%)		
4. I understand the value of performance measurement.	**48 (26%)**	**121 (66%)**	13 (7%)	1 (1%)	8
	169 (92%)		14 (8%)		

Survey respondents were invited to provide comments on why they *disagreed* or *strongly disagreed* with the above statements. Major themes include:

- It is not clear if operational data collected are appropriate for measuring performance.
- It is not clear if data collected are used for managing operations.
- The performance measures and expectations are not clear for staff.

As Figure 12 shows, the Administration Division and Engineering Division had the highest composite score with an average rating of 3.3. The Street/Storm Drain Maintenance Division had the lowest composite score with an average rating of 2.7.

Figure 12. Performance Measurement Composite Score by Division



Strategic and Business Planning

Survey respondents were asked to rate how strongly they agree with six statements on the topic of strategic and business planning and overall a majority of respondents agree or strongly agree with all of the statements, as shown in Table 20. Respondents indicate clarity on how their job and department contribute to the larger goals of the organization and how to be successful, with agreement ratings above 90%.

Table 20. Strategic and Business Planning

Answer Choices	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
	Strongly Agree/Agree		Strongly Disagree/Disagree		
1. I have a clear understanding of how my job contributes to fulfilling the mission of the department.	**84 (45%)**	**93 (49%)**	9 (5%)	2 (1%)	1
	177 (94%)		11 (6%)		
2. I have a clear understanding of how my department contributes to fulfilling the City's strategic plan.	**62 (36%)**	**96 (55%)**	14 (8%)	2 (1%)	15
	158 (91%)		16 (9%)		

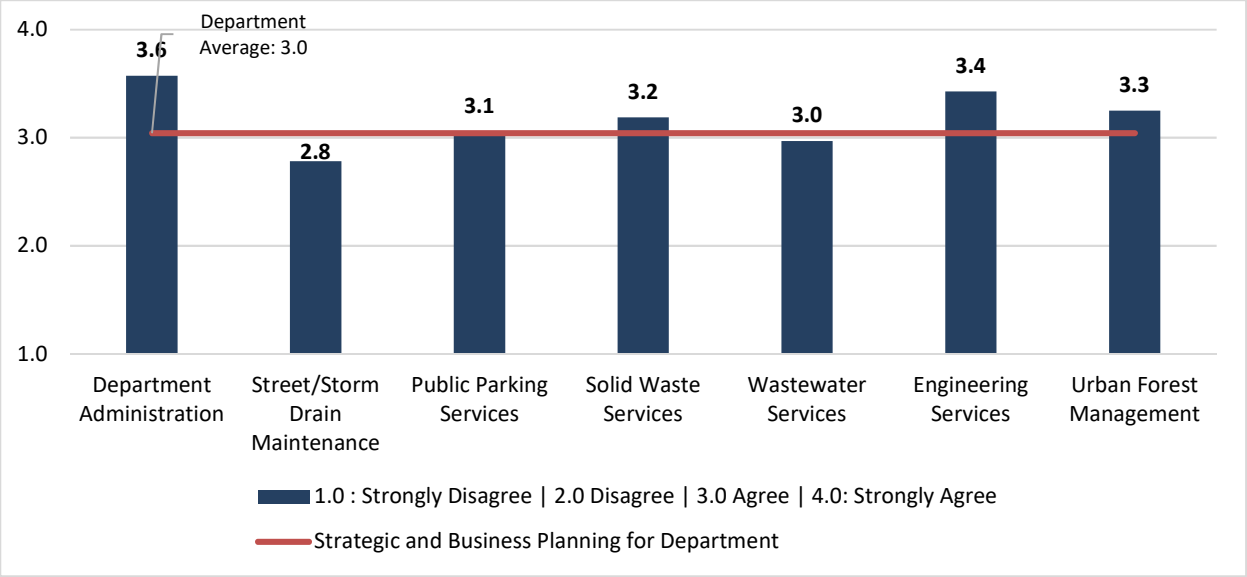
Answer Choices	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
	Strongly Agree/Agree		Strongly Disagree/Disagree		
3. Decisions in our department are made in a timely manner.	**30 (17%)**	**98 (55%)**	39 (22%)	11 (6%)	11
	128 (72%)		50 (28%)		
4. I understand the department's priorities.	**49 (27%)**	**105 (58%)**	21 (12%)	6 (3%)	8
	154 (85%)		27 (15%)		
5. Our director communicates a clear vision of what this department needs to succeed.	**36 (22%)**	**82 (49%)**	33 (20%)	15 (9%)	23
	118 (71%)		48 (29%)		
6. Our director emphasizes the importance of following department policies and procedures.	**41 (24%)**	**94 (55%)**	25 (15%)	12 (7%)	17
	135 (78%)		37 (22%)		

Survey respondents were invited to provide comments on why they *disagreed* or *strongly disagreed* with the above statements. Major themes include:

- There is little interaction between line staff and the director.
- Department vision and priorities are unclear to staff.
- Policies and procedures are outdated and uncertain/ambiguous. They are referenced most commonly when a situation occurs.
- Decisions made are more reactive than proactive.
- Untimely decisions negatively impact performance.
- Decisions made by managers/leaders of the organization do not effectively consider or rely upon staff expertise.

The Administration Division had the highest composite score with an average rating of 3.6 with the Engineering Division also high with a rating of 3.4, as shown in Figure 13. The Street/Storm Drain Maintenance Division had the lowest composite score with an average rating of 2.8.

Figure 13. Strategic and Business Planning Composite Score by Division



Resources and Technology

Survey respondents were asked to rate how strongly they agree with five statements on the topic of resources and technology, as shown in Table 21. Overall a majority of respondents agree or strongly agree with all of the related statements.

Table 21. Resources and Technology

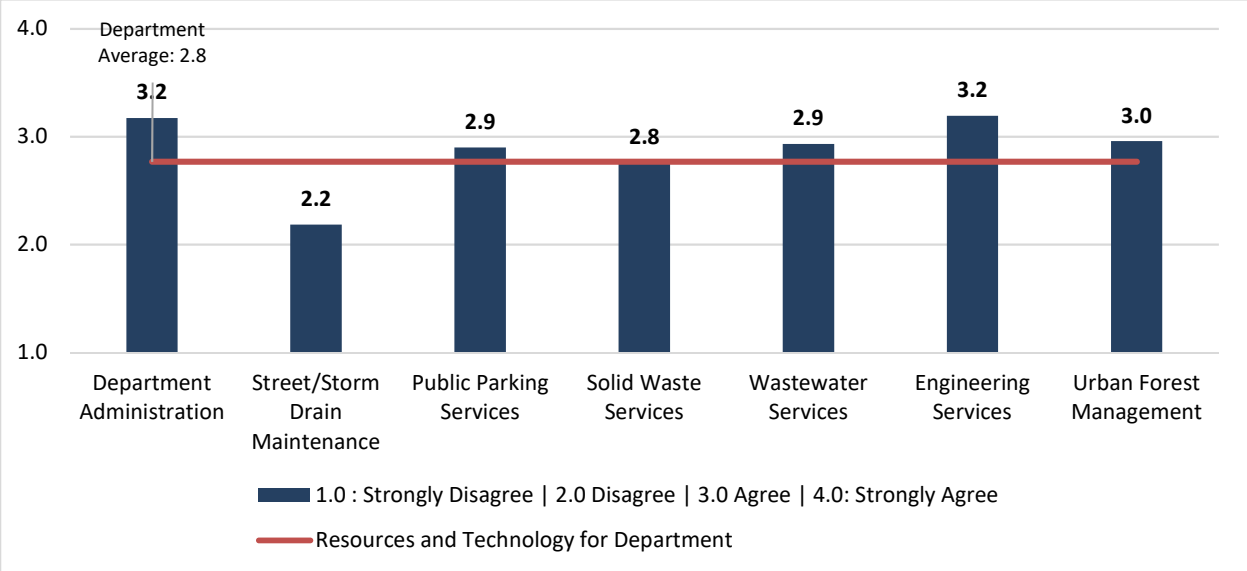
Answer Choices	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
	Strongly Agree/Agree		Strongly Disagree/Disagree		
1. I have the resources (e.g., materials/ equipment) I need to do my job.	**34 (18%)**	**108 (58%)**	25 (13%)	20 (11%)	1
	142 (76%)		45 (24%)		
2. The resources (e.g., materials/ equipment) available allow me to do my job efficiently.	**33 (18%)**	**103 (55%)**	35 (19%)	16 (9%)	1
	136 (73%)		51 (27%)		
3. I have the technology I need to do my job efficiently.	**25 (13%)**	**115 (61%)**	36 (19%)	11 (6%)	1
	140 (75%)		47 (25%)		
4. The department uses technology effectively.	**19 (10%)**	**109 (60%)**	41 (23%)	12 (7%)	7
	128 (71%)		53 (29%)		
5. Technology I use is up to date.	**18 (10%)**	**102 (56%)**	42 (23%)	21 (11%)	5
	120 (66%)		63 (34%)		

Survey respondents were invited to provide comments on why they *disagreed* or *strongly disagreed* with the above statements. Some major themes include:

- Technology is outdated and unreliable (and field technology is lacking). The hardware does not keep up with the times and new software is not compatible with old hardware.
- Software is underutilized, partly due to insufficient training.
- Equipment is not reliable due to old age.
- Technology help desk support is not timely.
- Department uses manual processes.
- Outdated/underutilized or nonexistent hardware and software includes department computers, vehicle computers, ticket writers, GIS (CADME), radios, laptops, work order system (CMMS), project management program, SCADA, control room, Civ3D, future permit software, etc.
- Needed safety equipment includes safety helmets, dust masks, gloves and pepper spray.

As Figure 14 shows, the Administration Division and Engineering Services Division had the highest composite scores with an average rating of 3.2. The Streets/Storm Drain Maintenance Division had the lowest composite score with an average rating of 2.2. The below average rating in the Streets/Storm Drain Maintenance Division suggests a need to review the availability and usefulness of resources and technology in that division.

Figure 14. Resources and Technology Composite Score by Division



Staffing and Workload

Survey respondents were asked to rate how strongly they agree with four statements on the topic of staffing and workload. As Table 22 shows, respondents report that they are able to complete their work within the expected timeframe. However, 68% of respondents disagree or strongly disagree with the statement, "Staffing in my department is appropriate for our workload" and over half disagree or strongly disagree that the department does a good job of recruiting staff.

Table 22. Staffing and Workload

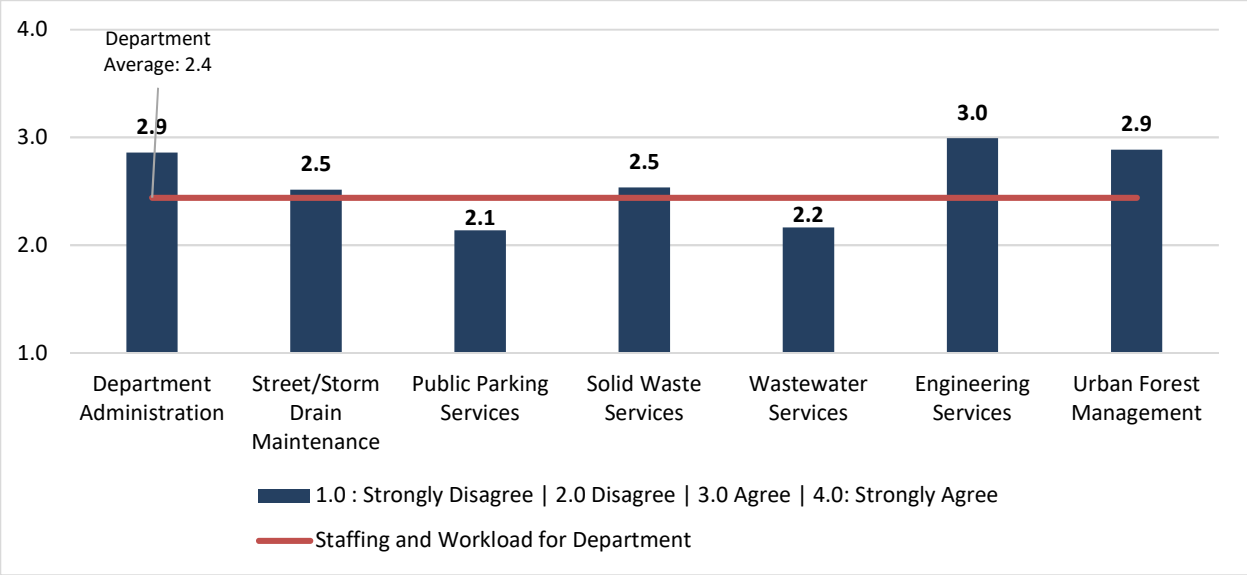
Answer Choices	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
	Strongly Agree/Agree		Strongly Disagree/Disagree		
1. Our department does a good job recruiting staff.	8 (5%)	71 (44%)	**52 (32%)**	**31 (19%)**	24
	79 (49%)		**83 (51%)**		
2. Our department does a good job retaining staff.	**12 (7%)**	**75 (45%)**	49 (29%)	32 (19%)	18
	87 (52%)		81 (48%)		
3. Staffing in my department is appropriate for our workload.	11 (6%)	46 (26%)	**70 (39%)**	**52 (29%)**	7
	57 (32%)		**122 (68%)**		
4. I can complete my work within the expected timeframe.	**24 (13%)**	**121 (68%)**	20 (11%)	14 (8%)	7
	145 (81%)		34 (19%)		

Survey respondents were invited to provide comments on why they *disagreed* or *strongly disagreed* with the above statements. Major themes include:

- There is not enough staff across the organization and workload is increasing.
- The effect of a lean operation is exasperating when there are unforeseen scheduling issues with staff.
- Vacancies take a long time to fill.
- Recruiting employees with proper qualifications is challenging.
- There is high employee turnover across the department due to lower wages compared to competing agencies.
- The department is used as a training ground for other departments.
- Some staff are not treated with respect within the organization.
- There are not enough promotional opportunities within the organization for qualified employees.
- There is a disconnect between Human Resources and department staff on hiring priorities and qualifications.

As Figure 15 shows, the Engineering Services Division had the highest composite score with an average rating of 3.0. The Public Parking Services and Wastewater Services Divisions had the lowest composite scores with an average rating of 2.1 and 2.2, respectively. These are well below the average.

Figure 15. Staffing and Workload Composite Score by Division



Talent Management

Survey respondents were asked to rate how strongly they agree with five statements on the topic of talent management. Overall a majority of respondents agree or strongly agree with most statements. Based on the results, training and development is valued by the department. However, only 35% of respondents agree or strongly agree with the statement, "My department is prepared for future retirements and employee turnover," suggesting the need for additional succession planning. This is presented in Table 23 below.

Table 23. Talent Management

Answer Choices	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
	Strongly Agree/Agree		Strongly Disagree/Disagree		
1. I have the training I need to do my job effectively.	**45 (25%)**	**115 (64%)**	15 (8%)	5 (3%)	6
	160 (89%)		20 (11%)		
2. The department provides effective safety training.	**40 (22%)**	**112 (63%)**	19 (11%)	7 (4%)	8
	152 (85%)		26 (15%)		
3. My supervisor allows me to take advantage of professional development opportunities.	**42 (24%)**	**103 (58%)**	23 (13%)	9 (5%)	9
	145 (82%)		32 (18%)		
4. My department is prepared for future retirements and employee turnover.	8 (5%)	45 (29%)	**67 (44%)**	**33 (22%)**	33
	53 (35%)		**100 (65%)**		

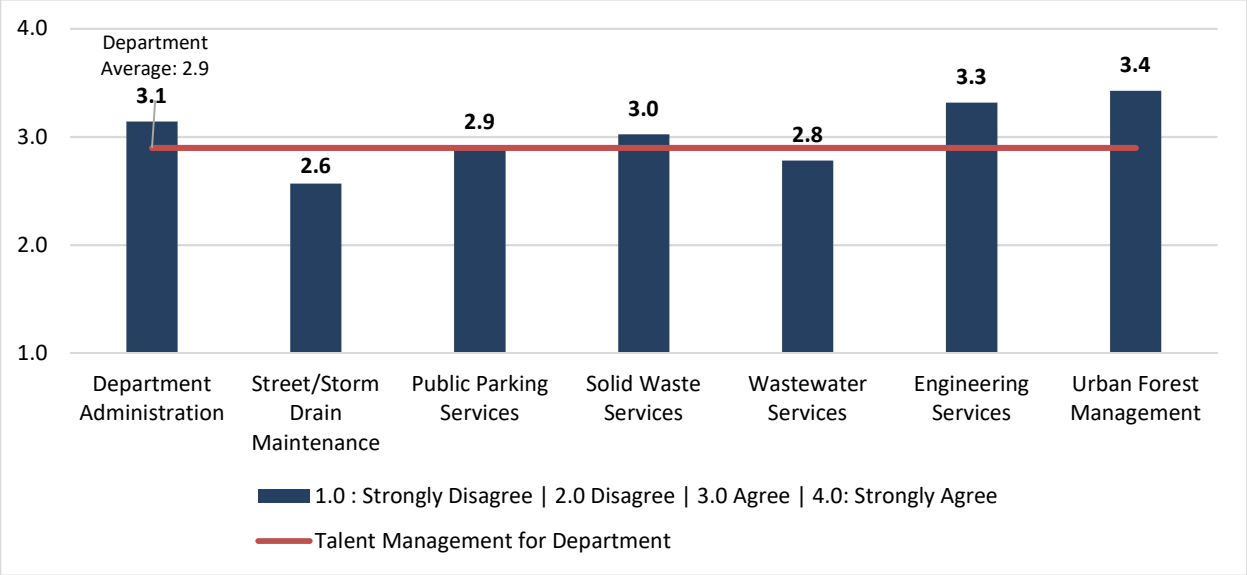
Answer Choices	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
	Strongly Agree/Agree		Strongly Disagree/Disagree		
5. I receive timely annual performance evaluations.	**32 (18%)**	**121 (69%)**	20 (11%)	3 (2%)	10
	153 (87%)		23 (13%)		

Survey respondents were invited to provide comments on why they *disagreed* or *strongly disagreed* with the above statements. Major themes include:

- The organization needs more safety training.
- The organization needs more training for staff (for policies, technology and equipment).
- Employees are not able to take advantage of training opportunities because the organization is short-staffed.
- City's travel reimbursement policy around conference attendance limits professional development opportunities.
- The organization does not cross train employees.
- The organization needs thoughtful, intentional and proactive training programs.
- The organization needs proactive succession planning.
- Performance evaluations are not completed in a timely manner.

As Figure 16 shows, the Urban Forestry Management Division and Engineering Services Division had the highest composite score with an average rating of 3.4 and 3.3, respectively. The Streets/Storm drain Maintenance Division had the lowest composite score with an average rating of 2.6.

Figure 16. Talent Management Composite Score by Division



Organizational Culture

Survey respondents were asked to rate how strongly they agree with seven statements on the topic of organization culture and, overall, a majority of respondents agree or strongly agree with them, as shown in Table 24. Employees report clear understanding of job responsibilities and feel encouraged to use their own judgment and initiative. Employee morale is positive overall, but appears to vary across divisions with only 55% reporting they agree or strongly agree.

Table 24. Organizational Culture

Answer Choices	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
	Strongly Agree/Agree		Strongly Disagree/Disagree		
1. I have a clear understanding of my job responsibilities and expectations.	**72 (40%)**	**99 (54%)**	11 (6%)	0 (0%)	4
	171 (94%)		11 (6%)		
2. Employees in my department work well as a team.	**65 (36%)**	**88 (49%)**	23 (13%)	4 (2%)	6
	153 (85%)		27 (15%)		
3. Employees at all levels in the organization treat each other with respect.	**37 (21%)**	**91 (52%)**	40 (23%)	6 (3%)	12
	128 (74%)		46 (26%)		
4. Quality performance is recognized and rewarded.	**26 (15%)**	**79 (45%)**	53 (30%)	17 (10%)	11
	105 (60%)		70 (40%)		
5. Employee morale in the department is good.	**18 (10%)**	**80 (45%)**	52 (29%)	27 (15%)	9
	98 (55%)		79 (45%)		
6. I am encouraged to use my own judgment and initiative when carrying out my job.	**57 (31%)**	**101 (55%)**	22 (12%)	3 (2%)	3
	158 (86%)		25 (14%)		
7. Leaders encourage employees to improve work processes.	**37 (21%)**	**96 (54%)**	35 (20%)	10 (6%)	8
	133 (75%)		45 (25%)		

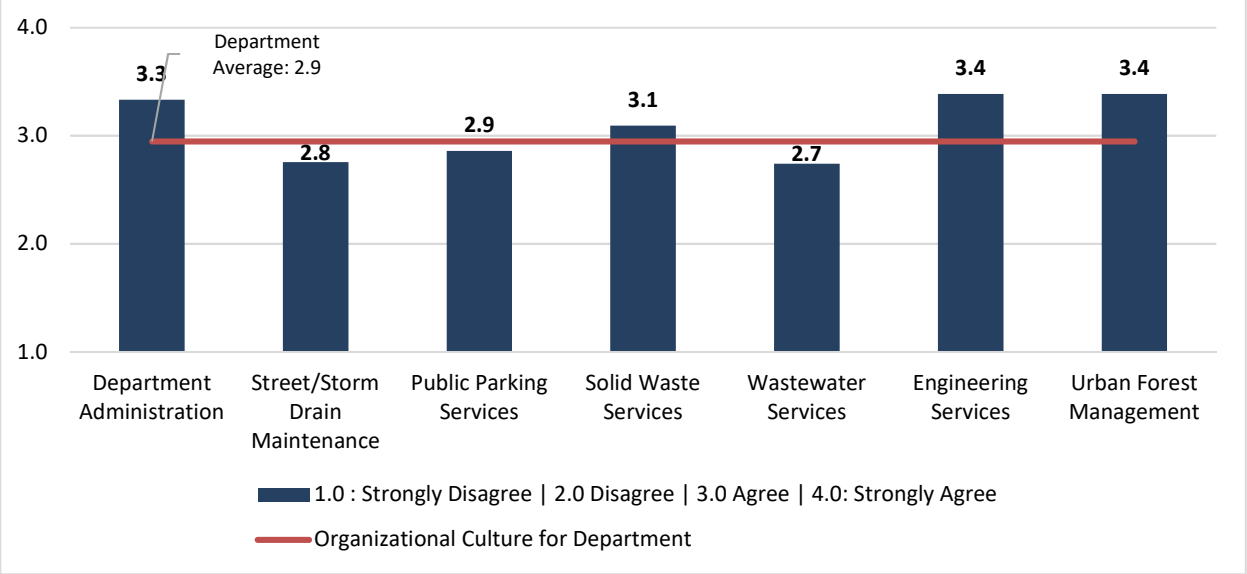
Survey respondents were invited to provide comments on why they *disagreed* or *strongly disagreed* with the above statements. Some major themes include:

- There is little recognition and reward of quality work (verbal or otherwise).
- Employees are not encouraged to use judgement in carrying out the job. Using judgement on the job sometimes results in negative consequences.
- Supervisors/managers and line staff have strained relationships.
- Line staff do not have the opportunity to provide feedback to managers to affect decision making.
- Staff are not encouraged to improve work processes.

- Some staff do not feel inspired to perform at a high level, and there is little accountability for poor performance.
- Blaming for inefficiencies commonly occurs.
- Morale is low in general.
- Morale is negatively impacted by the low compensation levels and the process of completing and presenting the compensation study.
- Not all staff treat one another with respect.
- Employee conflicts are frequent, perhaps due to miscommunication.

As Figure 17 shows, the Engineering Services Division and Urban Forestry Management Division had the highest composite scores with an average rating of 3.4. The Wastewater Services Division had the lowest composite score with an average rating of 2.7.

Figure 17. Organizational Culture Composite Score by Division



Open Question Highlights

The survey asked respondents to share what they believe is working well and one thing that they believe needs to change to improve service delivery. The results of the response analysis are summarized in Tables 25 and 26.

Table 25. What is Working Well in the Organization?

What is working well in the organization?	Number of Comments Mentioned*
Teamwork, colleagues	32
Communication, sharing of information	18
Quality work (even with limited resources)	15

What is working well in the organization?	Number of Comments Mentioned*
Leadership (supervisors, managers, deputies, director)	14
Morale, positive attitude, respect	10
Customer service	9
Project management	6
Tools, equipment and training	6
Work ethic	5
Innovation, use of technology	4
Overall job satisfaction	4
Transparency	3
Clear expectations	3
Opportunities for new challenges (and additional resources/projects)	3

**Includes comments mentioned by three or more separate survey respondents.*

Table 26. One Thing That Needs to Change to Improve Service Delivery

One Thing That Needs to Change to Improve Service Delivery	Number of Comments Mentioned*
More qualified staff, filling vacancies, efficient recruitment	32
Equipment and fleet	21
Communication	11
Updated and better use of technology	11
Clear goals and objectives of the department to guide management	11
Employee retainment and higher compensation	7
Treating everyone equally	4
Teamwork, trust, support and solidarity	4
General training	3
Improved operational practices (e.g., routes and processes)	3
Clear standard operating procedures and policies	3

**Includes comments mentioned by three or more separate survey respondents.*

Attachment C – Comparative Peer Research

As part of this project, Management Partners issued a peer survey to collect information on staffing levels and organizational structure from seven peer cities.

The survey was focused on budget and staffing levels, organizational structure, performance/workload measures and general operating practices for street and sidewalk maintenance, street sweeping, wastewater collections and solid waste.

Anaheim and Moreno Valley were the only cities to respond to the survey. Their responses, along with Riverside comparative data, are presented below.

Public Works Service Delivery Profile

Table 27 presents the service delivery profile of the two agencies that responded to our survey.

Table 27. Public Works Service Delivery Profile

Function	Anaheim		Moreno Valley		Riverside	
	Percentage by Contractors	Percentage by In-House Staff	Percentage by Contractors	Percentage by In-House Staff	Percentage by Contractors	Percentage by In-House Staff
Street maintenance	18%	82%	0%	100%	0.5%	99.5%
Street sweeping	20%	80%	0%	100%	0%	100%
Wastewater collections and maintenance	18%	82%	N/A	N/A	0%	100%

Source: Peer survey

Street and Sidewalk Maintenance

Operating expenditures for street and sidewalk maintenance are presented in Table 28. Riverside's expenditure totals are lower than the average of peer agencies for which data were available.

Table 28. Street and Sidewalk Maintenance Operating Expenditures for FY 2017-18

City	Total Expenditures	Expenditures per capita	Expenditures per square mile (of entire city area)
Riverside	**$4,274,263**	**$13.08**	**$52,704**
Anaheim	$4,531,402	$12.64	$90,992
Bakersfield	not available	not available	not available
Chula Vista	not available	not available	not available
Fontana	$3,285,650	$15.44	$77,492
Fresno	$9,686,700	$18.42	$86,488

City	Total Expenditures	Expenditures per capita	Expenditures per square mile (of entire city area)
Long Beach	not available	not available	not available
Moreno Valley	$3,168,016	$15.32	$61,755
PEER AVERAGE	**$5,167,942**	**$15.46**	**$79,182**

Sources: Adopted City Budgets, FY 2017-18 (Fontana, Fresno) and peer survey responses (Anaheim, Moreno Valley). Expenditures exclude costs associated with capital improvement projects (CIP) and debt service.

Table 29 presents a breakdown of operating expenditures by type for the agencies that responded to the survey.

Table 29. Street and Sidewalk Maintenance Budgeted Operating Expenditures for FY 2017-18

Expenditure Type	Anaheim[2]	Moreno Valley[1]	Riverside[2,3]
Personnel (Salaries and Benefits)	$2,442,161	$2,072,513	$5,166,652
Contracts and Professional Services	$802,712	$42,500	$43,890
Other Expenditures (including indirect costs and overhead)	$1,286,529	$1,053,003	($1,093,660)
TOTAL	$4,531,402	$3,168,016	$4,274,263

[1]*Includes signing and striping and expenditures allocated to Gas Tax funds.*
[2]*Excludes expenditures allocated to Gas Tax Funds.*
[3]*Includes 50% of costs associated with the Administration Unit in Field Services Division.*

Table 30 indicates the service delivery profile and total staffing for the agencies that responded to the survey.

Table 30. Street Maintenance Service Delivery Profile and Total Staffing for FY 2017-18

	Anaheim		Moreno Valley		Riverside	
	Percentage by Contractors	Percentage by In-house Staff	Percentage by Contractors	Percentage by In-house Staff	Percentage by Contractors	Percentage by In-house Staff
Street maintenance service delivery profile	18%	82%	0%	100%	0.5%	99.5%
	Noted contract services: • Crack sealing and slurry sealing		*Noted contract services:* • None		*Noted contract services*[1] • Paving, slurry seal and concrete	
Street maintenance staffing	*19.9 FTE*		*21.0 FTE*		55.0 FTE[2]	

[1]*Riverside's noted contract services include:*
- *Large projects involving paving, slurry seal, and concrete (managed by Engineering Division)*
- *Small projects involving paving, slurry seal and concrete (managed by Street Maintenance Division)*

[2]*In Riverside, the Street Maintenance Division includes road signs, road paint, road delineation, guardrails, fencing, weed management, 24/7 after-business-hours response to city road issues, and storm event response and cleanup. The budget and FTE shown above only reflect Street Maintenance Division and do not include engineering (contracts), traffic signal*

maintenance, or storm drain maintenance. FTE excludes 4.0 FTE in Administrative Support and 2.0 FTE allocated to the Street Maintenance Division (or 50% of the following positions in Street Administration: senior field services operations manager, principal management analyst, senior engineering aide, and senior office specialist).

Table 31 presents street maintenance staffing levels for the agencies that responded to the survey.

Table 31. Street Maintenance Staffing (FTE) for FY 2017-18

Position Classifications	Anaheim*	Moreno Valley	Riverside
Manager/Superintendent	0.1	0.0	0.0
Supervisor	2.4	1.0	5.0
Lead Worker	2.4	2.0	4.0
Maintenance Worker	15.0	8.0	36.0
Technician/Equipment Operator	0.0	10.0	10.0
TOTAL FTE	**19.9**	**21.0**	**55.0**

**Anaheim Street Maintenance Unit performs work for other departments per work orders. These costs and FTEs are not included in the data provided.*

Table 32 presents an overview of street maintenance targets for the agencies that responded to the peer survey.

Table 32. Overview of Street Maintenance

	Anaheim	Moreno Valley	Riverside
Total number of lane miles maintained	585.2[1]	1,081.0	875.4
Pavement Condition Index (PCI) – Target	90	75	62 to 67
Pavement Condition Index (PCI) – Actual Average	72.0	65.3	61.0
Date of your most recent PCI study/analysis	December 2017	June 2014[2]	May 2018
In what division does the street maintenance function reside?	Public Works, Operations	Public Works, Maintenance and Operations	Public Works, Street Services

[1]*Includes all City streets*
[2]*Next study anticipated for July 2018.*

Street Sweeping

Table 33 presents a breakdown of operating expenditures by type for the agencies that responded to the survey.

Table 33. Street Sweeping Budgeted Operating Expenditures for FY 2017-18

Expenditure Type	Anaheim	Moreno Valley	Riverside*
Personnel (Salaries and Benefits)	$2,388,551	$242,436	$1,307,627
Contracts and Professional Services	$900,000	$0	$280,745
Other Expenditures (including indirect costs and overhead, if possible)	$1,008,542	$141,532	$2,068,151
TOTAL	**$4,297,093**	**$383,968**	**$3,656,523**

**Includes 17% of costs associated with Administration unit of Solid Waste Services Division.*

Table 34 and 34 indicate the service delivery profile and staffing breakdown, respectively, of street sweeping services for the agencies that responded to the survey.

Table 34. Street Sweeping Service Delivery Profile and Total Staffing for FY 2017-18

	Anaheim		Moreno Valley		Riverside	
	Percentage by Contractors	Percentage by In-house Staff	Percentage by Contractors	Percentage by In-house Staff	Percentage by Contractors	Percentage by In-house Staff
Street sweeping service delivery profile	20%	80%	0%	100%	0%	100%
	Noted contract services: • Street sweeping enforcement • Citation processing		*Noted contract services:* • None		*Noted contract services:* • None	
Street sweeping staffing	17.75 FTE		3.0 FTE		13.68 FTE	

Table 35. Street Sweeping Staffing (FTE) for FY 2017-18

Position Classifications	Anaheim	Moreno Valley	Riverside
Superintendent / Manager	0.40	-	0.17
Supervisor	0.85	-	1.00
Lead Worker / Crew Leader	1.50	-	1.00
Operator	15.00	-	7.00
General Service Worker (RESET)	-	-	2.00
Street Maintenance Specialist	-	-	2.00
Analyst Staff	-	-	0.34
Administrative Staff	-	-	0.17
TOTAL FTE	**17.75**	**3.0**	**13.68**

Table 36 indicates an overview of street sweeping metrics and service delivery methods used by the agencies that responded to the survey.

Table 36. Overview of Street Sweeping

	Anaheim	Moreno Valley	Riverside
Average number of *lane miles* swept per day (all sweeping routes)	380 (day shift only)	76 (curb miles)	276
Average number of *lane miles* swept per day, per sweeping route	28 (day shift only)	38 (curb miles)	30
Number of sweepers in use	10	2 to 3 (excludes one back-up sweeper)	9
How often are residential streets swept?	Weekly	Twice per month	Twice per month
How often are commercial and industrial areas swept?	Weekly	Twice per month	Twice per month
How often are downtown areas swept (if applicable)?	Weekly	Not applicable	Twice per month
Number of street sweeping routes	18	20	52
Number of street sweeping shifts	2*	1	1
In what division does the street sweeping function reside?	Operations	Maintenance and Operations	Solid Waste

**Day shift covers residential areas; night shift covers commercial areas*

Wastewater Collections and Maintenance (excluding treatment)

Table 37 presents wastewater collections and maintenance operating expenditures for the peer agencies. Riverside's expenditures per capita and per square mile are higher than Anaheim and Fontana but are much lower than Long Beach.

Table 37. Wastewater Collections and Maintenance Operating Expenditures for FY 2017-18

City	Total Expenditures	Expenditures per capita
Riverside	**$8,009,530**	**$24.51**
Anaheim	$4,875,626	$13.60
Bakersfield	not available	not available
Chula Vista	not available	not available
Fontana	$3,465,550	$16.29
Fresno	not available	not available
Long Beach	$15,441,773	$32.16

City	Total Expenditures	Expenditures per capita
Moreno Valley	not applicable	not applicable
PEER AVERAGE	**$7,927,650**	**$20.68**

Sources: Adopted City Budgets, FY 2017-18 (Fontana, Long Beach) and peer survey responses (Anaheim). Expenditures exclude costs associated with capital improvement projects and debt service.

Table 38 provides a breakdown of budgeted expenditures for only Anaheim as they were the only one to respond to the survey.

Table 38. Wastewater Collections and Maintenance Budgeted Operating Expenditures for FY 2017-18

Expenditure Type	Anaheim	Riverside
Personnel (Salaries and Benefits)	$2,064,912	$2,341,810
Contracts and Professional Services	$1,212,500	$444,907
Other Expenditures (including indirect costs and overhead)	$1,598,214	$5,222,813
TOTAL	**$4,875,626**	**$8,009,530**

Tables 39 and 40 provide an overview of the service delivery profile and staffing levels, respectively, for the only agency that responded to our survey.

Table 39. Wastewater Collections and Maintenance Service Delivery Profile and Staffing for FY 2017-18

	Anaheim		Riverside	
	Percentage by Contractors	Percentage by In-house Staff	Percentage by Contractors	Percentage by In-house Staff
Wastewater collections and maintenance service delivery profile	18%	82%	*Varies by service*	*Varies by service*
	Noted contract services: • Pump station maintenance • CIPP installation • Emergency repairs		*Noted contract services:* • Some closed-circuit television sewer line inspections – 50% done by contractor • Emergency repairs – 90% done by contractor • Manhole repairs – 50% done by contractor • Emergency diesel pump quarterly maintenance – 75% done by contractor • Electrical & Instrumentation field support services –33% done by contractor • Landscape – 50% done by contractor • HVAC maintenance – 90% done by contractor • SCADA - engineering support services, lift station PLC system,	

	Anaheim		Riverside	
	Percentage by Contractors	Percentage by In-house Staff	Percentage by Contractors	Percentage by In-house Staff
			radios, antennas – 50 % done by contractor	
Wastewater collections and maintenance staffing	16.05 FTE		50.00 FTE	

Table 40. Wastewater Collections and Maintenance Staffing (FTE) for FY 2017-18

Position Classifications	Anaheim	Riverside
Superintendent/Manager	0.40	1.00
Supervisor	1.35	4.00
Crew Supervisor	1.00	2.00
Senior Maintenance Mechanic	-	2.00
Senior Technician[1]	-	3.00
Maintenance Mechanic	-	12.00
Technician[1]	-	14.00
Specialist[2]	-	4.00
Sewer Machine Operator	5.00	-
Maintenance Worker	8.00	2.00
Maintenance Coordinator	0.30	-
Maintenance Scheduler	-	3.00
Plant and Equipment Electrician	-	3.00
TOTAL FTE	**16.05**	**50.00**

[1]Riverside technicians include wastewater collection system technicians, instrument technicians, wastewater control system technicians and SCADA system technicians.
[2]Riverside specialists include inventory control specialists and wastewater co-generation specialists.

Table 41 presents an overview comparison of collections and maintenance elements for Anaheim and Riverside.

Table 41. Overview of Wastewater Collections and Maintenance

	Anaheim	Riverside
How often are sewers cleaned?	1 to 3 years (depending on pipe diameter)	Every 18 months
What percentage of sewer system is in need of repair or replacement?	25% (estimate)	11.72% (estimate)* *(We have 93.5 miles of pipes that are unknown in age or older than 80 years. This is ~11.72% of the City's collection system.)*
What percentage of sewer system is undersized?	60% (estimate)	1.58% (estimate, according to the latest Sewer Master Plan)
In what division does the wastewater collections and maintenance function reside?	Public Works, Operations	Public Works, Sewerage Systems

	Anaheim	Riverside
Does your city inspect the sewer system using video technology?	Yes	Yes
Does your city maintain some portion of sewer laterals?	No	Not officially – *(The city maintains from the property line to the sewer main line for single family residences only.)*

**Based on age and not condition of the pipes.*

Solid Waste

Table 42 provides operating expenditures for peer agencies for which data were readily available. Riverside's reported operating expenditures per capita are below all other agencies.

Table 42. Solid Waste Operating Expenditures for FY 2017-18

City	Total Expenditures	Expenditures Per Capita
Riverside	**$19,931,327**	**$60.99**
Anaheim	$44,570,350	$124.31
Bakersfield	$43,905,703	$114.48
Chula Vista	not available	not available
Fontana	not available	not available
Fresno	$35,592,900	$67.69
Long Beach	$47,154,322	$98.20
Moreno Valley	not available*	not available*
PEER AVERAGE	**$42,805,819**	**$101.17**

Sources: Adopted City Budgets, FY 2017-18 (Bakersfield, Fresno, Long Beach) and peer survey responses (Anaheim, Moreno Valley). Expenditures exclude costs associated with capital improvement projects and debt service.
**Moreno Valley's reported expenditures in the peer survey seem to only include costs associated with the administration of the operating agreement (not the cost of the agreement itself), so it has been excluded from this comparison.*

Table 43 presents budgeted revenue and expenditure information for the two agencies that responded to the survey.

Table 43. Solid Waste Budgeted Revenue and Operating Expenditures for FY 2017-18

	Anaheim	Moreno Valley	Riverside
Revenue			
Charges for services	$44,069,307[1]	$0	$21,931,195
Other	$0	$218,631[2]	$0
TOTAL REVENUE	**$44,069,307**	**$218,631**	**$21,931,195**
Expenditures			
Personnel (Salaries and Benefits)	$1,618,016	$205,474	$4,248,097
Contracts and Professional Services	$39,471,321	$0	$7,804,287

	Anaheim	Moreno Valley	Riverside
Other Expenditures (including indirect costs and overhead)	$3,481,013	$33,517	$7,878,943
TOTAL EXPENDITURES	**$44,570,350**	**$238,991**[3]	**$19,931,327**

[1]Anaheim solid waste enterprise revenue supports solid waste program administration, collection and education.
[2]Moreno Valley other revenue is General Fund reimbursement agreement franchise fees ($111,000) and grant funding ($107,631).
[3]Moreno Valley's reported expenditures in the peer survey seem to only include costs associated with the administration of the operating agreement (not the cost of the agreement itself).

Tables 44 and 45 indicate the service delivery profile and staffing, respectively, for solid waste services for the two agencies that responded to the survey.

Table 44. Solid Waste Service Delivery Profile and Staffing (FTE) for FY 2017-18

	Anaheim	Moreno Valley	Riverside
How are Services Delivered?			
Residential collections	Exclusive franchise	Exclusive franchise	2/3 City, 1/3 Contract
Commercial collections	Exclusive franchise	Exclusive franchise	Non-exclusive franchise
Construction and demolition waste	Exclusive franchise	Exclusive franchise	Non-exclusive franchise
Sorting	Contractor	Contractor	Contractor
Recycling	Contractor	Contractor	Contractor
Transfer	Contractor	Contractor	Contractor
Sorting	Contractor	Contractor	Contractor
Solid Waste Staffing			
Full-time equivalent (FTE)	12.9 FTE	2.5 FTE	45.32 FTE

Table 45. Solid Waste Staffing (FTE) for FY 2017-18

Position Classifications	Anaheim	Moreno Valley	Riverside
Superintendent	0.10	-	-
Solid Waste Program Administrator	1.00	-	-
Supervisor	0.30	-	-
Lead Maintenance Worker	0.50	-	-
Maintenance Worker	9.00	-	-
Customer Service Specialist	1.00	-	-
Contract Specialist	1.00	-	-
Recycling Specialist	-	1.00*	-
Management Analyst	-	1.00*	-
Intern	-	0.50*	-
TOTAL FTE	**12.90**	**2.50**	**45.32**

**Moreno Valley Management Analyst and Intern assist with all functions in Maintenance and Operations Division.*

Table 46 indicates the organic recycling efforts being performed by the two agencies that responded to the survey.

Table 46. Overview of Organic Recycling

Question	Anaheim	Moreno Valley	Riverside
Do you contract organic recycling?	Yes	Yes	Yes
Contractor	Republic Services Inc.	Waste Management Inc.	Agua Mansa LLC
Price per ton	$100.10	No response	$48.60

Table 47 presents an overview of solid waste operational aspects for the two agencies that responded to the survey.

Table 47. Overview of Solid Waste

Solid Waste	Anaheim	Moreno Valley	Riverside
State Certified Diversion Rate for 2016	30%	56.8% (3.8 lbs/person/ day)	6.9 lbs/person/day
Replacement cycle for solid waste collection fleet	10 years (contractor schedule)	10 years	7-11 years
Number of spare trucks for solid waste route service	Not provided	22	6
Number of collection routes	54	17 routes per day	23
Average number of homes served per day, per collection route	10,212	1,300 homes (trash) 1,800 homes (recycling) 2,100 (green waste)	1,100-1,400 homes/day all commodities
In what division does the solid waste function reside?	Public Works, Operations	Public Works, Maintenance and Operations	Public Works, Solid Waste Services

Solid Waste	Anaheim	Moreno Valley	Riverside
Are solid waste collection vehicles equipped with Global Positioning System (GPS) technology?	Unknown (vehicles owned by contractor)	Yes (GPS data used in real time to track vehicle location, benchmark productivity, and optimize routing)	No
Have you completed a system-wide review of your solid waste collection routes within the last ten years?	No	Yes (2017, using Erl - WM Software)	No
Do you have an incentive schedule (collection drivers can leave once the routes are completed, but paid for whole day) for collection operators of solid waste vehicles?	No	No	Yes
When did you last adjust solid waste collection rates?	2017	2017 (Rates adjusted annually, subject to Council approval)	2017
What factors impacted the rates?	Consumer Price Index (CPI)	*Service*: Consumer Price Index (CPI); *Disposal*: Landfill rate, tonnages, franchise fee, bulky item credit *Green waste*: Landfill rate, tonnages, franchise fee	CPI – need adjustments for landfill, labor and processing increase
When do you plan to adjust solid waste collection rates next?	2018	2018	2019
Have you implemented multi-family recycling?	Yes	Yes	Yes
Does your city have a Zero Waste Plan?	No	No	No

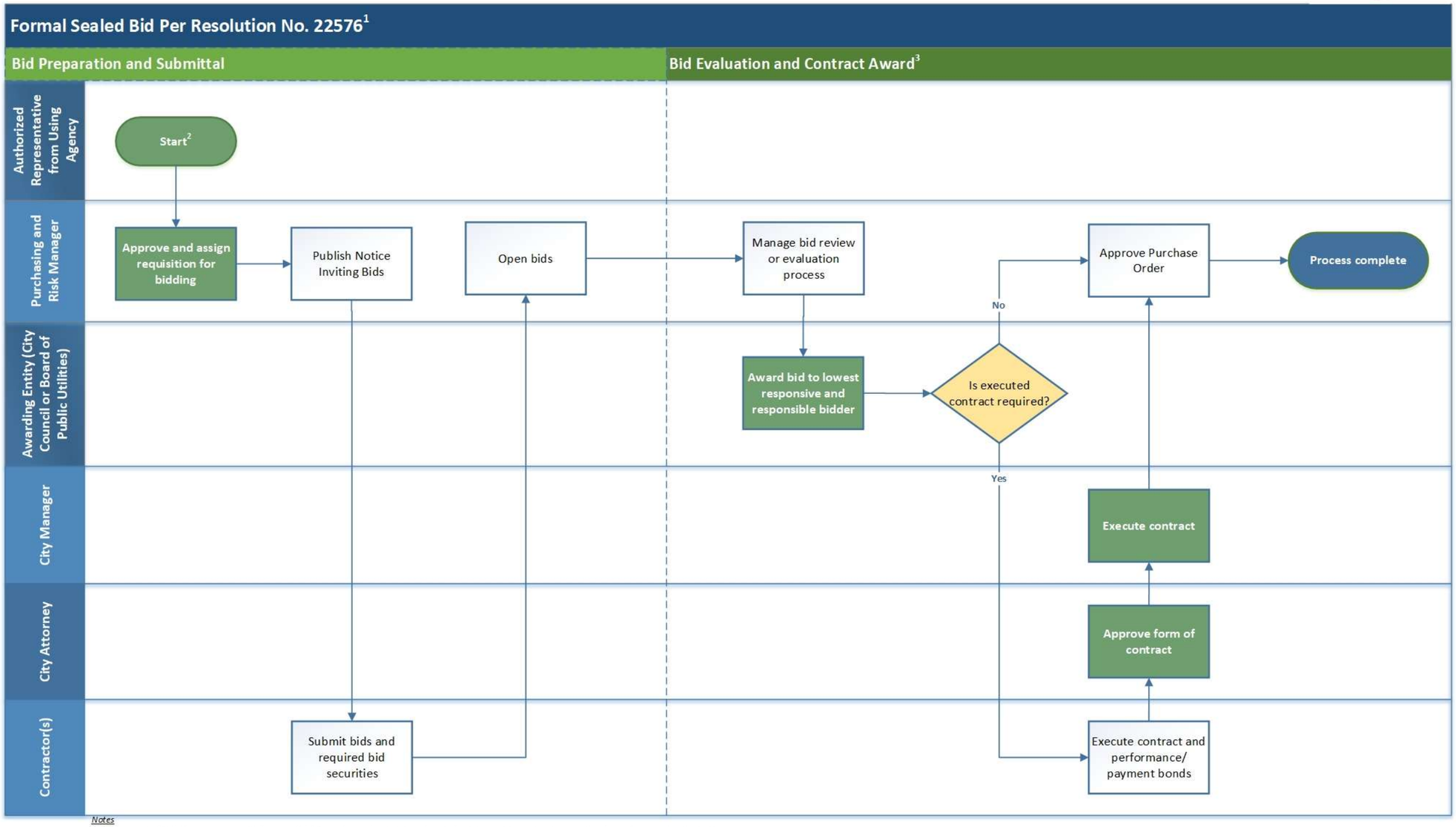
Solid Waste	Anaheim	Moreno Valley	Riverside
Is your city taking steps to meet the organics landfill ban and the 75% and 90% diversion goals?	No	Yes[1]	Yes[2]

[1]Moreno Valley is currently increasing source reduction and reuse, increasing recycling access and participation, increasing diversion of organics.
[2]Riverside is currently reviewing infrastructure for processing, determining rates, and working on waste characterization/ contamination education to meet the organics landfill ban and the 75% and 90% diversion goals.

Attachment D – Purchasing Process Maps

City of Riverside Public Works Department Performance Assessment and Financial Expenditures Review – Workflow Process for Formal Procurement

Management Partners

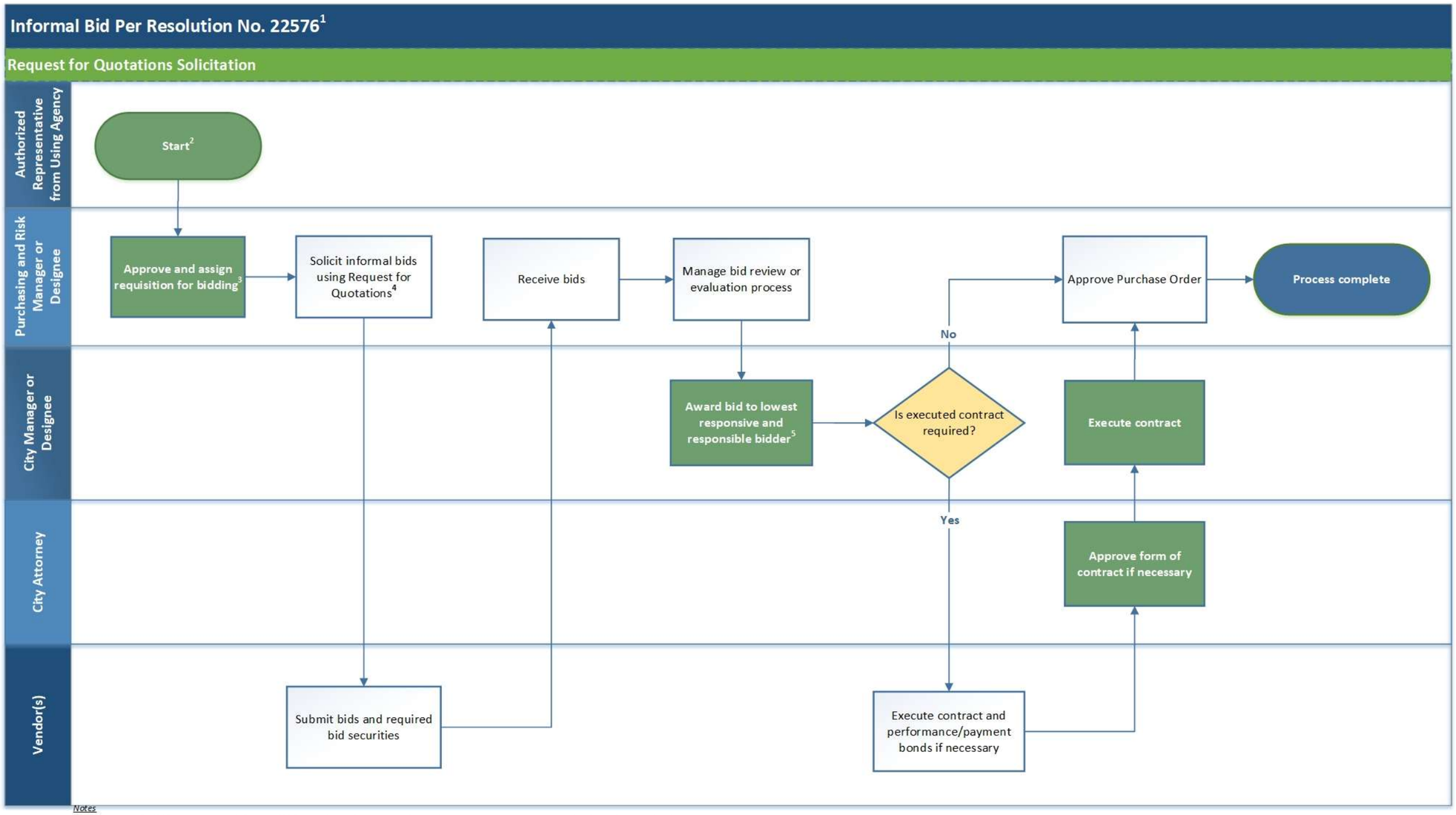


Notes

1. References to "Bid(s)" synonymous with "proposal(s)." Green boxes denote internal control points requiring a signature or other form of approval authorization.
2. Process starts once the Using Agency submits a properly completed and approved purchase requisition to the Purchasing and Risk Manager. The approver is the department head or duly authorized representative.
3. Bid evaluation and contract award phase includes purchasing process steps to determine lowest responsive and responsible bidders and rejecting bids.

City of Riverside Public Works Department Performance Assessment and Financial Expenditures Review – Workflow Process for Open Market Procurement

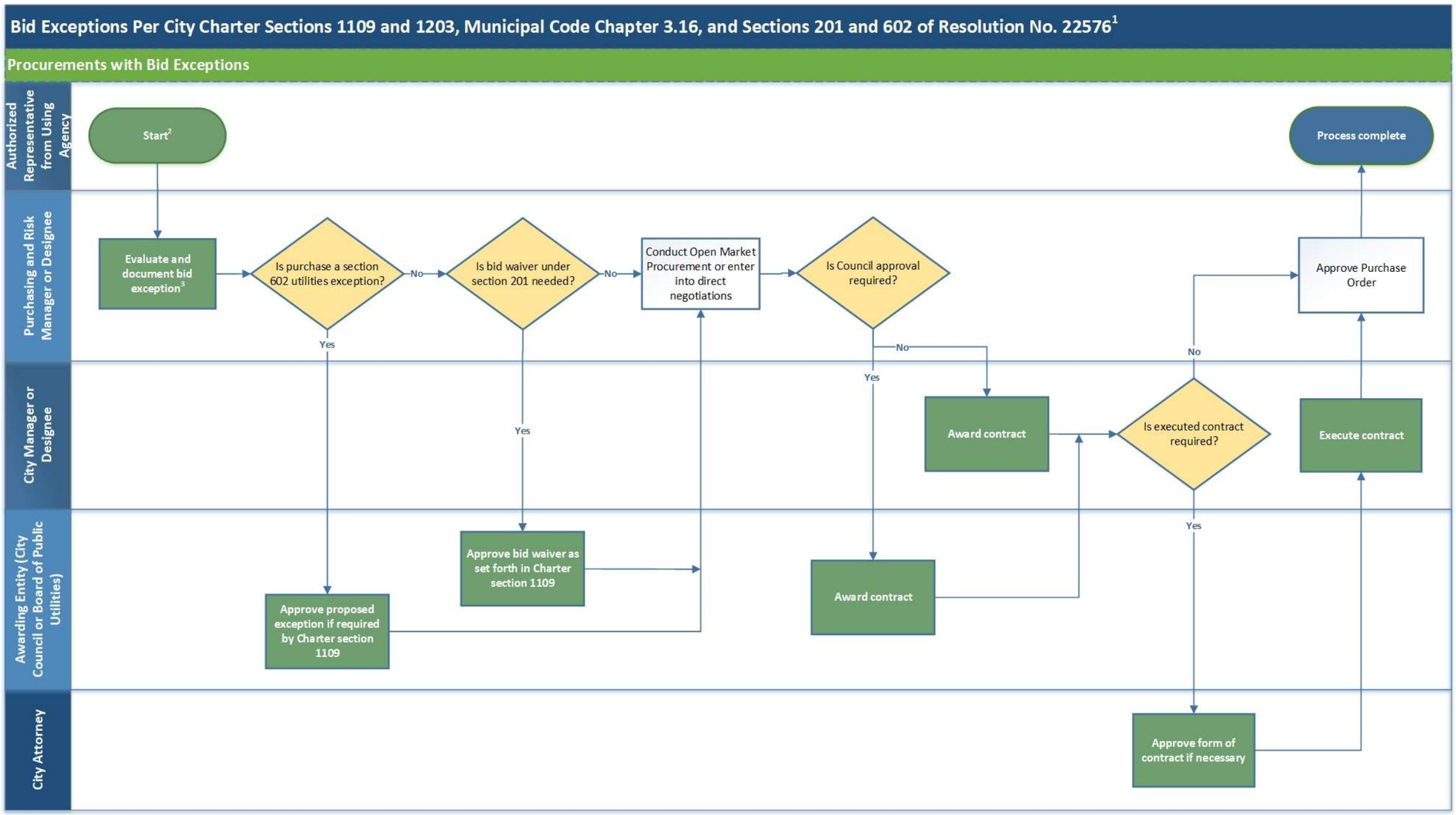
Management Partners



Notes:
1. References to "Bid(s)" synonymous with "proposal(s)." Green boxes denote internal control points requiring a signature or other form of approval authorization.
2. Process starts once the Using Agency submits a properly completed and approved purchase requisition to the Purchasing and Risk Manager. The approver is the department head or duly authorized representative.
3. Process may be delegated if the procurement does not involve construction or goods required by section 1109 of the City Charter.
4. The Purchasing and Risk Manager may forego an Open Market Procurement and directly negotiate if so authorized by the Awarding Entity.
5. Section 604 establishes the Purchasing and Risk Manager to be award and rejection authority.

City of Riverside Public Works Department Performance Assessment and Financial Expenditures Review – Workflow Process for Bid Exceptions

Management Partners



Notes

1. Riverside policies allow several different types of bid exceptions for general goods and services purchases, and for good and services purchases specific to the departments of Public Utilities and Public Works.
2. Process starts once the Using Agency submits a properly completed and approved purchase requisition to the Purchasing and Risk Manager. The approver is the department head or duly authorized representative.
3. Process step includes approval and assignment of properly authorized requisitions from Using Agency. Green boxes denote internal control points requiring a signature or other form of approval authorization.