



THE CITY OF SAN DIEGO

OFFICE OF THE INDEPENDENT BUDGET ANALYST REPORT

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Asset Management: Citywide Practices for Maintaining Infrastructure and Identifying Capital Needs

OVERVIEW

The City of San Diego owns and maintains a large and complex network of infrastructure assets, including streets, bridges, parks, public facilities, and airports. These assets anchor the City's economy; improve productivity and competitiveness; and secure public health, safety, and well-being. Underinvestment in infrastructure due to tight financial constraints in the City has resulted in deteriorating infrastructure and a significant backlog of deferred capital projects, estimated at \$898 million for streets, facilities, and storm drains.¹ The City Auditor conducted three infrastructure-related audits in 2010-2011 and made recommendations for improving street maintenance and the City's Capital Improvement Program (CIP), including implementing Citywide asset management practices and developing a Multi-Year Capital Improvement Plan.²

Over the past year and a half, the City Council has made significant headway toward addressing infrastructure challenges, including approving the City's first multi-year financing program for deferred capital; adopting Capital Improvement Program (CIP) streamlining reforms to help accelerate project implementation and transparency; establishing a community input process for the CIP budget; and creating an Infrastructure Committee in December 2012 to work towards identifying solutions. During the first Infrastructure Committee meeting on January 28, 2012, the Office of the IBA was requested to report back to the Committee on current asset management practices and processes for identifying capital infrastructure needs. To provide this information, our office coordinated with the Public Works Department, CIP Review and Advisory Committee

¹ Deferred capital for buildings could be significantly higher than the estimated \$185 million backlog since it is based on condition assessments conducted in fiscal years 2007 and 2009 on about 30% of the City's 1,600 facilities which was about half of total square feet. The next assessment is planned to be conducted in 2014 and include about 600 General Fund buildings.

² Office of the City Auditor, Street Maintenance (OCA-11-009, Nov. 2010); Capital Improvement Program (OCA-11-027, June 2011); and Public Utilities Capital Improvement Program (OCA-12-001, Sept. 2011).

(CIPRAC), Enterprise Asset Management (EAM) Steering Committee, and 12 departments or divisions that own, maintain, or have responsibility for infrastructure assets. This includes Airports, Disability Services, Environmental Services, Facilities, Fire-Rescue, Library, Park & Recreation, Police, Public Utilities, QUALCOMM, Real Estate Assets, and Transportation & Storm Water.³

FISCAL/POLICY DISCUSSION

THE CITY'S ASSET MANAGEMENT PRACTICES

Asset management is a process to effectively and sustainably manage assets at a desired level of service, both now and in the future, for the lowest life cycle cost. Asset management incorporates two broad concepts, a: (1) business practice for making decisions on infrastructure based on quality data and (2) software system for optimizing asset maintenance, repair, rehabilitation, and replacement (also referred to as Enterprise Asset Management). Using an asset management business practice will provide key data and information on assets so that decision makers can identify the most effective maintenance and CIP investment strategies. Making sound and informed decisions regarding infrastructure investment is particularly important for the City given valid and competing priorities for limited resources.

Core Asset Management Questions:

1. What is the current state of my assets?
2. What is my required level of service?
3. Which assets are critical to sustained performance?
4. What are my best operations and maintenance and CIP investment strategies?
5. What is my best long-term funding strategy?

To determine where City departments are in terms of answering core asset management questions, we assessed Citywide practices based on some key components of asset management, including goals for desired service levels, asset inventory, condition assessments, asset management systems, and asset management planning. Our summary assessment is included in Attachments 1 and 2. It is important to note that enterprise-funded departments generally have more fully developed asset management business practices largely because they are driven by requirements to comply with federal and/or state regulations or industry standards; have identified asset management as an effective business practice for meeting these requirements; and are able to provide resources for asset management staff, consultants, and systems. The Public Utilities Department, in particular, has developed a formal asset management program and could serve as a mentor/role model for other departments. Currently asset managers share information and ideas on asset management via the EAM Steering Committee.

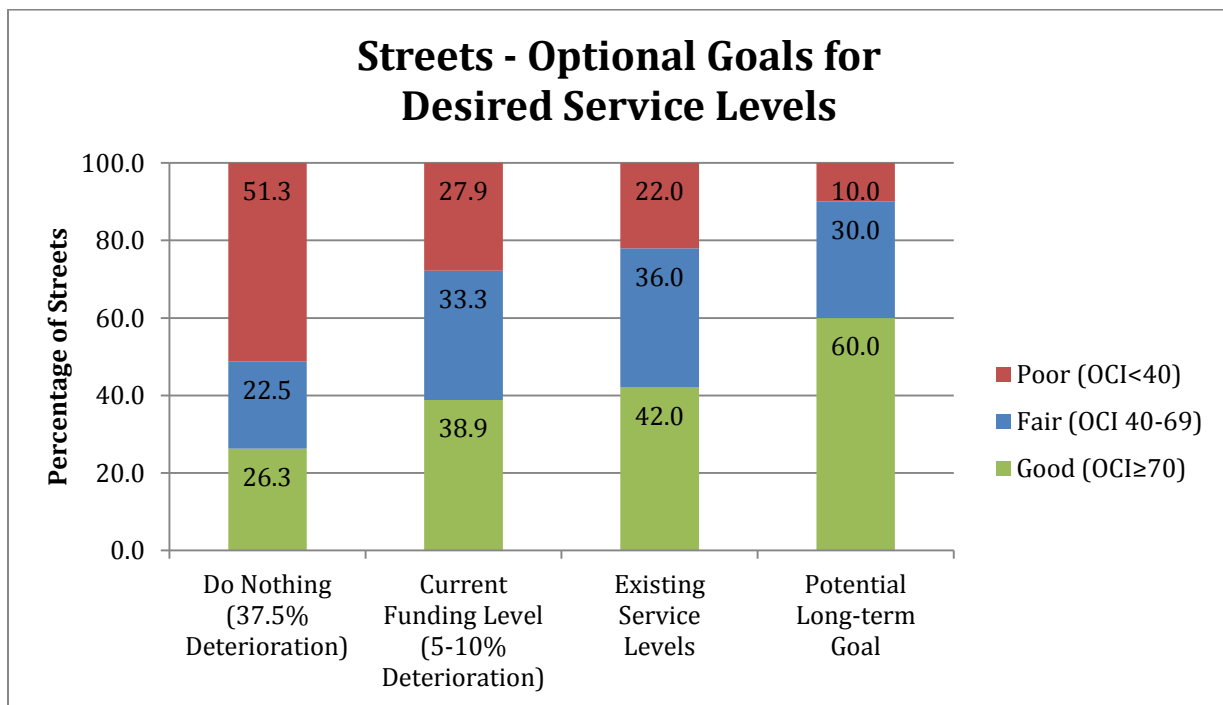
Goals for Desired Level of Service

Level of service is a measure of the quality, quantity, functionality, and reliability of assets. Establishing goals for the desired level of service of infrastructure assets is important for determining the needed ongoing maintenance, capital projects, and funding to achieve that goal. In many cases, goals for desired service levels can be based on a desired asset condition. For example, for streets the pavement condition is generally measured by a weighted index—called the Overall Condition Index (OCI)—which is calculated using weighted attribute characteristics, such as surface distress and ride quality. The OCI generally ranges from 0 to 100 with 100

³ Note that the Real Estate Assets Department manages land assets, and therefore is not included in our analysis.

representing the best street condition. Goals for desired service levels could be established using the OCI, for example having an average OCI of 70 for the street network or having a certain percentage of the street network in good condition (with an OCI of 70 or above).

Goals for desired service levels were part of discussions on deferred capital funding options for streets, buildings, and storm drains beginning in March 2011.⁴ Subsequent increases in the deferred capital backlog from \$840 million to \$898 million in February 2012 as a result of the updated condition assessment of streets led staff to develop more realistic and affordable funding options, including maintaining assets at existing service levels (status quo option).⁵ Facing tight financial constraints, Council ultimately approved a funding option which slows the rate of deterioration of the assets to 5-10% over 5 years (Enhanced Option B). Formal goals for desired service level were not established at that time. The chart below provides an example of optional goals for desired service levels for streets.



It is important to note that, given challenges in funding capital infrastructure projects, many departments focus on maintenance standards to achieve overall departmental goals. For example, since limited funds are available to address capital infrastructure needs, Park & Recreation’s goal of providing quality parks and programs depends a great deal on daily, ongoing maintenance practices—such as mowing and cleaning restrooms.

Challenges and Gaps - In setting goals for desired service levels for assets, it will be important to consider budgetary constraints and existing asset conditions as well as to obtain public input on acceptable levels.

⁴ Staff Report: Deferred Capital Update, 11-037, March 8, 2011.

⁵ Staff Report: Infrastructure Condition Update, 12-021, February 22, 2012; Staff Report: Deferred Capital Project Update – 2nd Bond Projects List, 12-022, February 22, 2012.

Asset Inventory

It is important to have an accurate inventory of assets in order to effectively manage them. All of the City departments have an asset inventory, but the level of accuracy, completeness, and tools with which inventories are managed varies. For example, Facilities and Street Divisions have systems for managing their inventories while Fire-Rescue, Police, and Library use Excel spreadsheets. Park & Recreation staff noted that they have a partial inventory which does not include information on smaller assets, like playgrounds.

Challenges and Gaps - Many departments lack the resources needed to conduct and maintain a comprehensive asset inventory, and the existing systems are not interactive.

Condition Assessments

Knowing the current condition of assets is important in order to determine the maintenance and capital projects that will be needed to meet the desired level of service. This also helps to identify the City's current backlog of deferred maintenance and capital. For some primary or high risk assets—such as airports, streets, bridges, and buildings—it is recommended, or in some cases required, that conditions be formally assessed on a regular basis. For example, per federal and State of California requirements, CALTRANS biannually inspects the City's bridges and provides a sufficiency rating and work recommendations in its inspection report.

Due to recent condition assessments conducted by consultants in 2010 through 2012, the City generally has accurate and updated information on the conditions of streets and storm drains. However, the most recent condition assessments for the City's buildings were conducted in fiscal years 2007 and 2009 on about 30% of the City's 1,600 facilities.⁶ As a result, deferred capital for buildings could be significantly higher than the estimated \$185 million backlog of deferred capital shown in the table below. The next assessment is planned to be conducted in 2014 and includes about 600 buildings (about 5 million square feet) that support General Fund activities. The estimated cost of about \$1 million is anticipated to be included in the Proposed FY 2014 Budget. Public Utilities and potentially the Environmental Services Department (ESD) and QUALCOMM will provide additional funds to have some of their buildings included in the assessment.

Estimated Backlog of Deferred Maintenance and Capital Projects

Millions of Dollars

Asset	Estimated Backlog	Basis for Estimate
Buildings	185	Three condition assessments conducted on (1) 31 public safety buildings in 2007; (2) the 5 Civic Center Complex facilities condition assessments in 2008 (Staubach Report); and (3) 443 major facilities in 2009 (Parsons Report).
Streets	478	Comprehensive condition assessment of 100% of streets completed in November 2011.
Storm Drains	235	Assessments/inspections conducted between 2010 and 2012 for all pump stations and corrugated metal pipe (CMP). Risk-based modeling for reinforced concrete pipe (RCP).
Subtotal	898	

⁶ This represents about half of the City's building space in square feet.

Challenges and Gaps – The Park & Recreation Department is responsible for a significant number of assets, and it has been recommended since 2002 that the City conduct a formal condition assessment of its park system as a first step for developing a Master Plan. However, Park & Recreation has been unable to identify the funds needed—estimated at about \$0.3-1.0 million for the condition assessment, depending on whether in-house staff or a consultant is used. Based on staff visual site observations, aerial photography, and square footage costs for a typical project, the Department estimates its deferred maintenance and capital is at least \$121 million. This is not an all-inclusive estimate since it excludes buildings and new parks and does not factor in Americans with Disability Act (ADA) accessibility or environmental requirements. Given the potentially large backlog and the lack of an ongoing, significant funding source for Park & Recreation capital projects, it is important that a formal condition assessment be conducted so that the Department has a comprehensive, valid list of deferred capital park system projects and can take advantage of future deferred capital bond funding, similarly to streets, buildings, and storm drains.

Park System Assets:

- developed parkland-9,180 acres
- open spaces -26,280 acres
- recreation centers-56
- aquatic centers -13
- athletic fields-190
- athletic fields with lighting-87
- golf courses-3
- cemetery-1
- playgrounds -300
- skateparks-5
- dog parks-15
- outdoor basketball courts-200
- tennis courts-150
- comfort stations-160
- ball diamonds-300
- oceanfront beach shoreline-25.9 miles
- fishing piers-2
- visitor’s centers-2

It is also important to note that the City has not conducted a condition assessment of sidewalks. Based on the California Streets & Highways Code (5610 thru 5618), sidewalks are owned and maintained by the adjacent property owners. Given deteriorating conditions of many sidewalks and based on budget priorities raised by Council Member Kersey, the Street Division has developed cost estimates for conducting an assessment of sidewalks using in-house staff. The projected cost is about \$908,000 which includes hiring two junior engineers and 14 student engineers and associated costs to conduct an assessment of about 5,000 miles of sidewalks. The staff would be hired on a limited basis for the time needed to conduct the assessment, currently estimated to be about one year. Costs for the sidewalks assessment may potentially be included in the Proposed FY 2014 Budget.

Asset Management Systems

Using information on desired service levels and current asset conditions and criticality, staff can assess alternatives and develop optimal maintenance plans and CIP funding investment strategies over the asset life cycle. An asset management system is an efficient tool for asset tracking, maintenance activity management, determining the residual life cycle and replacement costs of an asset, optimizing operation and maintenance investments, optimizing capital investments, assisting with determining funding strategies, and assisting with replacement of assets. These systems are particularly important given the large numbers of assets and significant amount of information that must be collected and analyzed to have optimized and cost-effective asset management strategies in place. For example, Street Division uses its’ Pavement Management System (Cartegraph) which was specifically designed for pavement management/asset management and provides the ability to perform maintenance and budget scenarios for varying

situations. It is also integrated with Street Division's GIS database which is used to manage street-related assets. In addition, Public Utilities has started an effort to replace its three existing maintenance management systems—which are obsolete, nonstandard, and fragmented—with SAP EAM. The new system will cost \$20 million over 3 years, but has numerous benefits including the ability to interface with the City's financial system. Another advantage is that this system will be a foundation for other asset-owning departments to leverage for their own SAP EAM roll-out in the future—likely for a significantly lower cost.

Challenges and Gaps – Four departments—Fire-Rescue, Library, Park & Recreation, and Police—currently do not have asset management systems primarily due to funding constraints, which makes management of their assets more challenging. These departments believe that an asset management system would improve the management of their assets, but have not assessed whether SAP EAM would be appropriate for their needs or how much this would cost.

Asset Management Planning

An asset management plan lays out the optimal maintenance and CIP strategy identified by staff assessments and, when available, the maintenance management system. With the exception of Public Utilities and Storm Water Division, City departments have not developed formal asset management plans due to limited resources and funding. Public Utilities developed an initial asset management plan with consultant support in 2006 which was updated internally in 2012. The plan is intended to converge and document the many asset management activities occurring throughout the Department. Storm Water Division is working with a consultant to develop a watershed-based asset management plan for each of the City's six watersheds. Each plan will include a minimum level of service for maintenance of the storm drain system based on flood capacity standards and water quality regulations. The plan is anticipated to be completed in 2013.

In the absence of plans, department staff have developed standards and lists of needed maintenance, but tight financial constraints have caused the majority of maintenance to be reactive rather than preventative.

Challenges and Gaps – Although many of the departments have several steps to go before developing an asset management plan, the lack of resources and funding will continue to be an issue. Staff believe that having a plan would greatly improve their department's management of assets, but noted that they would also need at least minimum resources required to execute the plan.

Funding Annual Maintenance

Annual, ongoing maintenance is vital for maintaining the condition of assets. When ongoing maintenance is not fully funded, it contributes to deferred maintenance and capital costs. In addition, as assets continue to deteriorate, the cost for repair will exponentially increase and can result in peripheral damage. For example, deferring roof replacement could later result in needing to replace the roof structural members, walls, and floor of a building. In addition, while lack of maintenance painting looks bad, it can also result in the underlying building components deteriorating prematurely. Several departments noted that they are not sufficiently budgeted to fully fund ongoing maintenance. For example, based on an assessment conducted by AECOM, the City would need to invest \$80 million in maintenance and capital projects over the next 10 years in QUALCOMM Stadium to stay contractually compliant with tenants and coding

requirements. The Facilities Division is another example of chronic underfunding of ongoing maintenance, and it provides routine maintenance and repair services for many City departments.

Public Works – General Services, Facilities Division

Currently, Facilities Division provides maintenance and repair services for Park & Recreation facilities, the City Administration Building (CAB) complex, and varying levels of support to the other General Fund departments.⁷ In addition, Fire-Rescue and Library Departments have requested that Facilities Division provide all facilities maintenance and repair support starting in FY2014. Current funding for the Division is significantly below the level needed to keep up with necessary repairs and maintenance of City facilities, largely due to a 23.2% reduction in budgeted positions since FY 2004. Facilities limited budget has challenged staff to a point where, over the past few years, the Division’s work has been primarily reactive and focused on corrective repairs rather than on preventative maintenance. In addition, Facilities staff reported a backlog of over 1,542 uncompleted work orders (as of January 2013).

Working with other General Fund departments, Facilities Division developed a sustainability model to recommend appropriate funding levels for maintaining City facilities. The model is based on the premise put forward by the National Research Council that annual routine maintenance and repair funding should be between 2-4% of the current replacement value of City General Fund facilities. Annual funding at the lower end of 2% would yield a requirement of \$47 million as compared to current estimated funding of about \$17 million across all City General Fund Departments—a \$30 million deficiency. Beginning in FY 2014, the Division is requesting a five-year ramp up of \$6 million per year. Note that this number does not include a CIP component associated with system and major component replacement. Based on the sustainability model, this would require an additional \$70 million annually.

“An appropriate budget allocation for routine M&R [maintenance and repair] for a substantial inventory of facilities will typically be in the range of two to four percent of the aggregate current replacement value of those facilities (excluding land and major associated infrastructure). In the absence of specific information upon which to base the M&R budget, this funding level should be used as an absolute minimum value. Where neglect of maintenance has caused a backlog of needed repairs to accumulate, spending must exceed this minimum level until the backlog has been eliminated.”
- National Research Council
Stewardship of Federal Facilities (1998)

Challenges and Gaps – Given tight budgetary constraints, the City may not currently be able to fully fund ongoing maintenance for City departments. However, it is important to use asset management to identify the deficiency and inform decision makers and citizens of the impact. Further, this information should be included in the City’s Multi-Year Capital Improvements Plan and goals established for achieving full funding.

IDENTIFYING CAPITAL INFRASTRUCTURE NEEDS

Asset management can provide a sound basis for identifying capital needs for existing assets, because it provides information on the optimal schedule for rehabilitation and replacement. It can also provide information on the need for new infrastructure assets based on projections for increased capacity. It is important to note that there are other important sources for identifying

⁷ Note that Facilities also sells its maintenance and repair service to enterprise-funded departments.

needs for new infrastructure, such as the General Plan, community, and facilities financing plans; specific studies conducted on assets, such as CityGate for fire stations; departmental master and multi-year capital improvement plans; and public input. Master and capital improvement plans outline short-term and long-term capital investment needs and serve as a guide to determine future capital investment projects in the most cost-effective manner.

We reviewed whether departments had master or capital improvement plans as well as their processes for identifying and prioritizing capital infrastructure. Our summary assessment is included in Attachments 3 and 4. Overall, the process for identifying capital needs is decentralized, varies by department, and generally depends on resources and funding available to the department. As was the case with asset management, enterprise-funded departments generally have master plans and more fully developed processes for identifying and prioritizing projects because they must comply with federal and/or state regulations or industry standards and have more resources available.

Challenges and Gaps – Capital planning should be a balance of addressing needs of existing infrastructure and adding new infrastructure, like fire stations, to address community needs. While many departments have some type of capital plan for one or more assets, General Fund departments generally did not incorporate all of their assets into the plan. In addition, when a department has a plan that only focuses on new infrastructure, like CityGate, it increases the risk that existing infrastructure may not be fully addressed.

CONCLUSION/RECOMMENDATION

Making sound and informed decisions regarding infrastructure investment is particularly important for the City given valid and competing priorities for limited resources. Using asset management will provide key data and information on assets so that decision makers can identify the most effective maintenance and CIP investment strategies. It also allows community involvement in determining what an acceptable level of services is while informing decision makers and citizens of the impacts that deferring investments will have on the system.

Not surprisingly, enterprise-funded departments generally have more fully developed asset management programs and processes for identifying capital needs. This is largely because they are driven by requirements to comply with federal and/or state regulations or industry standards; have identified asset management as an effective business practice for meeting these requirements; and are able to provide resources for asset management staff, consultants, and systems. As the City moves forward in implementing Citywide Asset Management and developing a Multi-Year Capital Improvement Plan, there are a number of challenges and gaps that should be considered and addressed.

- The City has not established goals for desired service levels for many of its assets which is an important early step for implementing asset management. In setting these goals, it will be important to consider budgetary constraints and existing asset conditions as well as to obtain public input on acceptable levels.
- The two biggest gaps in identifying conditions of existing assets are buildings and the park system. The City plans to conduct an assessment of buildings in FY 2014—the \$1 million estimated cost is anticipated to be included in the FY 2014 Proposed Budget. However, no funding has been identified for the condition assessment of park system assets, which is estimated to be between \$0.3-1.0 million. The Department has a

potentially large backlog of deferred capital and has extremely limited resources for funding projects. Conducting an assessment will provide a valid list of deferred capital park system projects which would be eligible to utilize future deferred capital bond funding, similarly to streets, buildings, and storm drains.

- An asset management system is an efficient tool for asset tracking, maintenance, determining the residual life cycle and replacement costs of an asset, optimizing operation and maintenance investments, optimizing capital investments, assisting with determining funding strategies, and assisting with replacement of assets. These systems are particularly important given the large numbers of assets and significant amount of information that must be collected and analyzed to have optimized and cost-effective asset management strategies in place. Four departments currently lack these system and the remaining systems in the City do not interface with one another or the City's financial system. Public Utilities is developing an SAP EAM system which provides a foundation for other asset-owning departments to leverage for their own SAP EAM roll-out in the future—likely for a significantly lower cost.
- Due to tight financial constraints, many departments are not fully funding ongoing, annual maintenance, which contributes to deferred maintenance and capital costs and increasing future repair costs as assets further deteriorate. Facilities Division is the most important example of chronic underfunding of ongoing maintenance, because its work effects many City departments. When needed maintenance and repair work goes undone, it may accelerate the deterioration of City buildings and could significantly add to the City's deferred capital backlog. Based on a recent sustainability model, Facilities Division estimates a \$30 million deficiency, and is requesting a \$6 million annual ramp up over 5 years beginning in FY 2014. While the City may not be able to fully fund maintenance in FY 2014, it is important to include in the Multi-Year Capital Improvements Plan, realistic projections for needed ongoing maintenance and goals for addressing deficiencies in Facilities Divisions and other departments.
- Capital planning should be a balance of addressing needs of existing infrastructure and adding new infrastructure, like fire stations, to address community needs. While many departments have some type of capital plan for one or more assets, General Fund departments generally did not incorporate all of their assets into the plan. In addition, when a department has a plan that only focuses on new infrastructure, it increases the risk that existing infrastructure will not be fully addressed.



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Attachments:

1. Summary of Asset Management Practices – Enterprise- Funded Departments
2. Summary of Asset Management Practices – General Fund Departments
3. Identifying Capital Needs – Enterprise- Funded Departments
4. Identifying Capital Needs – General Fund Departments

Summary of Asset Management Practices – Enterprise- Funded Departments

Department or Division	Types and Numbers of Primary Assets	Service Levels of Primary Assets	Inventory of Assets	Condition Assessment(s)	Asset Management Plan	Asset Management System
Airports Division, Real Estate Assets Department (READ)	Brown and Montgomery Fields: <ul style="list-style-type: none"> structures runways (25,500 sq ft) taxiways (211,377 sq ft) aprons (7.07 ac) streets lighting systems 	<i>Structures</i> – goals included in lease agreement per City policies and industry standards. <i>Other assets</i> – goals determined by FAA Design Standards, bi-diurnal inspections, and the annual CALTRANS Division of Aeronautics Inspection	<i>Structures</i> – Inventoried RE Portfolio software. <i>Other assets</i> – Inventoried in Excel spreadsheet and included in annual report to the Comptroller.	<i>Structures</i> – Inspected per lease requirements. <i>Runways, taxiways, and Aprons</i> – Inspected bi-diurnally by Airport Operations and semi-annually by City Engineer.	<i>Structures</i> – Developed by lease boilerplate. <i>Runways, taxiways, and Aprons</i> – Based on FAA regulations and policies.	<i>Structures</i> – RE Portfolio software. <i>Other assets</i> – Excel spreadsheet. <i>Does not believe SAP EAM would improve asset management.</i>
Environmental Services Department (ESD)	Miramar (Landfill) Greenery – Heavy equipment primarily used for processing green material and producing greenery commodities (i.e. compost, mulch, and wood chips)/ assets: <ul style="list-style-type: none"> grinders(2) screening machines (2) windrow turner (1) colorizer (1) 	<i>Greenery assets</i> – Do not have distinct goals by themselves, but must be operating at a level that ensures the Miramar Greenery remains in regulatory compliance. <i>Engines</i> must (1) meet Air Pollution Control District (APCD) and California Air Resources Board (CARB) emission regulations and (2) must be operable and in good working order to meet CalRecycle processing timeframes.	<i>All assets</i> – Are captured in SAP's fixed asset module which is updated every two years to ensure accuracy.	Daily asset inspections are conducted by equipment operators to identify any maintenance issues. Equipment engines are assessed regularly based on engine specifications.	No specific plan, but in order to achieve service level goals, ESD conducts (1) scheduled engine maintenance (per engine specifications) and (2) unscheduled maintenance as parts wear and/or fail.	ESD currently developing an Access database to centrally identify, track, and monitor all asset information, such as name of asset, maintenance schedule, and service life.
Public Utilities Department (PUD)	Water System Assets: <ul style="list-style-type: none"> reservoirs (9) treatment plants (3) pump stations (49) water transmission and distribution pipes (3,190 mi) Wastewater System Assets: <ul style="list-style-type: none"> treatment plants (4) major pump 	Goals are based on (1) regulatory requirements for water and wastewater systems per the Water and Sewer Design guidelines and (2) permit requirements issued by various regulating agencies, such as the CA Department of Public Health, and EPA.	Inventory is tracked via three maintenance management systems which focus on specific asset types. In-ground, spatially represented infrastructure is maintained in a GIS system that provides data to	Condition assessment is integral to PUD's operation, and PUD engineering directs ongoing assessments for all asset types which are conducted by field crews. In addition, per its Master Plan and maintenance plans, PUD has a formal Condition Assessment Program, utilizing both	The plan was developed with consultant support in 2006 and updated internally in 2012. It is intended to converge and document the many asset management activities occurring throughout the Department.	PUD has started an effort to replace its 3 existing maintenance management systems—which are obsolete, nonstandard, and fragmented—with SAP EAM. The new system will cost \$20 million over 3 years, but has numerous

Attachment 1

Department or Division	Types and Numbers of Primary Assets	Service Levels of Primary Assets	Inventory of Assets	Condition Assessment(s)	Asset Management Plan	Asset Management System
	stations (8) <ul style="list-style-type: none"> • small pump stations (75) • sewer pipelines (3,146 mi) 		the maintenance management systems.	City and consultant staff, is budgeted at \$28.3 million over the next five years to perform specific assessments of identified assets. The Department is also planning to provide funding in FY 2014 for their buildings to be assessed as part of an effort led by the Facilities Division.		benefits including ability to interface with the City's financial system.
QUALCOMM Division, READ	QUALCOMM stadium Sub-assets: <ul style="list-style-type: none"> • plumbing system • HVAC • electrical system 	Goals are based on industry standards (The National Football League, NCAA Division I Football) and other contractual obligations with tenants.	Asset inventory maintained in a spreadsheet.	Formal condition assessment conducted by AECOM in 2009. Also, informal assessments conducted via staff observations. Staff maintain a hard copy work log to monitor work scheduling and communicate through Word documentation internally.	Long-term plan based on AECOM's Tier 1 assessment of the stadium's structural integrity. Also have maintenance plans for some assets— HVAC, electrical, and plumbing systems have structured maintenance schedules. That plan created a Asset management is driven by construction standards, electrical standards, Coding, Fire Marshal inspection and a variety of other tradesmen-type standards for which compliance is legally required.	No maintenance management system. Implementing SAP EAM would require an additional full-time employee for which is currently not budgeted.

Summary of Asset Management Practices – General Fund Departments

Department or Division	Types and Numbers of Primary Assets	Service Level Goals for Assets	Inventory of Assets	Condition Assessment(s)	Asset Management Plan	Asset Management System
<p>Facilities Division, Public Works- General Services Department</p>	<p>City has total of 1,700 facilities (about 9.2 million sq ft)</p> <p>Facilities Division has primary responsibility for:</p> <ul style="list-style-type: none"> • City Administration Building (CAB) Complex • Park & Rec facilities <ul style="list-style-type: none"> ○ Balboa Park ○ recreation centers ○ pools • some Library facility systems <p>Facilities sells maintenance services to enterprise-funded departments, which have primary responsibility for the facilities that they occupy and operate, including:</p> <ul style="list-style-type: none"> • hangars • water and wastewater treatment plants • pump stations <p>Facilities provides varying support to General Fund departments, which have primary responsibility for the facilities that they occupy and operate,</p>	<p>No formal goals established; current service levels are a result of investment decisions.</p> <p><i>Facility Condition Index (FCI)</i> – used to measure the condition of each building, representing the total cost of required repairs divided by the current replacement value. The scale:</p> <p>Good (FCI ≤ 5.0%) Fair (FCI 5.01-10.0%) Poor (FCI ≥ 10.01%)</p> <p><i>Current conditions:</i> Good – 45% Fair – 27% Poor – 28%</p> <p><i>Potential goals:</i> Good – 60% Fair – 30% Poor – 10%</p>	<p>Facilities’ staff maintains the inventory list for all of these assets in iMaintenance (iMaint), the Division’s maintenance management system. Staff recently began to review the list quarterly and request other departments review and provide input on the facilities that they use.</p>	<p><i>Formal assessments</i> – Most recent assessments of General Fund facilities were completed on the (1) CAB Complex by Staubach in 2008 and (2) 443 primary buildings by Parsons in 2009. These covered about 30% of the City’s facilities but represent about half of the City’s building space (in sq ft).</p> <p>The next assessment will be conducted in 2014 and is anticipated to include about 600 General Fund buildings (about 5 million sq ft) and is estimated to cost about \$1 million. Public Utilities and potentially ESD and QUALCOMM will provide additional funds to have some of their buildings assessed as part of this effort.</p> <p>Note that if not performed as an incidental to scheduled maintenance, formal assessment should be conducted every 4-5 years.</p> <p><i>Informal assessments</i> – Facilities staff conduct informal assessments when performing scheduled preventative</p>	<p>No formal plan due to a combination lack of resources and lack of the administrative /management skills required to develop and implement asset management.</p> <p>Facilities believes having an asset management plan would greatly benefit the Division, as long as they have the minimal resources required to execute the plan.</p> <p><i>Maintenance approach:</i> There are several industry metrics for building maintenance that Facilities could follow:</p> <ul style="list-style-type: none"> • annual funding at 2-4% of current replacement value • a ratio of 70% preventative and scheduled maintenance vs. 30% unscheduled/ breakdown repair • 1-2 hour response time for emergency service calls. <p>In addition, the system or equipment manufacturer generally provides recommendations for preventative and scheduled maintenance.</p>	<p>Facilities utilizes iMaint and believes it is a robust asset management system:</p> <ul style="list-style-type: none"> • specifically designed for facilities maintenance management • capable of doing proper facilities management, including a reports component • user-friendly and flexible. <p>Management noted that the Division’s lack of personnel in quantity and in skills to make full use of this system.</p> <p>The advantage of an SAP EAM:</p> <ul style="list-style-type: none"> • full integration with personnel, procurement and financial management • elimination of double time entry for staff in both SAP and iMaint. <p>Management suspects that the facilities maintenance management portion of SAP will be adequate but not as “friendly” and flexible as iMaint.</p>

Attachment 2

Department or Division	Types and Numbers of Primary Assets	Service Level Goals for Assets	Inventory of Assets	Condition Assessment(s)	Asset Management Plan	Asset Management System
	including: <ul style="list-style-type: none"> • fire stations • lifeguard towers • police stations • comfort stations • trailers and sheds 			maintenance and inspections. The condition of a facility or specific system is communicated to the Work Control Group. Other departments who occupy facilities also perform informal assessments communicate this information to the Division.		
Fire-Rescue Department	<ul style="list-style-type: none"> • buildings (62+) (fire stations, lifeguard stations, fire training center • lifeguard towers • fleet vehicles (350) • helicopters • water vessels Sub-assets: <ul style="list-style-type: none"> • fire alerting system • apparatus doors • generator • exercise equipment Note that this discussion excludes fleet and other vehicles, vocational equipment, aircraft, and sea vessels.	No formal goals established; current service levels are a result of investment decisions. See Facilities Division discussion above.	Fire-Rescue staff update the inventory in an Excel spreadsheet when time allows or as needed. This is currently not tied to SAP for new acquisition of assets.	No formal assessments. Staff conduct visual observations during facility or site visit associated with repairs. Station Captains also conduct facility inspections and fill out a report, and are submitted to Fire-Rescue's Facilities Division. Issues noted are reviewed and if significant enough, are addressed. In previous years, Fire-Rescue's Facilities Division was able to dedicate the time to conduct a yearly conditional assessment of fire and lifeguard stations, but can no longer due so due to limited staff.	No specific plan for facilities. Fire-Rescue programs for future new assets (station facilities) are based on a study for future infrastructures such as CityGate, but the studies do not address existing assets that are already owned and operated. Fire-Rescue believes having an asset management plan would provide a great benefit by enabling the department to determine (1) operations and maintenance and (2) CIP multi-year programming and long-term funding strategies. <i>Maintenance approach:</i> To address needed repairs, Fire-Rescue contracts with private vendors to provide maintenance of certain components of primary assets, such as HVAC systems, generators, and apparatus doors Responds. The Department responds to as needed to day-to-day repairs.	No maintenance management system. Fire-Rescue believes SAP EAM would be greatly beneficial, especially if it is: <ul style="list-style-type: none"> • tied to Public Works' closing of new construction projects (NOC); • all stakeholders are notified of NOC; • the completed asset is added to the asset inventory list; and • the asset begins a regular maintenance schedule and plan.

Attachment 2

Department or Division	Types and Numbers of Primary Assets	Service Level Goals for Assets	Inventory of Assets	Condition Assessment(s)	Asset Management Plan	Asset Management System
<p>Library Department</p>	<ul style="list-style-type: none"> • buildings (35 Branch Libraries, 1 Central Library, old Logan Heights Branch Library, old Serra Mesa Branch Library, IBEW Building) <p>Sub-assets:</p> <ul style="list-style-type: none"> • cabinetry • self-check terminals 	<p>No formal goals established for buildings; current service levels are a result of investment decisions. See Facilities Division discussion above.</p>	<p>Library retains an Excel spreadsheet of each branch library and the current Central Library (820 E Street) by year built, square footage, and site size.</p>	<p>No formal assessments.</p> <p>The department maintains an internal Deferred Maintenance Needs List by library, work description, and estimated cost. Data is obtained through regular, informal assessments done by Branch Managers, Supervising Librarians, and Library Buildings Services staff. The Department typically assesses security systems, fire suppression systems, roofing, painting, landscaping, HVAC, parking lot conditions, ADA compliance, doors, windows, other sub-assets as needed. The goal is to conduct an annual assessment in the early months of each new calendar year (January or February).</p> <p>Facilities Division is responsible for formal condition assessments and deferred maintenance schedules.</p>	<p>For buildings, the department adheres to the Library System Improvements Plan which was approved by the City Council in 2002.</p> <p>Library has not developed an updated, formal asset management plan due to limited staff and resources, but believes such a plan would benefit the department.</p> <p><i>Maintenance approach:</i> The Library Department’s goal is to “Create inspiring places that are accessible, safe, and a source of pride.”</p> <p>To accomplish this, the Department has developed broad objectives:</p> <ul style="list-style-type: none"> • Providing an appropriately-sized library system • Improving library facilities and their accessibility. <p><i>Basis of objectives</i> - National Guidelines and guidelines and planning tools published by the American Library Association for library facilities and the San Diego Public Library .</p>	<p>No maintenance management system.</p> <p>Library believes an Asset Management System would provide an efficient tool for:</p> <ul style="list-style-type: none"> • asset tracking, • maintenance, • determining the residual life cycle and replacement costs of an asset, • optimizing operation and maintenance investments, • optimizing capital investments, • assistance with determining funding strategies, and • assistance with replacement of assets. <p>More information and evaluation is needed to be certain that an SAP EAM for the Library is the best direction, or if joining a Citywide SAP EAM is best.</p>

Attachment 2

Department or Division	Types and Numbers of Primary Assets	Service Level Goals for Assets	Inventory of Assets	Condition Assessment(s)	Asset Management Plan	Asset Management System
<p>Park & Recreation Department</p>	<ul style="list-style-type: none"> • developed parkland-9,180 acres • open spaces - 26.280 acres • recreation centers-56 • aquatic centers -13 • athletic fields-190 • athletic fields with lighting-87 • golf courses-3 • cemetery-1 • playgrounds -300 • skateparks-5 • dog parks-15 • outdoor basketball courts-200 • tennis courts-150 • comfort stations-160 • ball diamonds-300 • oceanfront beach shoreline-25.9 miles • fishing piers-2 • visitor's centers-2 <p>Sub-assets</p> <ul style="list-style-type: none"> • Ornamental fountains-20 • irrigation systems • turf • trees • boardwalks • picnic shelters • maintenance/storage sheds • equipment sheds • concession stands 	<p>No formal goals established. Parks defers to Facilities Division for buildings and Street Division for roads and parking lots (to a limited extent).</p> <p><i>Industry standards:</i> There are general industry standards for items such as replacement or renovation of turf and irrigation systems which are based on usage.</p> <p>There are well-defined standards for playground safety and accessibility which are achieved when playgrounds are renovated via a capital project. Since no specific funding source is available to address capital infrastructure needs, the Department's goal of providing quality parks and programs depends a great deal on daily, ongoing maintenance practices—such as mowing, cleaning restrooms, and waste removal— and not on meeting deferred maintenance or deferred capital needs.</p>	<p>Park & Rec maintains a partial inventory (Excel spreadsheets, ArcGIS data, and hard copies), but does not have a comprehensive master inventory of smaller assets or extensive details regarding larger assets.</p> <p>Acreage inventory is managed by READ though the Department does have some breakdown on how the gross acres managed by READ is used, such as acres of athletic fields, passive park acres, hardcourts, etc.</p>	<p>No formal assessment has been conducted or is planned. A comprehensive assessment of the City's park system (phase 1 of the Master Plan) has been recommended since 2002, but the Department lacks resources and funding has not been identified. This assessment is estimated to cost \$0.3-1.0 million.</p> <p>Park & Rec primarily relies on staff and community member observations to bring asset conditions to the Department's attention. Staff will assess an asset if there is a specific request or a safety issue has been raised, such as playgrounds and the ADA path of travel to playgrounds.</p>	<p>No specific plan, but the Park & Recreation Department believes an asset management plan would benefit the Department, but lacks the resources and consultant funding needed.</p> <p><i>Maintenance approach:</i> Department has developed Park Maintenance Standards which establish a standard of care based on a schedule or timeframe for conducting park maintenance tasks. Additional maintenance and repairs are conducted as needed in response to staff or community member observations.</p>	<p>No maintenance management system. Park & Rec believes that, if resources were provided, an SAP EAM system would greatly improve asset management for the Department. However, resources would need to be provided beyond the system—including assessing the condition of Park & Rec assets and staff to maintain and operate the system.</p>

Attachment 2

Department or Division	Types and Numbers of Primary Assets	Service Level Goals for Assets	Inventory of Assets	Condition Assessment(s)	Asset Management Plan	Asset Management System
<p>Police Department (PD)</p>	<ul style="list-style-type: none"> • buildings (headquarters, 9 police stations, police support facilities, storage buildings) • aircraft • helicopter • fleet vehicles <p>Sub-assets:</p> <ul style="list-style-type: none"> • security access system • fire alarm • AC units • generator <p>Note that this discussion excludes fleet and other vehicles and aircraft.</p>	<p>No formal goals established for condition of buildings; current service levels are a result of investment decisions. See Facilities Division discussion above.</p>	<p>Inventory is provided by the Comptroller's Office in an Excel spreadsheet.</p>	<p>PD does not have a formal procedure to consistently inspect assets due to lack of resources. Staff observation is the current procedure for identifying the condition of assets.</p> <p>PD believes it needs to conduct assessments of both infrastructure and support equipment biannually. Currently there are no lifecycles or replacement timelines associated with these types of assets. An inspection would capture the physical location, the condition and the time of use of the assets. The estimated cost is \$5,000.</p>	<p>The Police Department has a limited asset management plan that only captures the physical location of the asset. No information on condition, lifecycle, preventative maintenance schedule or replacement is included.</p> <p>PD believes that a comprehensive plan would capture all information needed to plan for future needs. Lack of personnel and money has prevented the Department from developing a proper plan.</p> <p><i>Maintenance approach:</i> PD has established service level goals for maintenance of assets using trade knowledge, manufacture recommendations and industry standards. The goal is to establish asset type preventative maintenance programs and lifecycles. Currently, Maintenance is performed on an as-needed basis and preventative maintenance is done as time permits.</p> <p>Not all service level goals are met due to lack of personnel which creates a system of "repair when broken". PD would like to be more proactive in all areas of Asset Management.</p>	<p>No formal EAM system. PD uses a form of Microsoft Access developed by an employee to capture work requests and track repairs. If a true EAM system was used it could track preventative maintenance schedules, equipment information and life cycles. No current cost for a system has been assessed.</p>
<p>Storm Water Division, Transportation & Storm Water (TSW) Department</p>	<ul style="list-style-type: none"> • storm drain structures (>48,000) • drainage pipe (750 miles) • storm water pump stations (15) • Best Management 	<p>Although Storm Drain assets do not have a specific condition index, Storm Water staff adopted the distribution of risk measure generally</p>	<p>Strain Water Division maintains and manages the inventory of storm drain assets in GIS with work</p>	<p>Assessments/ inspections were conducted between 2010 and 2012 for all pump stations and corrugated metal pipe (CMP). Risk-based modeling is being used</p>	<p>Storm Water is working with a consultant to develop a watershed based asset management plan for each of the City's six watersheds. Each plan will include a minimum level of service for maintenance of the storm drain system based on flood capacity standards and</p>	<p>Storm Water uses SAP as a work management tool. All asset attribute information (e.g. location, year of installation, asset type, etc) is managed by GIS.</p>

Attachment 2

Department or Division	Types and Numbers of Primary Assets	Service Level Goals for Assets	Inventory of Assets	Condition Assessment(s)	Asset Management Plan	Asset Management System
	<p>Practices (BMP's) (30 and growing annually at about a rate of 5 per year)</p>	<p>used for similar assets such as wastewater distribution systems as a condition index for drainage pipes. Risk is based on the probability and consequences of failure. Although there is no nationally adopted or recommended distribution of risk level, the general consensus amongst municipalities and consultants is to maintain the network with no more than 20% in the high risk category.</p> <p><i>Current conditions:</i> Low risk – 37% Medium risk – 53% High risk – 10%</p> <p><i>Potential goals:</i> Low risk – 55 % Medium risk – 43% High risk – 2%</p>	<p>orders being managed in SAP. This is based on a comprehensive inventory updated by a consultant in 2009. Staff estimates it would take about \$250,000 to update this inventory.</p>	<p>to assess the for reinforced concrete pipe (RCP). Currently, a multiyear effort is underway to assess the storm drain outfalls in canyons. This is anticipated to be completed in 2014.</p>	<p>water quality regulations. The plan is anticipated to be completed in 2013.</p>	<p>Storm Water has not assessed its ability to utilize the SAP EAM module.</p>
<p>Street Division, TSW</p>	<ul style="list-style-type: none"> • streets • alleys • street lights • traffic signals • street trees • traffic signs • curb ramps • sidewalks (technically sidewalks are owned and operated by the 	<p>No formal goals established; current service levels are a result of budget decisions by the Mayor ad Council.</p> <p><i>Overall Condition Index (OCI)</i> – a weighted index used to measure pavement condition which is calculated using</p>	<p>The inventory of assets is maintained by Street Division using GIS, SAP, and Cartegraph.</p> <p>New streets are added to the inventory through mostly private</p>	<p>Comprehensive condition assessment of 100% of asphalt and concrete streets completed in November 2011. It is recommended that the street network be assessed every four years. The next assessment is planned for FY 2015 for an estimated cost of \$500,000. In previous</p>	<p>No formal asset management plan,; however, the Division has developed a five-year resurfacing plan which is essentially a preventative maintenance plan for streets. The preventative maintenance approach is based on a schedule of slurry seal at years 7 and 14 and asphalt overlay at year 21.</p> <p>Street Division believes an asset management plan would be</p>	<p>Street Division uses its' Pavement Management System (Cartegraph) and SAP to manage its assets. The Cartegraph software was specifically designed and is continually improved for pavement management/ asset management, and is the standard software used by many local agencies around the</p>

Attachment 2

Department or Division	Types and Numbers of Primary Assets	Service Level Goals for Assets	Inventory of Assets	Condition Assessment(s)	Asset Management Plan	Asset Management System
	<p>adjacent property owners, but street department provides maintenance when there is a safety risk)</p>	<p>weighted attribute characteristics, such as surface distress and ride quality.</p> <p>The scale: Good (OCI ≥ 70) Fair (OCI 40-69) Poor (OCI ≤ 39)</p> <p><i>Current condition:</i> Good – 35% Fair – 40% Poor – 25%</p> <p><i>Potential best case goals:</i> Good – 60% Fair – 30% Poor – 10%</p> <p>While the transportation industry has not set specific OCI goals, some jurisdictions set a target of average OCI of 70 or higher.</p>	<p>development. The streets are then dedicated to the City as Right-of-Way.</p>	<p>years, the costs of assessments have funded by the Street Division’s operating budget and has been challenging for the Division to absorb.</p>	<p>beneficial, but currently lacks a dedicated asset manager position and other needed resources for developing the plan.</p>	<p>country.</p> <p>The strengths of the software include the ability to perform maintenance and budget scenarios for varying situations. It is also integrated with Street Division’s GIS database which is used to manage street-related assets. Street Division uses SAP primarily for its workflow process to manage the daily work of in-house staff.</p>
<p>Transportation Engineering Operations Division (TEO), TSW</p>	<ul style="list-style-type: none"> bridges 	<p>Service levels are based on overall 80+ sufficiency rating. The rating criteria are developed by CALTRANS and take into account structural deficiency and serviceability.</p> <p>Bridges with sufficiency rating of 50 to 80 are eligible for rehabilitation. Bridges with sufficiency rating below 50 are eligible for replacement. For</p>	<p>TEO maintains the inventory of bridges in and Access Database with a GIS layer, but does not include bridges for which Park & Rec has responsibility.</p>	<p>As mandated by the federal government, CALTRANS assesses the conditions of bridges biannually and provides inspection results to the City.</p> <p>The sufficiency rating formula is a method of evaluating highway bridge data by calculating four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service.</p>	<p>No formal asset management plan, maintenance and prioritization of projects for bridges is governed by inspection reports related work recommendations provided by CALTRANS .</p>	<p>No formal EAM system. TEO uses Access with a GIS layer,</p>

Department or Division	Types and Numbers of Primary Assets	Service Level Goals for Assets	Inventory of Assets	Condition Assessment(s)	Asset Management Plan	Asset Management System
		structures that have a sufficiency rating above 80 it may be considered to participate with the Bridge Preventive Maintenance program to extend the service life.		<p>The four factors are:</p> <ul style="list-style-type: none"> • S1: Structural Adequacy and Safety (55% maximum). Followings are the values considered: • S2: Serviceability and Functional Obsolescence (30% maximum). Followings are the values considered: • S3: Essentiality for Public Use (15% maximum) • S4: Special Reductions (13% maximum) 		

Identifying Capital Needs – Enterprise- Funded Departments

Department or Division	Master or Capital Plan	Process for Identifying Capital Needs	Prioritization	Funding Sources
Airports Division, Real Estate Assets Department (READ)	3-5 Year Airport Capital Improvement Plan (ACIP) is required by the Federal Aviation Administration (FAA).	ACIP list developed by analyzing the airports' safety requirements with input from the FAA and the Airports Advisory Committee (updated annually).	Projects prioritize using the criteria of safety and budget.	Revenues from leases and parking, landing, and fuel flowage fees; FAA grants
Environmental Services Department (ESD)	No capital plan. Most projects identified in the capital budget are maintenance projects and ESD is working to transition these to its operating budget so that the capital budget accurately reflects the Department's capital needs.	Department identifies and prioritizes capital needs for Miramar Landfill and the City's closed landfill sites based primarily on regulatory requirements. Regulatory agencies, such as the Regional Water Quality Board and CalRecycle, drive the needs of the City's landfills. These sites are monitored and inspected on an ongoing basis to ensure compliance.	Prioritized based on the needs of the Greenery. ESD identifies and budgets for the replacement and/or addition of key assets as pieces of equipment age, regulations are created/revised, and customers' needs change.	Refuse Disposal CIP Fund, Energy Conservation Program Fund, loans, grants
Public Utilities Department	System-wide facility master plans for both the water and wastewater system, updated on a five-year cycle	Capital needs lists were developed primarily from the master plans, condition assessments, and operations personnel observations	Prioritized based on Council Policy 800-14 and sub-criteria developed from staff and the Independent Rates Oversight Committee. The sub-criteria help to better define the nature of water and wastewater projects in order to score and rank all deficiencies/ projects.	Water and Sewer Enterprise Funds, grants, loans, bond financing
QUALCOMM Division, READ	AECOM Plan, 2006 (serves as plan for both maintenance and capital needs)	Prior to the start of every new budget planning process, staff meets in the late summer each year to establish what is needed and how to budget for it.	Prioritization of capital needs is based on: <ol style="list-style-type: none"> 1. life/safety issues, 2. what do we have to do to be able to perform events and 3. responding to unexpected expenses in an aging facility. 	QUALCOMM Stadium Operations Fund

Identifying Capital Needs – General Fund Departments

Department or Division	Master or Capital Plan	Process for Identifying Capital Needs	Prioritization	Funding Sources
Disability Services	ADA Transition Plan, 1997 List of 183 city facilities with ADA deficiencies based on accessibility consultant survey	Unfunded needs list based on Transition Plan, list of deficient facilities, and ADA complaints received from citizens. The list could be revised to reflect recent building and ADA codes changes if Disability Services had additional staff with the technical expertise to update the scopes of work and construction estimates.	Projects are prioritized in accordance with Council Policy 800-14.	Deferred capital bond, Developer Impact Fees (DIF), land sales
Facilities Division, Public Works-General Services Department	No master or capital plan due to resource limitations. <i>Note that CIP projects for buildings could also be planned by asset owning departments.</i>	Capital needs largely based on the 2009 condition assessment (Parsons Report). Periodic failures are injected into the list as well. List could be improved by updating in FY2014 and obtaining input from General Fund Departments and the public.	Recently Facilities has engaged with all General Fund departments with the help of Engineering & Capital Projects to prioritize projects using Council Policy 800-14.	Deferred capital bond
Fire-Rescue Department	CityGate Report identifies critical needs for new fire stations Citywide. A master plan for all assets would address current, ongoing and future needs for all assets, consistent with the growing population in future public and private developments.	Primarily based on CityGate report. Capital needs for existing fire stations and lifeguard stations is based on the life of the asset. Another way of assessing future asset needs is based on development permits where California Environmental Quality Act (CEQA) documents are reviewed in relation to any potential impacts to existing public facilities.	Prioritized internally, based on Citygate, replacement of an existing asset, asset condition, criticality, risk to public health and safety, funding availability, location, politically initiated, public input, etc.	Lease revenue bond for CIP, DIF and FBA, Community Development Block Grant (CDBG), donations
Library Department	The Branch Library Facilities Report, 1998 21 st Century Library System /Library Facilities Improvements Program, 2002	Needs are based on plans. New construction is currently driven by funding. Projects that have sound funding sources progress faster, and may receive a higher ranking in the CIP budget. These will need to be updated since most project n hold due to lack of funding and the department continues to evolve within standard	Capital projects for repair, upgrades/ improvements, and ADA compliance are prioritized based on criticality and available funding. When selecting and phasing new library construction, the following are considered: <ul style="list-style-type: none"> • Age, condition and size of the current building • Size of population served 	California State Library Grants, Lease revenue bond for CIP, private donations

Attachment 4

Department or Division	Master or Capital Plan	Process for Identifying Capital Needs	Prioritization	Funding Sources
		guidelines as community needs develop.	<ul style="list-style-type: none"> Proximity to other libraries; Readiness and/or status of the project to proceed (including whether a site has been identified, acquired, design started, and the availability of funding). 	
Park & Recreation Department	<p>No park system master or capital plan due to resource and funding limitations.</p> <p>A master plan would identify the park system's capital needs, allowing Park & Rec to plan for future CIP investments, apply for grants, and search for donations and outside resources.</p> <p>Five-Year Golf Plan, 2012</p>	<p>The Unfunded Park Improvement (UPI) List is developed by receiving input on needs within our park system from staff members and public input. The UPI list is not comprehensive and does not reflect a professional conditions assessment.</p> <p>List could be improved by conducting professional assessment of each item on the list and more refined cost estimates associated with each item.</p>	Needs are identified after a funding source is identified. If a funding source is available to several potential projects, the projects are evaluated on a case by case basis by using such factors as severity of the need, citizen complaints, political influence and how much the funding source could actually accomplish. Two playgrounds may score the same based on the criteria in 800-14, but one may have a higher need than another or the funding source may only allow the completion of the smaller, lower priority project.	DIF and FBA, Golf Enterprise Fund, Park Service District Fees, CDBG, Regional Park Fund, federal and state grants
Police Department	Five-year plan includes list of some capital needs and a deferred maintenance plan.	Needs are identified based on staff observations.	Prioritized based on what's most critical for life safety operations and then facility assets. Some projects are prioritized because of regulatory compliance or energy efficiencies.	Deferred capital Bond, developer funds
Storm Water Division, Transportation & Storm Water (TSW)	Developing an asset management plan, but no master or capital plan. A master plan would show the need for resources and provide support for investment decisions.	<p>As funding is allocated toward drainage repairs, projects are selected from the list of locations that have already been investigated.</p> <p>Division lacks sufficient resources to investigate all infrastructure deficiencies.</p>	Prioritized based on structural score for pipes, pollution reduction and opportunity for pollution prevention projects (BMP's)	Deferred capital bond, federal and state programs and grants
Street Division, TSW	Five-Year Resurfacing Plan, 2012	As funding is allocated and approved, streets from our multi-year capital improvement plan are selected for project implementation.	Based on Street Division's established criteria for selecting streets for asphalt overlay or slurry seal.	Deferred Capital bond, TransNet, Prop 42
Transportation Engineering Division, TSW	Regional Transportation Improvement Program (RTIP), 2012 (amended every year and updated biannually)	Develops a Transportation Unfunded Needs List based on community plans, financing plans, citizen requests, master plans, engineering analysis, & corridor studies.	Projects are prioritized in accordance with Council Policy 800-14.	TransNet, DIF, Regional Transportation Congestion Improvement Program (RTCIP), Grants.