



THE CITY OF SAN DIEGO
REPORT TO THE CITY COUNCIL

DATE ISSUED: January 16, 2015

REPORT NO: 15-008

ATTENTION: Infrastructure Committee Agenda of January 21, 2015

SUBJECT: City of San Diego Fiscal Years 2016 - 2020 Consolidated Multi-Year Capital Planning Report

REQUESTED ACTION:

None, this report is for information purposes only.

STAFF RECOMMENDATION:

Accept the report.

EXECUTIVE SUMMARY:

Infrastructure can be defined as the physical mechanisms of interrelated systems providing services essential to enable, sustain, or enhance existing community conditions. Infrastructure systems include physical structures, or assets, such as roads, bridges, water supply, sewers, police and fire stations, libraries, and park space, all serving to provide a certain service level to communities. Each day San Diego residents, visitors, and businesses make use of the City's intricate and diverse infrastructure system. The condition of the infrastructure system assets needs to be continually assessed and routinely maintained or scheduled to be replaced to preserve the committed service levels throughout the City. This effort requires the goal of maintaining an ongoing balanced infrastructure system. To achieve this, the City considers the condition of its entire infrastructure asset inventory, examines applicable service level standards, determines any missing asset needs, prioritizes the needs, and identifies potential funding strategies.

The City of San Diego (City) Multi-Year Capital Planning Report (MYCP) introduces the current state of capital planning efforts, provides definitions to critical components of capital planning, identifies challenges in maintaining MYCP efforts, and outlines future efforts in continuously enhancing the City's MYCP. The City's MYCP is neither intended to supplant City policies, nor trump the budget development process or principals for infrastructure projects, rather it is intended to harmonize the two.

The release of the MYCP follows the City's [Five-Year Financial Outlook](#) in order to best align revenue growth projections that are eligible to fund future capital infrastructure needs and supports the development of the Annual Capital Improvement Program Budget. The MYCP includes condition assessment updates of assets known to-date and provides service level

standard definitions, both critical components in establishing consistent criteria when determining citywide capital needs and prioritizing those needs for funding. The MYCP provides for transparency initiatives by informing the public of future infrastructure needs and cost estimates, and providing projected funding sources and amounts to identify funding gaps.

Competing priorities, changing demographics, performance capacity, varying funding mechanisms and numerous other inputs challenge the ability to capture a citywide assessment of the entire infrastructure environment. Therefore, the City has identified the need to develop this report to include known service level standards and updated condition assessments for all asset types.

Although this report is not intended to provide a finance plan, it presents a comprehensive overview of the City's MYCP including current driving factors, reviews of service level standards, a discussion on condition assessment impacts, and a cost analysis. The MYCP serves to continue the ongoing efforts of planning for current and future capital needs and considers solutions to best meet those needs.

EQUAL OPPORTUNITY CONTRACTING INFORMATION (IF APPLICABLE):

PREVIOUS COUNCIL and/or COMMITTEE ACTION: On November 18, 2013, the Public Works Department presented the plan for developing a Multi-Year Capital Planning Report to Infrastructure Committee. On March 26, 2014, the Public Works Department presented Service Level Standard for City Infrastructures to Infrastructure Committee. On July 23, 2014, a presentation was made to the Infrastructure Committee on the status of this report.

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

Key stakeholders include members of the public, the Mayor, City Council, Infrastructure Committee, Office of the Independent Budget Analyst, Capital Improvement Program Review and Advisory Committee, Community Planners Committee and Community Planning Groups, Planning Commission and other stakeholders.

(signature on file)

Tony Heinrichs
Deputy Chief Operating Officer
Infrastructure Branch

(signature on file)

James Nagelvoort
Public Works Department Director
City Engineer



City of San Diego Fiscal Year 2016-2020 Consolidated Multi-Year Capital Planning Report



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1. Introduction

Infrastructure can be defined as the physical mechanisms of interrelated systems providing services essential to enable, sustain, or enhance existing community conditions. Infrastructure systems include physical structures, or assets, such as roads, bridges, water supply, sewers, police and fire stations, libraries, and park space, all serving to provide a certain service level to communities. Each day San Diego residents, visitors, and businesses make use of the City's intricate and diverse infrastructure system. The condition of the infrastructure system assets needs to be continually assessed and routinely maintained or scheduled to be replaced to preserve the committed service levels throughout the City. This effort requires the goal of maintaining an ongoing balanced infrastructure system. To achieve this, the City considers the condition of its entire infrastructure asset inventory, examines applicable service level standards, determines any missing asset needs, prioritizes the needs, and identifies potential funding strategies.

The City of San Diego (City) Multi-Year Capital Planning Report (MYCP) introduces the current state of capital planning efforts, provides definitions to critical components of capital planning, identifies challenges in maintaining MYCP efforts, and outlines future efforts in continuously enhancing the City's MYCP. The City's MYCP is neither intended to supplant City policies, nor trump the budget development process or principals for infrastructure projects, rather it is intended to harmonize the two.

The release of the MYCP follows the City's [Five-Year Financial Outlook](#) in order to best align revenue growth projections that are eligible to fund future capital infrastructure needs and supports the development of the Annual Capital Improvement Program Budget. The MYCP includes condition assessment updates of assets known to-date and provides service level standard definitions, both critical components in establishing consistent criteria when determining citywide capital needs and prioritizing those needs for funding. The MYCP provides for transparency initiatives by informing the public of future infrastructure needs and cost estimates, and providing projected funding sources and amounts to identify funding gaps.

Competing priorities, changing demographics, performance capacity, varying funding mechanisms and numerous other inputs challenge the ability to capture a citywide assessment of the entire infrastructure environment. Therefore, the City has identified the need to develop this report to include known service level standards and updated condition assessments for all asset types.

Although this report is not intended to provide a finance plan, it presents a comprehensive overview of the City's MYCP including current driving factors, reviews of service level standards, a discussion on condition assessment impacts, and a cost analysis. The MYCP serves to continue the ongoing efforts of planning for current and future capital needs and considers solutions to best meet those needs.

2. Capital Planning Development Process

The City of San Diego's Capital Improvements Program (CIP) is a compilation of capital improvement projects and funding sources. CIP Projects are unique construction projects that provide improvements or additions to the City's vast infrastructure. The City of San Diego's CIP is designed to maintain and/or enhance overall quality of life through improving the City's infrastructure. A capital need includes various asset types such as:

- Airports
- Bikeways
- Bridges
- General Facilities
- Libraries
- Parks and Recreation facilities
- Police, fire, and lifeguard stations
- Sewer facilities and pipelines
- Sidewalk improvements
- Storm Water facilities
- Street improvements
- Street lights and traffic signal improvements
- Water facilities and pipelines

Executing the CIP is complex due to the volume, variety of funding sources, and diverse project types. Implementation of the CIP is intended to correlate with the City's adopted [General Plan](#), community plans, and other applicable plans. A capital project is based upon the construction, purchase, or major renovation of facilities, utility systems, roadway projects as well as land acquisition that add significant life and value to the City's assets. All capital projects are requested and represented by a City department (asset-managing department).

The City's [State of the CIP Report](#) issued semi-annually covers activity status and performance data of current CIP projects and current trends impacting the CIP. In 2012, City Council amended several sections in the Municipal Code and three Council Policies, and approved one new Council Policy to implement several streamlining measures. These streamlining measures, which took effect in Fiscal Year 2013, benefited the execution of the City's CIP by reducing time and cost to award contracts, establishing the Multiple Award Construction Contract (MACC) as a new project delivery method, factoring in the Small Local Business Enterprise (SLBE) Program, and increasing public transparency.

Primary Principles of CIP Business and Capital Planning

The MYCP addresses ongoing significant requirements of City capital assets to the infrastructure visions of the future described in the City's [General Plan](#) and adopted community plans through established service level standards. Other primary principals that guide the MYCP include following:

- Establish a consistent process to maintain an asset inventory of each capital need
- Review and forecast of eligible funding sources to support capital needs
- Support sustainability goals such as energy saving projects, construction waste reduction, and water conservation efforts

- Consider disability access infrastructure improvement opportunities across all assets
- Support the development of the Annual Capital Improvement Program Budget
- Promote transparency and community involvement of infrastructure improvements

Each [asset-managing department](#) is responsible for the operations and maintenance needs to improve, repair, or upgrade its own infrastructure through condition assessments and maintenance schedules. A repair that extends life to the asset is considered a capital improvement since it adds value to the asset. Infrastructure needs also include the rehabilitation or upgrade of existing assets and the need for new assets. Other infrastructure needs, such as major upgrades and new facilities, require capital investment. These latter types are referred to as [CIP projects](#). Most work performed by the asset-managing department is considered operational maintenance and repairs funded through their annual operating budgets.

Capital Improvements Program Review Advisory Committee (CIPRAC)

The City applies a consolidated approach by the participation of several City departments organized through a process to develop capital projects and manage CIP funds. This process is currently coordinated by the Capital Improvements Program Review and Advisory Committee (CIPRAC) which includes membership of the following City Departments:

Asset-managing City Departments

Environmental Services
Fire-Rescue
Library
Parks & Recreation
Police
Public Utilities
Real Estate Assets (including airports and stadiums)
Transportation & Storm Water

Service-providing City Departments

ADA Compliance and Accessibility
City Comptroller
City Planning
Debt Management
Development Services
Financial Management
Public Works
Purchasing and Contracting

CIPRAC functions as a City-staffed advisory committee that evaluates all proposed CIP projects using a preliminary scope of work and cost estimates to ensure that a citywide perspective is used to provide the Mayor with CIP budget and project prioritization recommendations. As outlined in [Council Policy 800-14](#), CIPRAC evaluated projects assists decision-makers to compare the costs, benefits, and merits of projects and make best use of available funding sources. CIPRAC also receives proposed projects from the public for consideration. Once proposed needs are vetted and recommended by CIPRAC, the Mayor proposes and City Council reviews and approves all new CIP projects and budgets for new and existing projects.

Purpose and Scope for Capital Planning

While the City's annual CIP has a multi-year financial forecast presented each fiscal year, it does not include the review of critical inputs needed for a comprehensive approach to addressing the City's future capital infrastructure needs.

In 2011, the Office of the City Auditor performed an audit of the CIP which resulted in 24 recommendations ([OCA-11-027](#)) which were further echoed by the Office of the Independent Analyst (IBA) in a series of [infrastructure related reports](#). These audit and analysis reports are also supported by the Mayor's infrastructure initiatives.

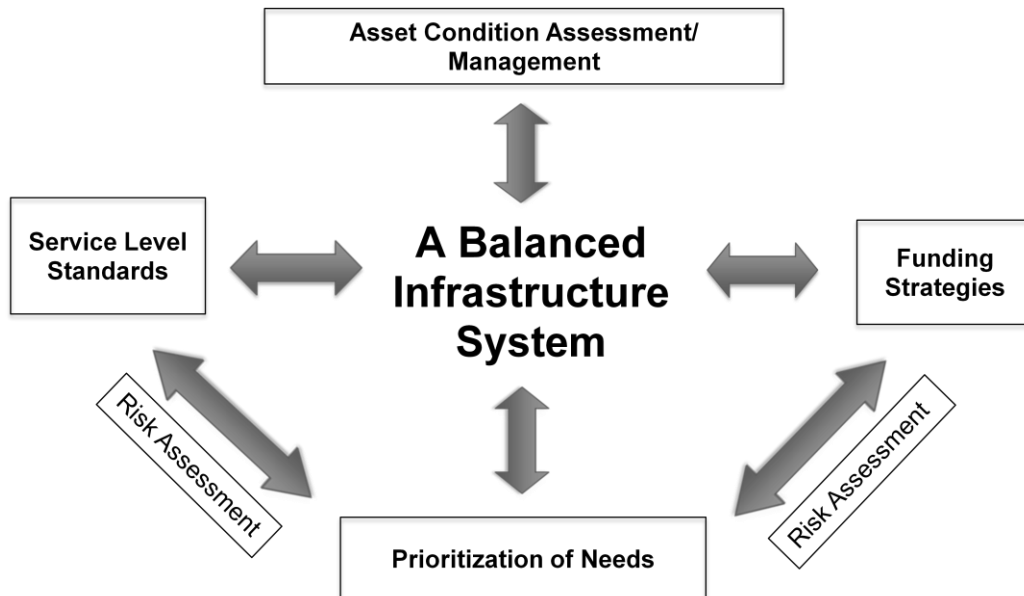
Although the City Charter does not require a multi-year capital planning process, the MYCP serves as the City's comprehensive planning effort and includes identified and potential capital needs for funding consideration during the projected five-year time frame. The MYCP is intended to provide a landscape from which capital needs are evaluated from a citywide perspective.



Photo 1: Central Library

The City's capital planning effort is an iterative process aimed at reaching goals within each critical function of the City's infrastructure system to serve as the starting point in developing future needs. **Figure 1** demonstrates this process.

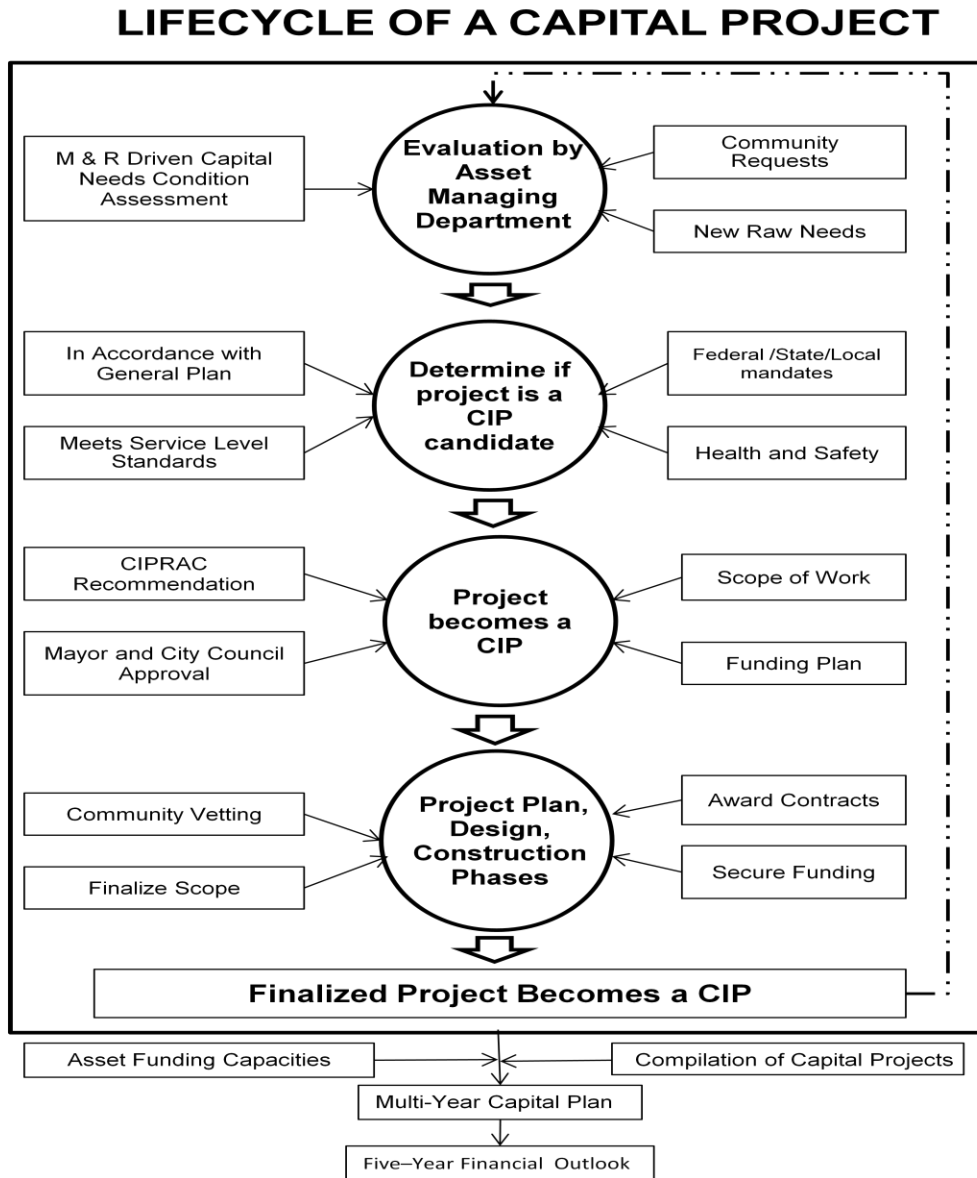
FIGURE 1: A Balanced Infrastructure System



The Government Finance Officers Association (GFOA) recommends, as a best practice, for local governments to develop multi-year capital programming plans in order to more effectively manage capital assets. According to the GFOA, best capital plans include the following components: identifying infrastructure needs; determining costs; prioritizing capital requests; and developing financing strategies.

The City engages in many processes to establish an infrastructure project which includes receiving a proposed need, vetting that request to established criteria, defining scope definition, estimating project costs, assigning prioritization, securing funding, and executing the project to completion within in budget and schedule. **Figure 2** below visually details the process of how an infrastructure project is created and processed and how an asset continues to cycle through the capital improvement process.

FIGURE 2: Lifecycle of a Capital Project



Challenges in Capital Planning

Like most large municipalities, the City experiences competing priorities, changing technology, and new or updated regulations which directly impact the condition of infrastructure assets that can result in necessary adjustments to project plans. Financial challenges include revenue source constraints, construction cost inflation, the cost of maintaining assets, and unidentified funding for projects.

Service Level Standards (SLS) are adopted policies reflecting an objective to carry out or maintain a specific standard applied to infrastructure. Changing demographics, commute patterns, recreational interests and community issues collectively affect the level of standard to maintain. Capital planning serves to deliver the current defined SLS such as providing park space, constructing more fire stations, or improving accessibility in public areas.



Photo 4: Fire Station 23

Each new regulatory requirement, such as wastewater treatment and recent storm water pollution control regulations, presents the possibility of new infrastructure or project revisions and cost increases. As the City further develops and implements an effective asset management system, it will allow for increased access to consolidated information on the current state of assets citywide.

This report is not intended to present needs that align to the current work load capacity of the City. The capacity needed to execute and deliver an approved future Capital Program would need to be assessed and presented during the annual budget development process. Recent and historical statistics on the delivery of the Capital Improvement Program can be viewed in the [City's State of the CIP Reports](#).

3. Adopted Service Level Standards

Service level standards (SLS) define the quantity and/or quality of a public asset or service to provide and play a key role in an asset management strategy, serving as a critical factor in deciding infrastructure investments. The successful outcome of capital planning efforts is the achievement of reaching these levels. These standards measure whether existing facilities and services are adequate. They also serve to measure whether existing capacity is adequate to handle new development, or to determine what facility improvements will be required to avoid overloading existing facilities. As the community grows in population, referring to SLS helps determine which facilities and services will need to keep pace with that growth.

The City's primary source for SLS is the [General Plan \(GP\)](#) last updated in 2008. The purpose of the GP is to serve as the foundation upon which land use decisions in the City are based. It expresses community vision and values, and embodies public policy for future land use. State law requires adoption of a general plan to guide future development and mandates periodic updates to assure continuing relevance. The GP addresses requirements through the following ten elements: Land Use and Community Planning; Mobility; Economic Prosperity; Public Facilities, Services and Safety; Urban Design; Recreation; Historic Preservation; Conservation; Noise; and Housing. Community Plans; federal, State, and local mandates; CIP; and City department standards narrow in on more details regarding service level standards. An amendment to the GP is underway to reflect recommendations from the Fire-Rescue Department Standard of Response Coverage Study which serves to improve emergency response times.

Changing Communities

The City of San Diego is characterized by diverse topography and distinctive neighborhoods within 52 community planning areas. The Planning Department works extensively with community planning groups to update community plans to implement citywide goals and address community-specific issues. Community plans also identify public facilities that are needed to serve the community and implement the General Plan. These facilities are included in financing plans that identify priorities, and existing and potential funding sources. With ten plan updates currently underway and new plan updates scheduled to be initiated in 2015, it is anticipated that new and revised projects will continue to be added to the CIP.

Future Service Level Standards

The City intends to build upon current service level standards to include all asset types, including those that are not presently covered by an SLS or are outdated. The results of these standards will impact the MYCP as they are factored to align with current standards and assessments. New standards may result in revising scope of work and cost projections of CIP projects. **Table 1** below displays various plans that directly or indirectly address SLS and also identifies the asset types that are missing standards.

TABLE 1: Various Plans That Include Service Level Standard Initiatives¹²

Asset Type	SLS Status/ Drivers
Airports	Federal Aviation Administration and Industry Standards
Bicycle Mobility	San Diego Bicycle Master Plan
Bridges	CALTRANS rating criteria
Civic, Cultural and Communities Centers	Facility Condition Index
Disabled Access	Federal Regulation and Laws
Fire Stations	Fire Department Standard of Response Coverage (Citygate)
Golf Courses	Five Year Golf Plan, 2012
Libraries	General Plan and American Library Association Guidelines
Lifeguard Stations	General Plan and Department Standards
Recreation Centers	General Plan and Department Standards
Police Stations	General Plan and Industry Standards
Sidewalks	Community Plans, Mobility Plans, and Transportation Needs List
Sporting Event Venues, Stadiums, Convention Center	Industry Standards and Contractual Obligations
Stormwater	Included in the Watershed Asset Management Plan - 2013
Streetlights	Community Plans, Mobility Plans, and Transportation Needs List
Streets and Roads	Overall Condition Index (OCI)
Water and Wastewater	State and Federal Regulations

¹ Please refer to **Appendix A** of this document for more detailed information.

² Libraries, Sidewalks, and Streetlights asset types currently are in the process of developing or updating SLS.

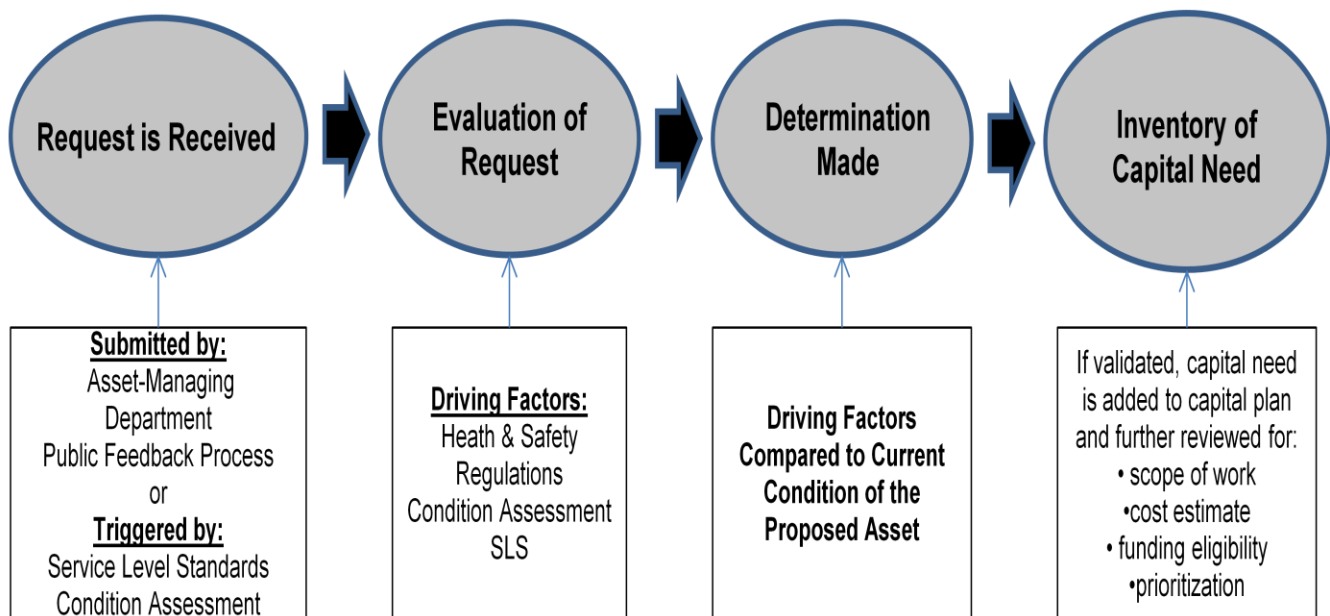
4. Driving Factors

Numerous factors affect what becomes a capital need, including consideration of health and safety, adhering to legal mandates, managing to SLS, and evaluation of asset conditions.

Figure 3 illustrates the planning component of evaluating proposed needs the City receives.

FIGURE 3: Multi-Year Capital Planning- Evaluating Capital Need Requests

Multi-Year Capital Planning: Evaluating a Capital Needs Request Process



Unmet Service Level Standards

Service Level Standards set a threshold for the amount or quality of public infrastructure needed. Newer initiatives such as the Bicycle Program or energy saving projects that have capital improvement components introduce new service level standards that need to be met along with other standards that exist within the General Plan and community plan updates. These standards reflect accepted infrastructure necessities such as increased park space, improved traffic patterns and reducing traffic congestion, and adding public safety facilities.

Health and Safety

Public safety assets are those assets that are used by City staff whose mission is to protect, preserve, and maintain the safety of the community, its environment and property. Typical facilities include lifeguard, fire and police stations. Other types of projects may result in avoiding or reducing risk to public health, safety, and the environment, through improvements such as reducing traffic collisions, sewer spills, and emergency response times.

In 2010, the City commissioned an expert consultant, Citygate, to examine the City's ability to meet response time benchmarks for the Fire-Rescue Department. The Citygate Report included 15 findings and eight recommendations and subsequently, a working group produced a Five-Year Plan that was adopted by the City Council in 2011. Portions of the study results and plan include recommended new safety infrastructure.

Federal and State Mandated Requirements

The City faces a wide range of directives to improve its infrastructure, which have different levels of urgency and consequences if unmet. Some CIP projects must be executed to comply with laws and regulations or may be mandated in legal agreements. Below is a partial listing of applicable legal mandates which could result in the City facing substantial fines or exposure to litigation for failure to comply:

- Americans with Disabilities Act (ADA)
- ADA Guidelines and Standards for Accessible Design
- California Code of Regulations Title 24
- Clean Water Act
- Ocean Pollution Reduction Act
- Safe Drinking Water Act
- California Department of Public Health
- San Diego Regional Municipal Storm Water Permit
- California Code of Regulations, Title 27
- Code of Federal Regulations, Title 40, Part 258



Photo 2: Stanley Park ADA Access

Disability Access Capital Improvements

The Americans with Disabilities Act (ADA) is a comprehensive federal civil rights law passed by Congress in 1990 and updated in 2010. ADA prohibits discrimination and ensures equal opportunity for persons with physical or mental disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation. Specifically, the City of San Diego must comply with Title II of the ADA and ensure all City facilities, programs, services, and activities are accessible to, and useable by, all residents and visitors with disabilities. The Department of Justice (DoJ) investigates and enforces ADA regulations.

The 1990 ADA law mandates local governments create a complaint process for persons with a disability who have an access-related grievance against the municipality. The City of San Diego's formal ADA complaint process is administered by its Office of ADA Compliance and Accessibility. The majority of complaints involve the public right-of-way, such as missing or inadequate curb ramps, missing sidewalks, and requests for accessible pedestrian signals at signalized roadway intersections. Individuals filing a complaint with the City may also file the complaint with DoJ against the City; there is no requirement for an individual to allow for the City to resolve a complaint before it is reported to DoJ. The City resolves all complaints in the most expeditious way feasible, though many public right-of-way complaints include complex design elements that can delay their resolution.

ADA law also requires public entities with 50 or more employees to complete a transition plan that identifies funds and schedules structural changes to facilities and public rights-of-way needed to achieve accessibility. Transition plans are a working document and the City will continue to evaluate its public facilities for compliance with current ADA regulations and update its Transition Plan when appropriate. The City's Transition Plan, adopted in 1996, identified 212 high-use City facilities needing architectural barrier removal to achieve full accessibility, such as libraries, public restrooms, and recreation centers, as well as leased facilities. Barrier removal plans include creating an accessible path of travel.

Condition Assessments of Existing Infrastructure Assets

Knowing the current condition of assets is an important step to determine the operational maintenance, repair, and replacement or capital projects that will be needed to meet desired service levels as well as to provide a citywide picture of the current backlog. In Fiscal Year 2015, the City made a substantial investment in funding condition assessments (**Table 2**).

Since most of these assessments are anticipated to be completed in the next year, new information was not available to use in developing planning efforts in this report with the exception of some preliminary the General Fund facilities assessment data used to serve as a basis for facilities' capital needs. As data becomes available from the ongoing condition assessments, prioritization of scheduling and funding capital needs will be re-evaluated.

TABLE 2: Status of Condition Assessments

Infrastructure Asset	Status
Facilities - General Fund	Anticipated to be completed in FY2016
Facilities - Public Utilities	Anticipated to be completed in FY2015
Facilities - Park and Recreation	Anticipated to be completed in FY2016
Developed Parks	Anticipated to be completed in FY2017
Sidewalks	Anticipated to be completed in FY2015
Streets	Conducted every four years, anticipated to be completed June 2015
Water and Wastewater	Part of Five-Year Condition Assessment Program (FY 2013-2017)

Natural Erosion and Disasters

Over time, much of the physical foundation supporting the City's infrastructure assets are susceptible to erosion and vulnerable to damage due to natural disasters (i.e. earth quakes, floods, fires, etc.). City engineering and planning efforts, along with the support of state and federal offices, work to prepare and respond to reinforce the foundation, the asset(s), or both. This might include retrofitting bridges, reinforcing structural walls, or replacing pipelines.

Community and External Input Gathering

The City is committed to involving the public in developing the CIP. The City gains public input and also provides information on the decisions and activities that have the greatest potential impact on the community. The City is also taking steps to increase public participation, open data, and transparency to better understand public priorities and improve accountability. CIPRAC has adopted goals to collect community input which reflects the intent of [Council Policy 000-32](#) by providing a public process to gain community input on infrastructure suggestions and priorities through Community Planners Committee (CPC).

To identify what infrastructure assets are currently of concern to the communities, the City Council Infrastructure Committee conducted an Infrastructure Workshop Survey to communities through their respective Council Districts in 2013. As a result, out of 20 asset types presented, ten were identified as being the top ranked assets for the community and where they are most interested in investing in these assets in the following order:

1. Streets and Roads
2. Water Infrastructure
3. Wastewater Infrastructure
4. Sidewalks
5. Fire Stations
6. Stormwater Infrastructure
7. Streetlights
8. Police Stations
9. Parks and Recreation Centers
10. Bridges

The CPC, Public Works Department, Office of the IBA, and the Financial Management Department have collaborated to create training sessions for the various planning groups to encourage more community involvement in the development of the CIP and receive community requests. Details of these efforts are further outlined in the [City's response](#) to these requests. The community remains involved in the process as the MYCP continues to develop.

5. Infrastructure Asset Management

Infrastructure Asset Management is a comprehensive and continuous best practice to effectively and sustainably manage assets at a desired level of service for the lowest life cycle cost. The Asset Management approach is based on having key data on infrastructure assets, such as current conditions, so that the City can make optimal investment decisions.

The City owns and maintains a large and complex network of infrastructure assets valued at

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?

approximately \$5.2 billion.³ Historically, the City has not fully utilized an approach needed for managing these assets, which has resulted in a backlog of deferred maintenance and deferred capital needs.

The City already has several efforts underway to assess the condition of assets. The condition assessments provide detailed information on the remaining useful life and cost of replacement or repair of the assets and their associated systems. The replacement costs along with the years that represent the end of each system's useful life are used to compile the capital backlog and capital renewal. Capital backlog is a summation of the assets and/or associated systems that have reached the end of their useful life in 2014 or prior years.

Capital renewal is a summation of the assets and/or associated systems that will reach the end of their useful life in years 2015 and beyond. Due to the size of the capital backlog for various assets such as buildings, it is important to target capital funding strategically in order to ensure reliability of the various assets. For example, systems within a facility are not all equal in terms of their ability to provide a facility that is reliable. Therefore, the capital backlog for the general fund facilities has been compiled and analyzed into three reliability levels based on their impact to operations of the facilities.

The three reliability levels that were analyzed for the Fiscal Year 2014 General Fund Facilities Condition Assessment (capital backlog only) are Level 1 Operations Impacts, Level 2 Deterioration and Level 3 Appearance. Level 1 Operations Impacts represent systems that can lead to partial or full shut-downs of the facility if the systems are allowed to operate past the end of their useful life or are not properly maintained. Level 2 Deterioration represents systems that will shorten the life of the asset and cause deterioration to other systems if allowed to operate past the end of their useful life or are not properly maintained. Level 3 Appearance represents systems that provide the appearance and quality of the facility. It is important to first address the Level 1 Operations Impacts followed by Level 2 Deterioration to ensure reliability.

Enterprise Asset Management System (EAM)

In order to accomplish Asset Management, a software tool or Enterprise Asset Management (EAM) system, is critical in order to properly house the mass volume of complex data. An EAM system allows City personnel to use asset data, such as conditions, to assess and measure the lifecycle costs; store and revise data from the on-going condition assessments; evaluate the status of infrastructure projects; and develop optimal maintenance and capital investment strategies.

A robust and comprehensive EAM system is particularly important given the large number of City assets; complex infrastructure assets; and the sophisticated and significant amount of information that must be collected and analyzed to implement cost-effective strategies and ensure that the City is optimizing limited funds.

In November 2013, the City Council approved Council Policy 800-16 to implement Asset Management business practices citywide. A new position for the City's EAM was hired in October 2014 and is tasked with the primary goals:

- Leading implementation of Council Policy 800-16
- Coordinating departments' Asset Management efforts

³ Based on the unaudited amount reported by Comptroller's Office 2014 CAFR.

- Providing leadership and oversight over the citywide strategic project to implement a unified EAM system

The EAM project is a citywide strategic initiative for implementation of a unified EAM system that integrates data and business processes to facilitate the effective and efficient management of the City's infrastructure assets. The project is critical for replacing existing disparate, obsolete and ineffective maintenance management systems for several City departments, and will serve as the foundation for other departments to implement an EAM system in the future. The project is anticipated to begin in the 4th quarter of Fiscal Year 2015 and be placed into production over the next 33 months through Fiscal Year 2017.

Operations & Maintenance Impacts to Capital Renewal

Assets that are neglected and continue to age and deteriorate for many years often require emergency or reactive, breakdown maintenance, and ultimately cost the City much more than planned preventative maintenance. Conducting annual operational maintenance is vital for maintaining the appropriate lifecycle condition of assets, including both preventative maintenance and corrective repairs.

Lack of performing routine preventative maintenance of assets results in increasing deferred maintenance and deferred capital status, raising risks to public health and safety, and ultimately increases the cost of repairs and replacement. Furthermore, not maintaining a routine preventative maintenance schedule of an asset will upset the capital renewal schedule driving costs higher such as needing to replace a roof sooner than originally planned.

While capital repairs are eligible to be included as a CIP project, any maintenance of the asset are considered operational costs and are typically funded by the asset-managing department's operating budget or other non-capital funding sources. Further, many available funding sources have restrictions on how much of the funds can be used for maintenance such as TransNet, which limits operational maintenance to 30 percent of the total funds the City receives. The [Five-Year Financial Outlook](#) for operating costs identifies the required funding, to the extent possible.

6. Future Funding Capacity

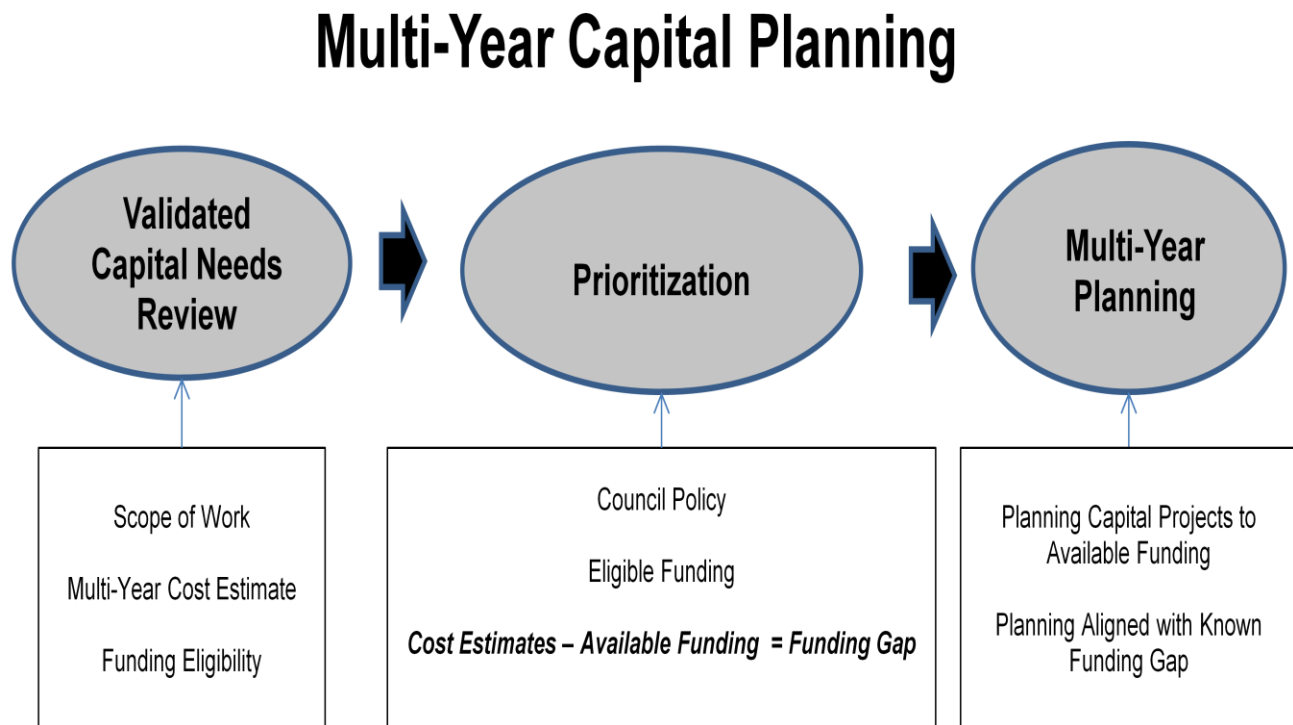
When developing the annual budget for CIP projects, City staff analyze trends in revenue generation, debt levels, general economic factors, new and increased revenues, and changes to project estimates. All project costs including capital costs to complete the project, operating and maintenance expenses that are projected to be incurred upon completion of the project; the ramifications of not implementing the project, and the potential lost opportunity cost to the City if the project is delayed are reviewed annually.

Prioritizing funding sources may be constrained by other factors, such as geographic region or specific funding source requirements. Phase funding is a method of funding which allows the contract or project to be divided into clearly defined phases which are contracted for independently, making available additional funds for other projects during that time while the remaining funds to be phased into the project based on the timing of expenses in future years.

The CIP budget is the mechanism that implements the CIP and fulfills a requirement of the City Charter (Section 69). The City Council annually approves the CIP budget and the allocation of funds for the included projects via the Appropriations Ordinance (AO), which establishes the legal spending authority for each budgeted fund and/or department based upon the adopted budget (City Charter Section 71). These limits include appropriations carried forward from prior years as authorized in the City Charter (Section 84).

Although the budget includes a provision for current year anticipated funding, these funds are not included in the AO as they are either not certain to be received within the fiscal year or that the appropriation of the funds will require additional legal authority. Spending limits, based on updated information, can be amended during the year through City Council action. Once all capital needs are identified with cost estimates, the known revenue sources can be applied and then a known funding gap is calculated. This is further illustrated in **Figure 4** below.

FIGURE 4: Multi-Year Capital Planning- Needs vs. Resources



Funding Sources⁴

The CIP uses a variety of one-time and on-going funding sources to fund capital improvement projects. Appropriating funds to meet capital needs is always contingent upon planning for revenue to be received for a specific year. Definitions, restrictions, and constraints of funding sources to support capital needs are described in **Table 3**.

Some of the funding sources in **Table 3** do not always realize revenue as planned due to economic down-turns (TransNet Funds), lack of land sales (Capital Outlay Fund), rate of development delays (Development Impact Fees and Facilities Benefit Assessment Funds), etc.

⁴ Additional information regarding these CIP fund sources are further described in the [City's Annual CIP Budget](#).

TABLE 3: Capital Project Funding Sources, Restrictions, and Constraints

Funding Source	Restrictions	Constraints
Bond Financing	Limited to infrastructure for which the bonds were intended	Contingent on the ability and option of the City to bond
Capital Outlay	Used exclusively for the acquisition, construction, and completion of permanent public improvements or real property	Contingent upon land sales
Development Impact Fees	Limited to communities in which each fee was collected	Contingent upon development and developers submitting their fees
Donations and Developer Funding	Donations may be restricted by the donor to a particular purpose Developer Funding is restricted to certain projects (or types), in certain areas	Donations must be received by the donor Developer Funding must be received by the developer
Enterprise Funds	Must be used to support the services that provide the revenue	Based on user revenues and established user fee rates
Facilities Benefit Assessments	Limited to the designated area of benefit in the community planning area	Contingent upon development and developers submitting their fees
General Fund	Limited to General Fund-managed Assets	Use of monies for CIP projects impacts the operational budgets of the departments requesting these funds
Grants	Used for purposes approved by granting agency	Contingent upon grant being awarded
Maintenance Assessment Districts (MADs)	Limited to projects within MAD boundaries	Based upon the amount of assessments charged to each property owner in the district
Mission Bay and Regional Park Improvement Funds	Mission Bay Improvements Funds must be used on specific projects listed in the City Charter Regional Park Improvement Funds must be used in the City's regional parks and recommended by the Regional Park Improvements Fund Oversight Committee	Based on annual lease revenue generated in Mission Bay Park
Park Service District Funds	Limited to park and recreational facilities within the district areas from which the funds were collected	These funds no longer collect revenue and have been replaced by a park component of FBAs and DIFs
Special Revenue Funds	Must be used for the specifically identified purpose of the fund	Revenue must be received
TransNet Funds	Limited to projects that provide congestion relief and transportation improvements	Contingent on revenue from a one-half cent local sales tax

Grant funding is difficult to predict for the outlying years of this report's projections due to complex contingency requirements in order to continue eligibility to receive additional grants. This is common for very large scale projects, such as improvements to bridges, as well for Community Development Block Grants. Additionally, Development Impact Fee (DIF) revenue is also not projected beyond Fiscal Year 2016 of this report since this revenue is contingent upon private development which is difficult to predict for outlying years.

General Fund Contribution to Capital Improvements

The City's main operating fund pays for basic City services that use most of the City's tax revenue, such as public safety, parks, and library services is the General Fund. While the primary purpose of the General Fund is to support operational activities, the fund also serves as one of the many funding sources for capital improvements. As reflected in the Mayor's Five-Year Financial Outlook for Fiscal Years 2016 through 2020, a commitment of 50 percent of major General Fund revenue growth is dedicated to fund infrastructure⁵.

This report includes approximately \$72.1 million from the General Fund allocated for CIP projects⁶ for Fiscal year 2016 through Fiscal Year 2020 with \$50.3 million dedicated towards storm water infrastructure and \$12.0 million dedicated towards streets and roads infrastructure. **Table 4** below displays the General Fund projected contribution to capital infrastructure improvements per asset type.

TABLE 4: General Fund Capital Improvement Funding Projection

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 6,650,000	\$ 11,750,000	\$ 16,150,000	\$ 17,250,000	\$ 20,250,000	\$ 72,050,000
Landfills	900,000	-	900,000	-	-	1,800,000
Sidewalks	400,000	400,000	1,400,000	1,400,000	1,400,000	5,000,000
Storm Water	5,350,000	11,350,000	9,850,000	10,850,000	12,850,000	50,250,000
Streetlights	-	-	1,000,000	1,000,000	1,000,000	3,000,000
Streets & Roads						
- Pavement	-	-	3,000,000	4,000,000	5,000,000	12,000,000

Review of Infrastructure Financing

The City has many asset classes and diverse funding sources available to finance CIP. Those CIP projects receive funding through pay go and bond finance programs. Cash or pay go contributions to a capital program are an important funding source. Examples of cash as a funding source include Developer Impact Fees, Facilities Benefits Assessments, TransNet funding, Water and Sewer rate revenue, and various federal and state grants and loans. Generally, funding sources must be applied strictly for purposes intended for a specific program.

For example, the goal of TransNet funding is to reduce traffic congestion, and therefore can only be used for street improvements and for constructing assets within the public right-of-way. Development impact fees are assessed to mitigate the impacts of development on a

⁵ The amounts do not just improve infrastructure but support the entire infrastructure program including bond payments, and new and existing infrastructure.

⁶ This does not include General Fund allocations for capital information technology projects, such as EAM and the Computer Aided Dispatch (CAD) system for public safety.

community, and DIFs assessed within a specific community must be used for expanded or new facilities within the same community.

The City's reliance on bond financing programs is an equitable and affordable means of financing capital projects and represents an important component of capital planning to address the infrastructure commitments within the City's General Fund and Enterprises. It is the City's goal to structure and implement bond financings to provide funding in a timely and cost effective manner for priority capital projects with sound structuring, utilizing a recurring repayment source consistent with the guidelines within the City's Debt Policy.

If CIP projects have a dedicated revenue source and sufficient revenue capacity to support the CIP, those projects are financed on a pay-go basis. Most General Fund assets do not have the revenue capacity/affordability to finance many CIP projects through pay-go. Therefore, the City leverages the General Fund through the issue of long-term bonds to meet CIP needs.

For General Fund civic assets, as an alternative to pay go funding, periodic bond offerings are conducted to fund and restore existing capital assets to a functionally acceptable level and to initiate major new capital investments. The City primarily utilizes Lease Revenue Bonds as a financing strategy to support General Fund capital improvements.

The City's existing general operating revenues are pledged to pay annual debt service on these bonds. The bond obligations do not authorize the City to levy a new tax or a charge to repay the bonds. The Water and Sewer infrastructure projects are financed with the proceeds from Water and Sewer Revenue Bonds, with repayment solely derived from revenue generated by water or sewer rate charges from respective customers.

Historically, given funding constraints and competing priorities, capital funding for General Fund asset classes such as streets, facilities, and storm drains have been deferred resulting in a major capital backlog. To begin to address the capital needs within the existing infrastructure, the City issued bonds for approximately \$213 million between 2009 and 2013. These funds were allocated to address important capital improvements to existing assets and new facilities across the City:

Streets and Sidewalks	\$108 million
Facilities	\$60 million
Storm Drains	\$31 million
Other (ADA, parks, street lights)	\$14 million

In 2014, the City Council unanimously approved an additional \$120 million in bonds to continue to address various capital needs. Among the Enterprise Funds, the Water and Sewer Utilities each have large CIP programs. These capital programs are driven by the need to maintain or replace existing infrastructure, increase capacity, improve process technology, expand the systems to accommodate growth, and/or comply with federal and State Regulations. These utilities are primarily supported by revenues generated by charges to

customers - City residents and commercial enterprises, and participating agencies in the case of the Sewer Utility.

The Water and Sewer capital improvement programs are traditionally funded through a combination of cash, bond proceeds, grants, and State Revolving Fund loans, supported by the respective system revenues. Under the Water Utility CIP program, issuance of approximately \$500 million in bonds is projected between Fiscal Years 2016 and 2018. Currently no bond issuances are projected for the Sewer Utility; the CIP program is projected to be cash funded through Fiscal Year 2018.

Future Year Funding and Proposed Capital Needs

Each fiscal year, many proposed capital needs are considered for future funding opportunities through the annual allocations process. Some needs may lack sufficient identified funding to implement and remain listed as an “unidentified funding” amount summarized in each City Department's Unfunded Needs List.



Photo 3: Ned Baumer Aquatic Center

Future year funding is based upon estimated revenue from the various funding sources. For example, FBAs are dependent upon the rate of development in communities. Although current projections show that revenue should be received, in reality a certain portion of these fees may not be received at the assumed rate.

TransNet revenue projections are based upon sales tax projections provided by the San Diego Association of Governments (SANDAG). These estimates are utilized in preparation of the TransNet five-year program of projects to comply with the Regional Transportation Improvement Program (RTIP). The City's enterprise funds receive revenue from fees and charges to users.

Anticipated funding from these sources is based on revenue trends and fee or rate schedules. If revenue is not sufficient for the five-year period, then the City has other options such as to reduce the scope of projects, transfer operating expenditure savings to capital projects, increase revenues, underfund the CIP, postpone projects or redefine SLs to balance with funding availability.

7. Five Year Capital Planning Outlook: Fiscal Years 2016 - 2020

While the Adopted CIP Budget serves as a planning tool for balancing anticipated funding with needs in the next fiscal year, this report further presents the City's intentions for the future based on projected revenues for new and deferred capital needs over the next five fiscal years through Fiscal Year 2020.⁷

⁷ Projections displayed in this report are not a part of the annual Appropriations Ordinance adopted by City Council.

City asset-managing departments were tasked to identify future infrastructure capital needs. Responses were received to include needs based on driving factors defined in this report. While information was collected on all infrastructure assets, focus was placed on the top ten priority assets identified by the Infrastructure Committee's community survey efforts results as identified earlier in this report in Chapter 4.

Based on currently identified needs, the total projected needs for Fiscal Years 2016 through 2020 are \$3.87 billion and of these capital needs, approximately \$2.16 billion is projected to be funded. The projected funding gap presented in this report for Fiscal Years 2016 through 2020 is approximately \$1.71 billion. **Table 5** below provides a summary of total projected needs over the next five fiscal years, projected funding sources for each asset type, and the estimated funding gap per fiscal year.

TABLE 5: Summary of Infrastructure Needs, Funding, and Projected Fiscal Funding Gap

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Needs	\$ 632,075,738	\$ 805,796,758	\$ 733,877,384	\$ 808,927,396	\$ 892,422,528	\$ 3,873,099,803
Funding	425,337,517	528,722,502	358,965,981	348,809,569	501,926,985	2,163,762,553
Gap	\$ 206,738,221	\$ 277,074,256	\$ 374,911,403	\$ 460,117,827	\$ 390,495,543	\$ 1,709,337,250

The total assessed needs of \$3.87 billion includes information recently received from condition assessments performed on 274 General Fund-managed facilities throughout the City in addition to departmental submissions on new infrastructure needs that have not yet been approved and increases to existing approved projects based on newly received information.

Existing projects partially funded in a prior year may also address needs identified in condition assessments from prior years. The total needs are separated into two categories displayed in **Table 8** and **Table 9**, and further detailed in asset-specific tables (**Tables 10** through **26**). Additionally, new or revised SLS are likely to result in modified needs for various asset types. When this occurs, an update to cost estimates will be necessary thereby altering the funding gap analysis and funding strategies.

This report is not a reflection of all capital needs because not all requested needs have gone through a standardized needs assessment. Identification of available funding must include a validation of both capital project determination and projection of eligible funding sources.

Some asset types, such as the convention center, City piers, new parks, a new stadium, sea walls, leased space or other unconfirmed or pending policy-driven capital needs were not included. **Table 6** provides expanded detail of projected expenditure needs of \$3.87 billion by asset type projected over the next five fiscal years.⁸

⁸ There are several asset types with needs that are fully funded by enterprise funds and not related to the projected fiscal gap. Enterprise Funds account for specific services funded directly by fees and charges to users such as water and sewer services intended to be self-supporting.

TABLE 6: Summary of Infrastructure Needs Fiscal Year 2016 through Fiscal Year 2020

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Asset Type						
ADA	\$ 4,742,900	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000	\$ 38,742,900
Airports	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	12,000,000
Bike Paths	780,000	750,000	750,000	2,181,468	750,000	5,211,468
Bridges	66,910,469	13,055,516	12,967,000	26,264,000	7,601,000	126,797,985
Facilities	21,935,164	32,527,746	32,527,746	44,885,758	48,416,618	180,293,032
Fire Stations	12,199,766	17,558,333	9,193,333	11,245,633	18,670,355	68,867,420
Landfills	900,000	-	900,000	-	-	1,800,000
Libraries	455,000	10,055,000	-	15,443,082	16,771,030	42,724,112
Lifeguard Stations	-	2,000,000	2,000,000	6,735,444	-	10,735,444
Parks	28,502,900	55,139,474	38,006,401	48,423,574	31,221,305	201,293,653
Police Stations	-	11,000,000	-	-	-	11,000,000
Sidewalks	4,359,000	9,040,000	9,174,000	9,309,000	9,448,000	41,330,000
Storm Water	110,013,269	136,097,896	177,968,303	197,357,503	155,786,748	777,223,719
Streetlights	42,090,000	46,538,000	46,664,000	46,794,000	46,926,000	229,012,000
Streets and Roads - Modifications	14,855,000	58,444,490	21,909,995	43,124,701	27,515,507	165,849,693
Streets and Roads - Pavement	83,100,000	83,100,000	83,100,000	83,100,000	83,100,000	415,500,000
Traffic Signals	6,500,000	6,500,000	6,500,000	22,000,000	22,000,000	63,500,000
Wastewater	113,290,243	126,360,272	109,669,162	70,608,398	93,892,440	513,820,515
Water	119,042,027	186,730,031	171,647,444	170,554,835	319,423,525	967,397,862
Total Need	\$ 632,075,738	\$ 805,796,758	\$ 733,877,384	\$ 808,927,396	\$ 892,422,528	\$ 3,873,099,803

In order to effectively plan the execution of capital needs, the City needs to provide reasonable projections of cash flows displayed in **Table 7** of projected funding per asset type.

TABLE 7: Summary of Funding Type Fiscal Year 2016 through Fiscal Year 2020⁹

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Asset Type						
ADA	\$ 792,900	\$ -	\$ -	\$ -	\$ -	\$ 792,900
Airports	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	12,000,000
Bike Paths	30,000	-	750,000	2,181,468	750,000	3,711,468
Bridges	47,063,076	3,275,000	500,000	500,000	500,000	51,838,076
Facilities	18,350,000	18,350,000	750,000	750,000	750,000	38,950,000
Fire Stations	6,353,100	8,365,000	-	-	-	14,718,100
Landfills	900,000	-	900,000	-	-	1,800,000
Libraries	455,000	10,000,000	-	-	-	10,455,000
Parks	24,132,900	40,280,834	21,080,401	22,823,574	14,321,305	122,639,013
Police Stations	-	-	-	-	-	-
Sidewalks	900,000	400,000	2,600,000	2,600,000	2,600,000	9,100,000
Storm Water	31,430,000	37,430,000	9,850,000	10,850,000	12,850,000	102,410,000
Streetlights	-	-	1,100,000	1,100,000	1,100,000	3,300,000
Streets and Roads - Modifications	14,255,000	50,150,000	21,909,995	43,124,701	27,515,507	156,955,203
Streets and Roads - Pavement	44,373,750	44,881,365	13,908,979	19,416,593	23,924,208	146,504,895
Traffic Signals	1,569,521	100,000	1,900,000	1,900,000	1,900,000	7,369,521
Wastewater	113,290,243	126,360,272	109,669,162	70,608,398	93,892,440	513,820,515
Water	119,042,027	186,730,031	171,647,444	170,554,835	319,423,525	967,397,862
Total Funding	\$ 425,337,517	\$ 528,722,502	\$ 358,965,981	\$ 348,809,569	\$ 501,926,985	\$ 2,163,762,553

⁹ Some funding sources are projected only on an annual basis only such as FBAs, DIFs, and some grants. While the needs that may be eligible for these funding sources are projected and included, projected funding beyond Fiscal Year 2016 for these funding sources is not necessarily included.

Summarized in the tables above demonstrate the City's intent to address and identify infrastructure improvement needs and funding options within the next five fiscal years. This does not represent the entire value of all City infrastructure needs since not all needs can be addressed within the next five years. Also omitted are infrastructure needs that are not capital in nature, such as preventive maintenance and repairs performed on an asset.

The report includes two priority category summaries to serve as a broad grouping of needs based on the criteria described below:

Priority Category 1: Capital improvements to existing assets or the construction of new assets to maintain appropriate health and safety standards of the asset itself and/or to comply with legal mandates.

Examples include, but are not limited to, improvements to water and sewer assets to maintain a clean water supply and sanitary sewer treatment conditions, projects to increase and improve access to persons with disabilities, compliance with storm water regulations, and maintaining essential public safety structures to meet emergency response time standards.

In addition, this category includes the residents' top priority of Streets and Roads as identified through a survey effort conducted by the City Council Infrastructure Committee.

Priority Category 2: Capital improvements to existing assets or the construction of new assets to meet or maintain appropriate service and operational goals approved by the Mayor and/or City Council not included in Category 1.

These needs would include the remaining projects included in the Adopted CIP Budget and approved formal study results such as condition assessment and Fire-Rescue's Citygate Report and unfunded regulatory mandates.

In addition, this category includes construction of new assets not included in Category 1 to support operational goals. Examples include new bike paths, streetlights and parks that need greater evaluation to determine geographic area needs of the specific asset and updates to any policy plans.

The summary of each of these categories by asset type is further detailed in **Tables 8** and **9** below. The ability to pair all available and eligible funding to eligible capital needs by asset type is further detailed in **Tables 10** through **24**.

TABLE 8: Priority Category 1

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Need by Asset Type						
ADA	\$ 4,742,900	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000	\$ 38,742,900
Bridges	49,258,076	5,250,000	9,750,000	-	-	64,258,076
Fire Stations	2,500,000	6,166,667	6,166,667	3,666,666	3,670,355	22,170,355
Lifeguard Stations	-	2,000,000	2,000,000	6,735,444	-	10,735,444
Sidewalks	200,000	200,000	200,000	200,000	200,000	1,000,000
Storm Water	110,013,269	136,097,896	177,968,303	197,357,503	155,786,748	777,223,719
Streets and Roads - Pavement	83,100,000	83,100,000	83,100,000	83,100,000	83,100,000	415,500,000
Wastewater	113,290,243	126,360,272	109,669,162	70,608,398	93,892,440	513,820,515
Water	119,042,027	186,730,031	171,647,444	170,554,835	319,423,525	967,397,862
Total Need by Asset Type	\$ 482,146,515	\$ 554,404,866	\$ 569,001,576	\$ 540,722,846	\$ 664,573,068	\$ 2,810,848,871
Total Funding	\$ 354,986,996	\$ 398,651,668	\$ 305,275,585	\$ 271,629,826	\$ 450,290,173	\$ 1,780,834,248
Gap	\$ 127,159,519	\$ 155,753,198	\$ 263,725,991	\$ 269,093,020	\$ 214,282,895	\$ 1,030,014,623

TABLE 9: Priority Category 2

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Need by Asset Type						
Airports	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 12,000,000
Bike Paths	780,000	750,000	750,000	2,181,468	750,000	5,211,468
Bridges	17,652,393	7,805,516	3,217,000	26,264,000	7,601,000	62,539,909
Facilities	21,935,164	32,527,746	32,527,746	44,885,758	48,416,618	180,293,032
Fire Stations	9,699,766	11,391,666	3,026,666	7,578,967	15,000,000	46,697,065
Landfills	900,000	-	900,000	-	-	1,800,000
Libraries	455,000	10,055,000	-	15,443,082	16,771,030	42,724,112
Parks	28,502,900	55,139,474	38,006,401	48,423,574	31,221,305	201,293,653
Police Stations	-	11,000,000	-	-	-	11,000,000
Sidewalks	4,159,000	8,840,000	8,974,000	9,109,000	9,248,000	40,330,000
Streetlights	42,090,000	46,538,000	46,664,000	46,794,000	46,926,000	229,012,000
Streets and Roads - Modifications	14,855,000	58,444,490	21,909,995	43,124,701	27,515,507	165,849,693
Traffic Signals	6,500,000	6,500,000	6,500,000	22,000,000	22,000,000	63,500,000
Total Need by Asset Type	\$ 149,929,223	\$ 251,391,892	\$ 164,875,808	\$ 268,204,550	\$ 227,849,460	\$ 1,062,250,932
Total Funding	\$ 70,350,521	\$ 130,070,834	\$ 53,690,396	\$ 77,179,743	\$ 51,636,812	\$ 382,928,305
Gap	\$ 79,578,702	\$ 121,321,058	\$ 111,185,412	\$ 191,024,807	\$ 176,212,648	\$ 679,322,627

Asset Type Needs

The asset descriptions and accompanying tables provided below present further detail to the projected capital needs, anticipated funding sources, identification of any fiscal funding gaps, and additional clarification and highlights regarding certain unique projects.

Accessibility for Persons with Disabilities- ADA

Disability access improvements are an integral part of several various asset types, including facilities, streets, sidewalks, etc. The Development Impact Fees (DIF) identified in the table below are eligible for ADA curb ramp installations only. All of the other public right-of-way access complaints received are not DIF eligible, such as missing sidewalks or accessible pedestrian signals in which additional funding is needed.

TABLE 10: Accessibility- ADA Asset Type

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 4,742,900	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000
Funding Source					
Development Impact Fees	792,900	-	-	-	-
Funding Source Total	\$ 792,900	\$ -	\$ -	\$ -	\$ -
Gap	\$ 3,950,000	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000

In 2009 the City hired a consultant to update its Transition Plan. The consultant identified 183 high-use public facilities requiring architectural barrier removal. Since 2009 several of the 183 facilities identified have had major architectural barriers removed, though significant work remains at an approximate cost of \$40 million. All facilities requiring ADA barrier removal identified in this report were obtained from the 2009 Transition Plan update.

Total cost for Transition Plan and complaint remediation projects is currently estimated at \$52 million. Since Fiscal Year 2008 the City has invested an average of \$6.8 million annually in barrier removal projects. In addition, all facility renovations and upgrades include current ADA code requirements, and City projects such as its street resurfacing and utility undergrounding programs, and its water and sewer pipeline replacement activities, install hundreds of ADA curb ramps annually. There are currently over 250 open and unfunded complaints with an approximate remediation cost of \$12 million. The remaining facilities on this original Transition Plan are funded but not yet complete.

Environmental Services: Landfills

The Environmental Services Department operates a full-service landfill and maintains eight closed landfills and eight inactive burn sites, all of which require sustained improvements. The Department also manages the City's energy use and a variety of programs focused on implementing innovative alternatives to increase energy efficiency at City facilities.

Through the Capital Improvements Program, the Department identifies and dedicates Refuse Disposal Fund resources to projects that focus on providing reliable solid waste management. In addition, State and federal energy grants and loans are provided to projects that focus on resource conservation and environmental protection to preserve public health and ensure sustainable communities for future generations. **Table 11** below reflects current needs based

on cost estimates for the Natural Gas Fueling Facility and will provide a return on investment that pays for itself and does not include any funding at this time for the Zero-Waste Program.

TABLE 11: Landfills Asset Type

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 900,000	\$ -	\$ 900,000	\$ -	\$ -
Funding Source					
General Fund	900,000	-	900,000	-	-
Funding Source Total	\$ 900,000	\$ -	\$ 900,000	\$ -	\$ -
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Fire-Rescue: Fire and Lifeguard Stations, Training Sites, Communication Centers, etc.

The Fire-Rescue Department is committed to replacing and rehabilitating Fire-Rescue facilities in order to serve a population of 1.3 million within a 343 square mile area. The Department has 46 fire stations, a fire communications center, an air rescue facility, a training facility, nine lifeguard stations, a boat dock, and 48 seasonal lifeguard towers. Fire-Rescue capital projects include the rehabilitation and construction of existing stations to ensure that older stations are maintained to extend the life of the asset for long-term cost savings and meet the department's current operational needs, while new stations achieve good quality and sustainable design that enhances the overall urban design of the communities they serve.

Progress made on fire infrastructure includes the updating of the Fire Station Alerting System, and completion of the eastside Mission Valley Fire Station (Station 45). Both of these projects are planned to be completed prior to 2016. The design and construction of the Home Ave. Fire Station has been identified to receive \$2.0 million toward land and design in the Deferred Capital III bonding. In addition, budget was identified in the current fiscal year to study the Citygate recommended Fast Response Squad (FRS) and to place a temporary fire station in the Skyline neighborhood (Station 51).

Table 12 below summarizes the anticipated capital needs to improve time response standards to emergencies throughout the City as defined in the City's formal study performed by the Citygate consultants and also includes Lifeguard Stations.

TABLE 12: Fire and Lifeguard Asset Types

Fire Stations	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 12,199,766	\$ 17,558,333	\$ 9,193,333	\$ 11,245,633	\$ 18,670,355
Funding Source					
Development Impact Fees	1,353,100	-	-	-	-
Facilities Benefit Assessments	5,000,000	8,365,000	-	-	-
Funding Source Total	\$ 6,353,100	\$ 8,365,000	\$ -	\$ -	\$ -
Gap	\$ 5,846,666	\$ 9,193,333	\$ 9,193,333	\$ 11,245,633	\$ 18,670,355
Lifeguard Stations	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ -	\$ 2,000,000	\$ 2,000,000	\$ 6,735,444	\$ -
Funding Source Total	\$ -	\$ -	\$ -	\$ -	\$ -
Gap	\$ -	\$ 2,000,000	\$ 2,000,000	\$ 6,735,444	\$ -

An Implementation Plan for the Citygate Standards of Coverage report was adopted by the City Council on November 15, 2011. Many of the recommendations contained in the report were capital improvement measures. The report also called for revising all the CIP projects in the Facility Financing Plans. All projects with full or partial funding have been established as CIPs and all Community Plan updates are reviewed by the Department to ensure required fire stations are included in the Facility Financing Plans.

Libraries

The Capital Improvements Program plays an important role in providing new facilities and addressing the capital needs of existing facilities. The Library System includes the Central Library and 35 branch libraries located throughout the City.

TABLE13: Libraries Asset Type

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 455,000	\$ 10,055,000	\$ -	\$ 15,443,082	\$ 16,771,030
Funding Source					
Development Impact Fees	455,000	-	-	-	-
Donations	-	10,000,000	-	-	-
Funding Source Total	\$ 455,000	\$ 10,000,000	\$ -	\$ -	\$ -
Gap	\$ -	\$ 55,000	\$ -	\$ 15,443,082	\$ 16,771,030

Reflected in the above table reflects goals included in the 21st Century system/Library Facility Improvements Program including four branch locations: Skyline Hills, Mission Hills-Hillcrest, San Ysidro, and San Carlos.

Park and Recreation: Parkland, Golf Courses, Regional Parks

The Park and Recreation Department oversees more than 41,000 acres of developed parks, open space, underwater park, and golf courses. With 56 recreation centers, 13 aquatic centers, approximately 256 playgrounds in 8,700 acres of developed parks, as well as over 26,000 acres of open space, and the 110 acre Mt. Hope Cemetery, the Department continually seeks funding for capital improvements ranging from roof replacements to playground upgrades to trail enhancements. The department's CIP is divided into the following three (3) service levels: the GP, Deferred Capital, and community requests.

The GP sets a standard of 2.8 useable acres per 1,000 population. Recreation Centers serve a population of 25,000 or within three miles, whichever is less. Aquatic Complexes serve a population of 50,000 or within six miles. Certain improvements that expand the size of a building or increase usage of a site may be considered park equivalencies. The basis for estimating costs includes land acquisition, park development, and comfort station construction costs. The department's deferred capital asset needs are based on end of facility-life cycle replacement, refurbishment to extend the use, and accessibility improvements.

The Park and Recreation and City Planning Departments aim to secure funding to begin developing a Park System Master Plan in Fiscal Year 2016. Once funded, the effort would take approximately three to four years to complete, led by the Planning Department. The Park

System Master Plan will begin to address park acreage deficits and the costs associated with those deficits. These costs would not be identified until Fiscal Year 2020 with estimates projected for Fiscal Year 2021 and beyond with the assumption that the costs would be staggered over a 25-year period.

The second service level is Deferred Capital, which includes assets that reach the end of their life cycles, require accessibility improvements, and need to be refurbished. Deferred Capital needs that have been identified are included in this report. However, unfulfilled General Development Plans, Public Facilities Financing Plans, Unfunded Park Improvements List, and on-going Park Condition Assessments are among source documents that were not included at this time in determining potential needs.

Community requests may include items that are not required per the GP nor are deferred capital yet are requested by the community in support of a specific upgrade within an existing park. These requests are not quantified at this time and are considered to be outside the five-year planning window. **Table 14** provides greater detail of projected summarized needs for parks, golf courses and needs related to Mission Bay Improvements.

TABLE 14: Parks, Golf Courses, and Mission Bay Improvements

Parks	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 20,518,161	\$ 37,195,039	\$ 28,427,522	\$ 35,407,907	\$ 22,066,481
Funding Source					
Antenna Fund	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000
Developer Funding	1,430,000	-	-	-	-
Development Impact Fees	3,466,089	-	-	-	-
Environmental Growth Funds	1,131,586	1,092,984	1,369,709	1,651,968	1,939,873
Facilities Benefit Assessments	4,900,000	18,180,697	7,063,853	5,009,050	-
Grants	2,311,000	-	-	-	-
Regional Park Improvements Fund	2,661,580	2,814,812	2,892,960	2,971,889	3,051,608
Sunset Cliffs Natural Park Fund	72,906	72,906	-	-	-
Funding Source Total	\$ 16,148,161	\$ 22,336,399	\$ 11,501,522	\$ 9,807,907	\$ 5,166,481
Gap	\$ 4,370,000	\$ 14,858,640	\$ 16,926,000	\$ 25,600,000	\$ 16,900,000

Golf Course	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ -	\$ 9,500,000	\$ 900,000	\$ 4,100,000	\$ -
Funding Source					
Golf Course Enterprise Fund	-	9,500,000	900,000	4,100,000	-
Funding Source Total	\$ -	\$ 9,500,000	\$ 900,000	\$ 4,100,000	\$ -
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Mission Bay Improvements	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 7,984,739	\$ 8,444,435	\$ 8,678,879	\$ 8,915,667	\$ 9,154,824
Funding Source					
Mission Bay Improvements Fund	7,984,739	8,444,435	8,678,879	8,915,667	9,154,824
Funding Source Total	\$ 7,984,739	\$ 8,444,435	\$ 8,678,879	\$ 8,915,667	\$ 9,154,824
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Police: Police Stations

In addition to the Headquarters building, the Police Department serves the community from ten area commands, including Traffic Division, located throughout the City. **Table 15** below summarizes the anticipated capital needs to enhance police operations by improving systems and police facilities citywide and typically reflect needs for police stations, training sites, and communication systems. These needs support operations to ensure the Police Department has the facilities and critical systems in place to provide high quality police services.

TABLE 15: Police Stations

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ -	\$ 11,000,000	\$ -	\$ -	\$ -
Funding Source					
Funding Source Total	\$ -	\$ -	\$ -	\$ -	\$ -
Gap	\$ -	\$ 11,000,000	\$ -	\$ -	\$ -

Public Utilities: Water and Sewer Infrastructure

The Public Utilities Department provides water, wastewater, and recycled water services to approximately 1.3 million water customers and 2.5 million wastewater customers within the San Diego region. The CIP supports the infrastructure for reliable water supply and wastewater collection and treatment. The water system extends over 404 square miles with demands of approximately 172 million gallons per day (mgd). This system includes 49 water pump stations, 29 treated water storage facilities, three water treatment plants, and over 3,000 miles of pipelines.

The Department also manages the recycled water system, which includes three pump stations and over 80 miles of purple pipe delivering an annual average of over 10 mgd for irrigation, manufacturing, and other non-potable uses. The wastewater system consists of the Municipal (Muni) System and Metropolitan (Metro) System.



Photo 5: Point Loma Wastewater Treatment Plant

The Muni System consists of approximately 3,000 miles of pipelines and 77 sewer pump stations and is primarily used to collect and convey wastewater from residences and businesses in the City of San Diego. The Metro System consists of three wastewater treatment plants, one biosolids processing facility, four large pump stations, and two outfalls, and provides treatment and disposal services for the City and 12 other agencies and districts within a 450 square mile area stretching from Del Mar to the north, Alpine and Lakeside to the east, and San Ysidro to the south. The CIP program also includes water projects mandated in the Compliance Order from the California Department of Public Health; meeting requirements of the Safe Drinking Water Act, and providing the needed replacement/rehabilitation of aging infrastructure in compliance with the Clean Water Act.

The City of San Diego faces significant issues with water supply and wastewater treatment. Water is critical to the health, safety and quality of life of people living in San Diego. Currently 85% of our water supply is imported. The region's reliance on imported water causes our water supply to be vulnerable to impacts from shortages and susceptible to price increases beyond our control. At the same time, a decision must be made regarding the future treatment process at the City of San Diego's Point Loma Wastewater Treatment Plant (PLWTP). The PLWTP operates with a Clean Water Act Section 301(h) modified National Pollutant Elimination Discharge System permit. The current modified permit expires on July 30, 2015. There is an opportunity to integrate these two issues into a win-win comprehensive solution, referred to as Pure Water San Diego.

Pure Water San Diego is a 20 year cost effective, integrated water and wastewater capital improvement program to provide a safe, secure, and sustainable local water supply by turning recycled water into drinkable water through the use of water purification technology. Pure Water San Diego benefits the City and the State of California by increasing water independence, significantly reducing reliance on the already stressed Bay Delta, and combating climate change, drought conditions and natural disasters.

By substantially reducing San Diego's reliance on imported water through the State Water Project, the State will realize positive environmental benefits including reductions of water demands from the Delta, reduced energy needs for pumping water south, and reduced maintenance costs on facilities and pipelines. Diverting more water for recycling would also reduce the amount of highly treated wastewater discharged to the ocean. Additionally, Pure Water San Diego eliminates the need for nearly \$2 billion of upgrades to the Point Loma Wastewater Treatment Plant and associated facilities.

Public Utilities Assets has a Five-Year Condition Assessment Program (FY 2013-2017) to provide comprehensive assessment coverage for water and wastewater infrastructure. In addition, the Department continues its ongoing condition assessment efforts including inspection of 40-60 miles of sewer mains per year. The **Table 16** below summarizes the anticipated capital needs to improve existing wastewater and water infrastructure.

TABLE 16: Water and Wastewater Assets

Wastewater	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 113,290,243	\$ 126,360,272	\$ 109,669,162	\$ 70,608,398	\$ 93,892,440
Funding Source					
Sewer Funds	113,290,243	126,360,272	109,669,162	70,608,398	93,892,440
Funding Source Total	\$ 113,290,243	\$ 126,360,272	\$ 109,669,162	\$ 70,608,398	\$ 93,892,440
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Water	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 119,042,027	\$ 186,730,031	\$ 171,647,444	\$ 170,554,835	\$ 319,423,525
Funding Source					
Water Fund	\$ 119,042,027	\$ 186,730,031	\$ 171,647,444	\$ 170,554,835	\$ 319,423,525
Funding Source Total	\$ 119,042,027	\$ 186,730,031	\$ 171,647,444	\$ 170,554,835	\$ 319,423,525
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

In order to keep up with the replacement of aging infrastructure and based on the on-going condition assessment of our system, the Public Utilities Department continues to replace about 45 sewer miles and 30-40 water miles per fiscal year. These capital needs are based on condition assessment results, future demand, policies, and regulatory requirements to continue providing reliable service to our customers and the new innovative, water purification technology to provide a safe and sustainable local water supply by turning recycled water into drinkable water, known as Pure Water San Diego.

Real Estate Assets Department: Airports and Qualcomm

The Real Estate Assets Department manages the Airports Division and Qualcomm Stadium assets. The Airports Division manages Brown and Montgomery Fields with a combined 1,330 acres. These two general aviation airports contain nearly eight miles of runways and taxiways, which safely accommodate over 275,000 annual aircraft operations. The CIP plays an important role by rehabilitating and repairing the pavement and lighting of its runways, taxiways and aircraft ramp areas.

The projected annual revenues of \$2.4 million are based on historical experience over the last several years. Significant projects to highlight include rehabilitation of roadways and taxiways at the air fields in order to maintain airport safety in compliance with Federal Aviation Administrative (FAA) grant requirements and other City regulations. **Table 17** displays projected capital needs and funding for Airports and **Table 18** displays projected values for Qualcomm Stadium.

TABLE 17: Airport Assets

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000
Funding Source					
Airport Funds	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Funding Source Total	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Qualcomm Stadium is a 70,500 seat sports stadium that hosts the San Diego Chargers, San Diego State University Aztecs, the annual Holiday and Poinsettia Bowls, plus Super Cross, Monster Jam and major religious conventions and hosts over one million visitors every year. The 166- acre stadium site opened in 1967, and is now in its 48th year of operation.

The annual allocation provides for needed improvements, including the emergency back-up lighting system, training center HVAC and roof replacement, parking lot, and stadium seating areas. Funding for Capital Improvements Program projects comes from Qualcomm Stadium revenue.

TABLE 18: Qualcomm Stadium

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000
Funding Source					
QUALCOMM Stadium Fund	750,000	750,000	750,000	750,000	750,000
Funding Source Total	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Transportation & Storm Water

The Transportation & Storm Water Department's CIP includes roadway infrastructure within the public right-of-way; drainage improvements in the right-of-way and in drainage easements; and green infrastructure in the right-of-way and on City-owned parcels. Drainage improvements are expected to last 100 years while new green infrastructure is expected to last 20 to 40 years, depending on the asset type.

The Right of Way Coordination Division, Grant Administration coordinates and administers the transportation grants. Currently, the Division is managing 35 active grants totaling approximately \$12.5 million. These grants fund various transportation projects that seek to enhance mobility and pedestrian and bicyclist safety.

The Utilities Undergrounding Program removes overhead power and communication lines and relocates them underground. The City has been undergrounding overhead utility lines since 1970 under the State's 20A mandated Undergrounding Program; however, the City expanded its undergrounding efforts in 2003 following the California Public Utilities Commission approval of an undergrounding surcharge on San Diego residents' electricity bills. This surcharge is the primary funding source for the program.

The expanded program targets to underground approximately 1,400 miles of overhead utility lines throughout the City¹⁰. The Utilities Undergrounding Program provides for resurfacing or slurry sealing curb-to-curb all trenched streets, installing new streetlights in accordance with the Street Design Manual Standards, and installing curb ramps in compliance with Americans with Disabilities Act (ADA) requirements.

To date, approximately 374 miles of overhead utility lines have been undergrounded with 1,065 miles remaining to be undergrounded. Since 2003, with the addition of the surcharge component, the Utilities Undergrounding Program has installed over 1,900 streetlights, 1,500 curb ramps, and resurfaced or slurry sealed 112 miles of roadway. Currently, the Program is in the process of updating the Undergrounding Master Plan to provide up-to-date cost estimates, determine the most cost efficient way to underground overhead lines, and to accommodate the newly created 9th Council District.

The Transportation Engineering Operations (TEO) Division is responsible for engineering traffic systems to improve traffic flow and safety for motorists, pedestrians, and cyclists. This division oversees transportation projects and secures funding for a variety of capital needs such as bike facilities, new sidewalks, new streetlights, and traffic signal communication.

Bike Paths Infrastructure

A [Bike Advisory Committee](#) (BAC) was established by the City in Fiscal Year 2015 to advise on implementation of the Bicycle Master Plan. The BAC has not yet established advisory criteria, and therefore, needs beyond the restriping of resurfaced roadways have not been identified. **Table 19** assumes capital needs within the next five fiscal years that will be adjusted at a later date when capital needs are further defined to support the Bicycle Master Plan.

¹⁰ This may change with the update of the Master plan.

TABLE 19: Bike Paths Infrastructure

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 780,000	\$ 750,000	\$ 750,000	\$ 2,181,468	\$ 750,000
Funding Source					
Facilities Benefit Assessments	-	-	-	1,431,468	-
TransNet Funds	30,000	-	750,000	750,000	750,000
Funding Source Total	\$ 30,000	\$ -	\$ 750,000	\$ 2,181,468	\$ 750,000
Gap	\$ 750,000	\$ 750,000	\$ -	\$ -	\$ -

Bridges Infrastructure

TEO Division's goal for bridges is to perform repairs, rehabilitation, and replacement needs for all bridges inspected by Caltrans within the next ten years along with CIP projects for certain large complex bridges. **Table 20** provides the projected needs and funding gap for the next five fiscal years.

TABLE 20: Bridges Asset Type

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 66,910,469	\$ 13,055,516	\$ 12,967,000	\$ 26,264,000	\$ 7,601,000
Funding Source					
Donations	14,000,000	-	-	-	-
Grants	20,058,076	-	-	-	-
Maintenance Assessment Districts	5,000	25,000	-	-	-
TransNet Funds	13,000,000	3,250,000	500,000	500,000	500,000
Funding Source Total	\$ 47,063,076	\$ 3,275,000	\$ 500,000	\$ 500,000	\$ 500,000
Gap	\$ 19,847,393	\$ 9,780,516	\$ 12,467,000	\$ 25,764,000	\$ 7,101,000

Streetlights Infrastructure

The TEO and Streets Divisions both work on providing streetlights throughout the City. TEO Division establishes new streetlights while the Streets Division replaces existing streetlights. The Streets Division has identified long-term goals replacing street light poles every 50 years. TEO Division's goal is to install 1,777 streetlights by the end of Fiscal Year 2020 and up to 3,877 streetlights by the end of Fiscal Year 2026.

TABLE 21: Streetlights Asset Type

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 42,090,000	\$ 46,538,000	\$ 46,664,000	\$ 46,794,000	\$ 46,926,000
Funding Source					
General Fund	-	-	1,000,000	1,000,000	1,000,000
TransNet Funds	-	-	100,000	100,000	100,000
Funding Source Total	\$ -	\$ -	\$ 1,100,000	\$ 1,100,000	\$ 1,100,000
Gap	\$ 42,090,000	\$ 46,538,000	\$ 45,564,000	\$ 45,694,000	\$ 45,826,000

Streets Infrastructure¹¹

The Street Division manages the City's roadway infrastructure of 2,659 centerline miles of asphalt streets, 115 centerline miles of concrete streets, approximately 5,000 miles of sidewalks, and approximately 50,000 lights. A condition assessment of all City streets was last conducted in 2011. Street Division is currently conducting another condition assessment, which will be complete in 2015. The table below provides projected capital needs for City streets. The Division's long-term goal is to reach a street estimated Overall Condition Index (OCI) of 70 ("Good") for asphalt streets over the next ten years. This will be an increase from the 2011 estimated OCI of 54 ("Fair"). The funding need identified in the table below also includes replacement of concrete streets, and completion of other street infrastructure needs.

TABLE 22: Streets Asset Type

Streets and Roads - Pavement	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 83,100,000	\$ 83,100,000	\$ 83,100,000	\$ 83,100,000	\$ 83,100,000
Funding Source					
Bond Funds	40,480,000	40,480,000	-	-	-
General Fund	-	-	3,000,000	4,000,000	5,000,000
Prop 42 Replacement-Transportation Relief Fund	1,893,750	2,401,365	2,908,979	4,416,593	5,924,208
TransNet Funds	-	-	6,000,000	9,000,000	11,000,000
Trench Cut/Excavation Fee Fund	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Funding Source Total	\$ 44,373,750	\$ 44,881,365	\$ 13,908,979	\$ 19,416,593	\$ 23,924,208
Gap	\$ 38,726,250	\$ 38,218,635	\$ 69,191,021	\$ 63,683,407	\$ 59,175,792
Streets and Roads - Modifications	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 14,855,000	\$ 58,444,490	\$ 21,909,995	\$ 43,124,701	\$ 27,515,507
Funding Source					
Bus Stop Capital Improvement Fund	60,000	60,000	60,000	60,000	60,000
Developer Funding	-	3,538,000	-	-	-
Facilities Benefit Assessments	4,180,000	24,975,000	5,900,000	28,929,676	14,272,100
Grants	500,000	172,000	-	-	-
Maintenance Assessment Districts	65,000	455,000	65,000	65,000	65,000
TransNet Funds	4,450,000	15,950,000	10,884,995	9,070,025	8,118,407
Undergrounding Utilities Fund	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Funding Source Total	\$ 14,255,000	\$ 50,150,000	\$ 21,909,995	\$ 43,124,701	\$ 27,515,507
Gap	\$ 600,000	\$ 8,294,490	\$ -	\$ -	\$ -

Sidewalks Infrastructure

The Streets Division is also nearing completion of the first comprehensive inventory and assessment of City sidewalks. The information from these assessments will be used to identify and prioritize future maintenance, repair, and replacement needs. The Division has identified long-term goals of replacing sidewalks damaged by street trees during the next ten years. Additionally, the target for new sidewalks is to construct 48,500 linear feet of sidewalks by the

¹¹ Capital needs for Streets infrastructure does not include slurry seal which is maintained by the Department's operations and maintenance budget.

end of Fiscal Year 2020 and up to 99,800 linear feet by the end of Fiscal Year 2026. **Table 23** below provides detail of funding sources and projected fiscal gap.

TABLE 23: Sidewalk Asset Type

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 4,359,000	\$ 9,040,000	\$ 9,174,000	\$ 9,309,000	\$ 9,448,000
Funding Source					
General Fund	400,000	400,000	1,400,000	1,400,000	1,400,000
Grants	500,000	-	-	-	-
TransNet Funds	-	-	1,200,000	1,200,000	1,200,000
Funding Source Total	\$ 900,000	\$ 400,000	\$ 2,600,000	\$ 2,600,000	\$ 2,600,000
Gap	\$ 3,459,000	\$ 8,640,000	\$ 6,574,000	\$ 6,709,000	\$ 6,848,000

Storm Water Infrastructure

The Storm Water Division leads the City's efforts to protect and improve water quality and provide flood risk management through CIPs focused on providing the most efficient storm drain system. The Department has developed a Watershed Asset Management Plan that projects the cost of compliance with Storm Water regulations over the next 18 years. In order to comply with these regulations, the Department expects a substantial increase in the number of capital projects. **Table 24** below provides detail of funding sources and projected fiscal gap. The Department is actively working to reduce these costs by refining regulations and initiating non-capital projects to address storm water quality issues, which may result in a reduced cost for compliance.

TABLE 24: Storm Water Asset Type

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 110,013,269	\$ 136,097,896	\$ 177,968,303	\$ 197,357,503	\$ 155,786,748
Funding Source					
Bond Funds	26,080,000	26,080,000	-	-	-
General Fund	5,350,000	11,350,000	9,850,000	10,850,000	12,850,000
Funding Source Total	\$ 31,430,000	\$ 37,430,000	\$ 9,850,000	\$ 10,850,000	\$ 12,850,000
Gap	\$ 78,583,269	\$ 98,667,896	\$ 168,118,303	\$ 186,507,503	\$ 142,936,748

Traffic Signals/Signal Communication

The TEO Division is responsible for management and operation of the City's traffic signal system which includes signal timing, upgrades, installation of new signals and modifications and upgrading of existing traffic signals throughout the City. **Table 25** below provides the funding sources projected to support traffic signals.

TABLE 25: Traffic Signals/Signal Communication Asset Type

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 6,500,000	\$ 6,500,000	\$ 6,500,000	\$ 22,000,000	\$ 22,000,000
Funding Source					
Development Impact Fees	220,000	-	-	-	-
TransNet Funds	1,349,521	100,000	1,900,000	1,900,000	1,900,000
Funding Source Total	\$ 1,569,521	\$ 100,000	\$ 1,900,000	\$ 1,900,000	\$ 1,900,000
Gap	\$ 4,930,479	\$ 6,400,000	\$ 4,600,000	\$ 20,100,000	\$ 20,100,000

City Facilities: General Fund Facilities

The Public Works-General Services Department's Facilities Division provides repair, modernization, and improvement services to over 1,700 municipal facilities incorporating nine million square feet of floor space. The Facilities CIP projects include the construction of new City structures and major improvements to existing buildings, including the backlog of General Fund deferred capital requirements.

The City is conducting a Facilities Condition Assessment to assess existing General Fund buildings, identify replacement items, update and augment current databases, identify capital projects and budgets, and prioritize operations and maintenance work and capital projects. At the time of this report, 274 City facilities had been formally assessed for determining Capital Reinvestment needs for fire, lifeguard, police, and other General Fund maintained facilities and stations. **Table 26** below only represents the estimated backlog for the 274 General Fund maintained facilities such as recreation centers, libraries, and other City office buildings. Estimated capital renewal costs have not been included.

Condition assessments continue to be performed on all City owned facilities, including facilities that are leased to other parties. Leased space condition assessment costs are not included in this report until a full evaluation of all lease terms are reviewed to determine the City's versus the Lessees' obligation at each leased facility.

TABLE 26: City Facilities (Police, Fire, Lifeguard stations and other City facilities)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 21,185,164	\$ 31,777,746	\$ 31,777,746	\$ 44,135,758	\$ 47,666,618
Funding Source					
Bond Funds	17,600,000	17,600,000	-	-	-
Funding Source Total	\$ 17,600,000	\$ 17,600,000	\$ -	\$ -	\$ -
Gap	\$ 3,585,164	\$ 14,177,746	\$ 31,777,746	\$ 44,135,758	\$ 47,666,618

8. Conclusion

Providing adequate public infrastructure involves a continuous review of the City's capital needs and funding programs along with an integrated capital asset management system. This report serves to identify and prioritize expected needs based on unique criteria and project anticipated eligible funding to consider for infrastructure investment opportunities based on the information known at this time. While the Mayor has committed to achieving a streets condition of "Good" over the next ten years, additional asset types require the development of new and revised service level standards and/or completion of condition assessments. This will further the discussion on how future capital needs are prioritized and funded. An example is the development of a new Master Park Plan and how it will drive capital needs in the future.

There are issues that positively impact the City's capital investment performance. Capital planning initiatives including CIP streamlining initiatives, updated prioritization policy, asset management, and organized outreach through City-recognized community organizations are important examples of positioning the City to proactively build and take full advantage of a

robust centralized planning system. The continuation of creating or revising service level standards will shape future needs to meet the City's commitment to communities, user groups, visitors, local business, and other stakeholders. Furthermore, the City's recently boosted and renewed efforts to assess the condition of its assets will provide thorough and cost-effective analyses of infrastructure conditions, assist in prioritizing projects, and help in developing funding plans for all infrastructure needs.

It is evident that the City's capital funding needs far exceed the resources available to support them and creative solutions must be identified to finance the City's ongoing and new capital projects. Without a well-defined capital planning process, the City risks degrading service levels and the value of the infrastructure assets. More reasonable, cost effective and long-term policy goals for the City would be to reduce the amount of work deferred in future years and to reduce backlogs over time. Projects that cannot be funded within limited annual capital funds are tracked to form a basis for other funding strategies. The City must continue to be resourceful in identifying funding to address major infrastructure needs.

Finally, it is the goal of a MYCP to provide increasing ties between the City's operating and capital budgets by demonstrating how capital spending relates to broader City policy and supports the City's infrastructure short and long-term goals.

Appendix A: Summary of Existing Service Level Standards and Plans

Department/ Asset Type	General Plan Element	Identified Service Level Standards	Relevant Documents
Real Estate Assets/Airports <ul style="list-style-type: none"> - structures - runways/taxiways - aprons - streets - lighting systems 	Noise Land Use and Community Planning	Structures are included in lease agreement per City policies and industry standards. Other assets are determined by FAA Design Standards, bi-diurnal inspections, and the annual CALTRANS Division of Aeronautics Inspection.	3-5 Year Airport Capital Improvement Plan required by the Federal Aviation Administration
Real Estate Assets/QUALCOMM <ul style="list-style-type: none"> - plumbing/HVAC/electrical systems 	Land Use and Community Planning	Goals are based on industry standards (National Football League, NCAA Division 1 Football) and other contractual obligations with tenants.	AECOM Plan, 2006
Public Utilities/Water <ul style="list-style-type: none"> - reservoirs - treatment plants - pump stations - transmission and distribution pipes - recycled pipes Public Utilities/Wastewater <ul style="list-style-type: none"> - treatment plants - pump stations - pipelines and trunk sewers 	Public Facilities, Services and Safety Conservation	Based on regulatory requirements for water and wastewater systems per the Water and Sewer Design guidelines and permit requirements issued by various regulating agencies, such as the CA Department of Public Health, and Environmental Protection Agency.	System-wide facility master plans for both updated on a five-year cycle 2012 Long Range Water Resources Plan San Diego Sewer System Management Plan
Parks and Recreation/Park Space <ul style="list-style-type: none"> - developed parkland - open spaces - recreation, youth and senior centers - museums/theaters - aquatic centers - athletic facilities - golf courses - playgrounds - skate & dog parks - comfort stations 	Recreation Historic Preservation Conservation	GP Park Standards: 2.8 usable acres per 1,000 residents. Community parks are 13 acre minimum to serve a population of 25,000, including recreation centers and aquatic complexes. Neighborhood Parks are 1 acre to 13 acres and serve a population of 5,000 within approximately one mile and provide active and passive recreation amenities. Recreation Building for every 25,000 residents, minimum 17,000 SF. Aquatic Complex for every 50,000 residents, 25 meters by 25 yards. Community plans identify locations and types of facilities. Department defers to Facilities Division for buildings and Street Division for roads and parking lots for standards. There are general industry standards such as replacement or renovation of turf and irrigation systems which are based on usage.	Five-Year Golf Plan, 2012
Fire-Rescue/Fire Safety <ul style="list-style-type: none"> - fire stations - lifeguard stations and towers 	Public Facilities, Services and	The goal for Fire-rescue service is to provide the highest level of life safety and protection to the citizens of the City of San Diego. The GP includes t response time standards and additional policies	The Fire Department Standard of Response

Department/ Asset Type	General Plan Element	Identified Service Level Standards	Relevant Documents
<ul style="list-style-type: none"> - fire training center - dispatch systems 	Safety	to achieve this goal. GP amendments are currently being processed to reflect the Citygate recommendations. For lifeguard towers: provide every 1/10 of a mile, or ten towers per mile.	Coverage (Citygate) Fire Station Master Plan
Police/Police Safety <ul style="list-style-type: none"> - headquarter buildings - area police stations - police support facilities and storage buildings - Computer Aided Dispatch System 	Public Facilities, Services and Safety	<p>The mission of the Police Department is to maintain peace and order by providing the highest of police services. GP Response Times Standards:</p> <ol style="list-style-type: none"> 1. Priority E (imminent threat to life) within 7 minutes. 2. Priority 1 (serious crimes in progress) within 14 minutes. 3. Priority 2 (less serious crimes with no threat to life) within 27 minutes. 4. Priority 3 (minor crimes/requests that are not urgent) within 68 minutes. 5. Priority 4 (minor request for police service) within 70 minutes. <p>No formal goals established for condition of buildings; current service levels are a result of investment decisions. Department has established service level goals for maintenance of assets using trade knowledge, manufacture recommendations and industry standards.</p> <p>Most police facilities are operational on a 24/7 basis and must be maintained to acceptable levels in order for police officers and civilian staff to perform their duties effectively and for the department to meet its performance targets.</p>	Five-year plan includes list of some capital needs and a deferred maintenance plan.
Library/ Library System <ul style="list-style-type: none"> - Branch Libraries - Central Library 	Public Facilities Service and Safety	GP Standards: Develop and maintain a Central Library to adequately support the branch libraries and serve as a major resource library for the region. Design all Libraries with a minimum of 15,000 SF, with adjustments for community-specific needs. Plan for larger Libraries that can serve multiple communities. Plan new Libraries to maximize accessibility to village centers, public transit, or schools.	Branch Library Facilities Report, 1998 21st Century Library System /Library Facilities Improvements Program, 2002

Department/ Asset Type	General Plan Element	Identified Service Level Standards	Relevant Documents
		Branch Service Area: This guideline recommends a 2 mile radius, spacing branches 4 miles apart. The population of a given community should reach 18,000 to 20,000 residents before a permanent library facility is warranted, with anticipated growth to at least 27,000 to 30,000 residents after twenty years. A site of t3 acres will allow for building expansion.	
<p>Public Works Facilities Division/Other City Buildings (City has approximately 1,700 facilities)</p> <ul style="list-style-type: none"> - City Administration Building Complex - Emergency Operations Center - Park & Recreation facilities (golf, recreation centers, regional park structures, swimming pools, etc.) - some library facility systems - airport hangars - water and wastewater treatment plants - pump stations - fire stations - lifeguard towers - police stations - comfort stations - trailers and sheds 	<p>Public Facilities Financing</p> <p>Historic Preservation</p>	<p>No formal goals established; current service levels are a result of investment decisions.</p> <p>Facility Condition Index (FCI) measures condition of each building, representing the total cost of required repairs divided by the current replacement value.</p> <p>A ratio of 70% preventative and scheduled maintenance vs. 30% unscheduled/ breakdown repair</p> <p>1-2 hour response time for emergency service calls.</p> <p>System or equipment manufacturer generally provides recommendations for preventative and scheduled maintenance.</p>	<p>CIP projects for buildings are planned in conjunction with the asset-managing departments.</p>
<p>Transportation and Storm Water/Watershed and Storm Drains</p> <p>Conveyance System Assets & Structures</p> <ul style="list-style-type: none"> - Box Culvert - Brow Ditch - Channel - Storm Drain - Cleanout - Inlet - Energy Dissipater 	<p>Public Facilities, Services and Safety</p> <p>Flood Maps</p> <p>Urban Design</p>	<p>Developed a watershed based asset management plan for each of the City's six watersheds. Each plan includes a minimum SLS for the maintenance of the storm drain system based on flood capacity standards, asset condition, and water quality regulations and mandates.</p> <p>Levels of service for all watersheds are as follows:</p> <p>Storm drain structures- conveys 50 year storm Drainage pipes- conveys 50 year storm Storm water pump stations- capacity to pump</p>	<p>Watershed Asset Management Plan - 2013</p>

Department/ Asset Type	General Plan Element	Identified Service Level Standards	Relevant Documents
<ul style="list-style-type: none"> - Headwall - Low Flow Diversion - Outlet - Spillway - Tidegate - Pump Station - Structural BMPs 		<p>100% of the design flow while keeping BRE score < 30% of maximum</p> <p>Storm water channels- conveys 100 year storm</p> <p>Pump Stations- capacity to pump 100% of the design flow</p> <p>Structural BMPs- achieve waste load allocations for current and future TMDLs</p>	
<p>Transportation and Storm Water/Streets and Roads</p> <ul style="list-style-type: none"> - streets - alleys - street lights - traffic signals - street trees - traffic signs - curb ramps - sidewalks - bridges - bike facilities 	<p>Mobility</p> <p>Urban Design</p>	<p>Overall Condition Index (OCI) is a weighted index used to measure pavement condition which is calculated using weighted attribute characteristics, such as surface distress and ride quality, but no defined SLS for remaining assets (street lights, sidewalks, etc.).</p> <p>SLS for Street Lights, Sidewalks and Traffic Signals vary for each asset. The SLS for sidewalks will be determined upon completion of the FY15 sidewalk assessment.</p> <p>SLS for bridges are based on overall sufficiency rating. The rating criteria are developed by CALTRANS and take into account structural deficiency and serviceability.</p> <p>SLS for Bike Facilities will be based on the projects identified in the 20 Year Bike Master Plan and also based on scheduling of resurfacing roadways by Public Utilities, Street Division and all CIP projects. Roadways are restriped to accommodate bike facilities.</p> <p>Transportation Master Plan will be developed in FY16 that identifies long range, city wide transportation needs.</p>	<p>Five-Year Resurfacing Plan, 2012</p> <p>San Diego Bicycle Master Plan.</p> <p>Pedestrian Master Plan</p> <p>Street Preservation Ordinance</p>
<p>Environment Services/Miramar Landfill</p> <ul style="list-style-type: none"> - landfill - office buildings - operation station (yard) 	<p>Public Facilities, Services and Safety</p> <p>Conservation</p>	<p>Standards are currently being developed.</p>	

Appendix B: Summarized Gap Analysis by Asset Type

ADA

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 4,742,900	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000
Funding Source					
Development Impact Fees	792,900	-	-	-	-
Funding Source Total	\$ 792,900	\$ -	\$ -	\$ -	\$ -
Gap	\$ 3,950,000	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000	\$ 8,500,000

Airports

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000
Funding Source					
Airport Funds	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Funding Source Total	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Bike Paths

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 780,000	\$ 750,000	\$ 750,000	\$ 2,181,468	\$ 750,000
Funding Source					
Facilities Benefit Assessments	-	-	-	1,431,468	-
TransNet Funds	30,000	-	750,000	750,000	750,000
Funding Source Total	\$ 30,000	\$ -	\$ 750,000	\$ 2,181,468	\$ 750,000
Gap	\$ 750,000	\$ 750,000	\$ -	\$ -	\$ -

Bridges

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 66,910,469	\$ 13,055,516	\$ 12,967,000	\$ 26,264,000	\$ 7,601,000
Funding Source					
Donations	14,000,000	-	-	-	-
Grants	20,058,076	-	-	-	-
Maintenance Assessment Districts	5,000	25,000	-	-	-
TransNet Funds	13,000,000	3,250,000	500,000	500,000	500,000
Funding Source Total	\$ 47,063,076	\$ 3,275,000	\$ 500,000	\$ 500,000	\$ 500,000
Gap	\$ 19,847,393	\$ 9,780,516	\$ 12,467,000	\$ 25,764,000	\$ 7,101,000

Facilities

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 21,185,164	\$ 31,777,746	\$ 31,777,746	\$ 44,135,758	\$ 47,666,618
Funding Source					
Bond Funds	17,600,000	17,600,000	-	-	-
Funding Source Total	\$ 17,600,000	\$ 17,600,000	\$ -	\$ -	\$ -
Gap	\$ 3,585,164	\$ 14,177,746	\$ 31,777,746	\$ 44,135,758	\$ 47,666,618

Fire Stations

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 12,199,766	\$ 17,558,333	\$ 9,193,333	\$ 11,245,633	\$ 18,670,355
Funding Source					
Development Impact Fees	1,353,100	-	-	-	-
Facilities Benefit Assessments	5,000,000	8,365,000	-	-	-
Funding Source Total	\$ 6,353,100	\$ 8,365,000	\$ -	\$ -	\$ -
Gap	\$ 5,846,666	\$ 9,193,333	\$ 9,193,333	\$ 11,245,633	\$ 18,670,355

Landfills

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 900,000	\$ -	\$ 900,000	\$ -	\$ -
Funding Source					
General Fund	900,000	-	900,000	-	-
Funding Source Total	\$ 900,000	\$ -	\$ 900,000	\$ -	\$ -
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Libraries

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 455,000	\$ 10,055,000	\$ -	\$ 15,443,082	\$ 16,771,030
Funding Source					
Development Impact Fees	455,000	-	-	-	-
Donations	-	10,000,000	-	-	-
Funding Source Total	\$ 455,000	\$ 10,000,000	\$ -	\$ -	\$ -
Gap	\$ -	\$ 55,000	\$ -	\$ 15,443,082	\$ 16,771,030

Lifeguard Stations

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ -	\$ 2,000,000	\$ 2,000,000	\$ 6,735,444	\$ -
Funding Source					
Funding Source Total	\$ -	\$ -	\$ -	\$ -	\$ -
Gap	\$ -	\$ 2,000,000	\$ 2,000,000	\$ 6,735,444	\$ -

Parks

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 28,502,900	\$ 55,139,474	\$ 38,006,401	\$ 48,423,574	\$ 31,221,305
Funding Source					
Antenna Fund	175,000	175,000	175,000	175,000	175,000
Developer Funding	1,430,000	-	-	-	-
Development Impact Fees	3,466,089	-	-	-	-
Environmental Growth Funds	1,131,586	1,092,984	1,369,709	1,651,968	1,939,873
Facilities Benefit Assessments	4,900,000	18,180,697	7,063,853	5,009,050	-
Golf Course Enterprise Fund	-	9,500,000	900,000	4,100,000	-
Grants	2,311,000	-	-	-	-
Mission Bay Improvements Fund	7,984,739	8,444,435	8,678,879	8,915,667	9,154,824
Regional Park Improvements Fund	2,661,580	2,814,812	2,892,960	2,971,889	3,051,608
Sunset Cliffs Natural Park Fund	72,906	72,906	-	-	-
Funding Source Total	\$ 24,132,900	\$ 40,280,834	\$ 21,080,401	\$ 22,823,574	\$ 14,321,305
Gap	\$ 4,370,000	\$ 14,858,640	\$ 16,926,000	\$ 25,600,000	\$ 16,900,000

Police Stations

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ -	\$ 11,000,000	\$ -	\$ -	\$ -
Funding Source					
Funding Source Total	\$ -	\$ -	\$ -	\$ -	\$ -
Gap	\$ -	\$ 11,000,000	\$ -	\$ -	\$ -

Qualcomm

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000
Funding Source					
QUALCOMM Stadium Fund	750,000	750,000	750,000	750,000	750,000
Funding Source Total					
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Sidewalks

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 4,359,000	\$ 9,040,000	\$ 9,174,000	\$ 9,309,000	\$ 9,448,000
Funding Source					
General Fund	400,000	400,000	1,400,000	1,400,000	1,400,000
Grants	500,000	-	-	-	-
TransNet Funds	-	-	1,200,000	1,200,000	1,200,000
Funding Source Total	\$ 900,000	\$ 400,000	\$ 2,600,000	\$ 2,600,000	\$ 2,600,000
Gap	\$ 3,459,000	\$ 8,640,000	\$ 6,574,000	\$ 6,709,000	\$ 6,848,000

Storm Water

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 110,013,269	\$ 136,097,896	\$ 177,968,303	\$ 197,357,503	\$ 155,786,748
Funding Source					
Bond Funds	26,080,000	26,080,000	-	-	-
General Fund	5,350,000	11,350,000	9,850,000	10,850,000	12,850,000
Funding Source Total	\$ 31,430,000	\$ 37,430,000	\$ 9,850,000	\$ 10,850,000	\$ 12,850,000
Gap	\$ 78,583,269	\$ 98,667,896	\$ 168,118,303	\$ 186,507,503	\$ 142,936,748

Streetlights

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 42,090,000	\$ 46,538,000	\$ 46,664,000	\$ 46,794,000	\$ 46,926,000
Funding Source					
General Fund	-	-	1,000,000	1,000,000	1,000,000
TransNet Funds	-	-	100,000	100,000	100,000
Funding Source Total	\$ -	\$ -	\$ 1,100,000	\$ 1,100,000	\$ 1,100,000
Gap	\$ 42,090,000	\$ 46,538,000	\$ 45,564,000	\$ 45,694,000	\$ 45,826,000

Streets and Roads - Modifications

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 14,855,000	\$ 58,444,490	\$ 21,909,995	\$ 43,124,701	\$ 27,515,507
Funding Source					
Bus Stop Capital Improvement Fund	60,000	60,000	60,000	60,000	60,000
Developer Funding	-	3,538,000	-	-	-
Facilities Benefit Assessments	4,180,000	24,975,000	5,900,000	28,929,676	14,272,100
Grants	500,000	172,000	-	-	-
Maintenance Assessment Districts	65,000	455,000	65,000	65,000	65,000
TransNet Funds	4,450,000	15,950,000	10,884,995	9,070,025	8,118,407
Undergrounding Utilities Fund	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Funding Source Total	\$ 14,255,000	\$ 50,150,000	\$ 21,909,995	\$ 43,124,701	\$ 27,515,507
Gap	\$ 600,000	\$ 8,294,490	\$ -	\$ -	\$ -

Streets and Roads - Pavement

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 83,100,000	\$ 83,100,000	\$ 83,100,000	\$ 83,100,000	\$ 83,100,000
Funding Source					
Bond Funds	40,480,000	40,480,000	-	-	-
General Fund	-	-	3,000,000	4,000,000	5,000,000
Proposition 42 Replacement - Transportation Relief Fund	1,893,750	2,401,365	2,908,979	4,416,593	5,924,208
TransNet Funds	-	-	6,000,000	9,000,000	11,000,000
Trench Cut/Excavation Fee Fund	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Funding Source Total	\$ 44,373,750	\$ 44,881,365	\$ 13,908,979	\$ 19,416,593	\$ 23,924,208
Gap	\$ 38,726,250	\$ 38,218,635	\$ 69,191,021	\$ 63,683,407	\$ 59,175,792

Traffic Signals

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 6,500,000	\$ 6,500,000	\$ 6,500,000	\$ 22,000,000	\$ 22,000,000
Funding Source					
Development Impact Fees	220,000	-	-	-	-
TransNet Funds	1,349,521	100,000	1,900,000	1,900,000	1,900,000
Funding Source Total	\$ 1,569,521	\$ 100,000	\$ 1,900,000	\$ 1,900,000	\$ 1,900,000
Gap	\$ 4,930,479	\$ 6,400,000	\$ 4,600,000	\$ 20,100,000	\$ 20,100,000

Wastewater

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 113,290,243	\$ 126,360,272	\$ 109,669,162	\$ 70,608,398	\$ 93,892,440
Funding Source					
Sewer Funds	113,290,243	126,360,272	109,669,162	70,608,398	93,892,440
Funding Source Total	\$ 113,290,243	\$ 126,360,272	\$ 109,669,162	\$ 70,608,398	\$ 93,892,440
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Water

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Need	\$ 119,042,027	\$ 186,730,031	\$ 171,647,444	\$ 170,554,835	\$ 319,423,525
Funding Source					
Water Fund	\$ 119,042,027	\$ 186,730,031	\$ 171,647,444	\$ 170,554,835	\$ 319,423,525
Funding Source Total	\$ 119,042,027	\$ 186,730,031	\$ 171,647,444	\$ 170,554,835	\$ 319,423,525
Gap	\$ -	\$ -	\$ -	\$ -	\$ -

Appendix C: Summarized Projected Funding Sources

Airport Funds

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 2,400,000	\$ 12,000,000
Airports	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	12,000,000

Antenna Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000	\$ 875,000
Parks	175,000	175,000	175,000	175,000	175,000	875,000

Bond Funds

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 84,160,000	\$ 84,160,000	\$ -	\$ -	\$ -	\$ 168,320,000
Facilities	17,600,000	17,600,000	-	-	-	35,200,000
Storm Water	26,080,000	26,080,000	-	-	-	52,160,000
Streets and Roads - Pavement	40,480,000	40,480,000	-	-	-	80,960,000

Bus Stop Capital Improvement Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 300,000
Streets and Roads - Modifications	60,000	60,000	60,000	60,000	60,000	300,000

Developer Funding

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 1,430,000	\$ 3,538,000	\$ -	\$ -	\$ -	\$ 4,968,000
Parks	1,430,000	-	-	-	-	1,430,000
Streets and Roads - Modifications	-	3,538,000	-	-	-	3,538,000

Development Impact Fees

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 6,287,089	\$ -	\$ -	\$ -	\$ -	\$ 6,287,089
ADA	792,900	-	-	-	-	792,900
Fire Stations	1,353,100	-	-	-	-	1,353,100
Libraries	455,000	-	-	-	-	455,000
Parks	3,466,089	-	-	-	-	3,466,089
Traffic Signals	220,000	-	-	-	-	220,000

Donations

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 14,000,000	\$ 10,000,000	\$ -	\$ -	\$ -	\$ 24,000,000
Bridges	14,000,000	-	-	-	-	14,000,000
Libraries	-	10,000,000	-	-	-	10,000,000

Environmental Growth Funds

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 1,131,586	\$ 1,092,984	\$ 1,369,709	\$ 1,651,968	\$ 1,939,873	\$ 7,186,120
Parks	1,131,586	1,092,984	1,369,709	1,651,968	1,939,873	7,186,120

Facilities Benefit Assessments

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 14,080,000	\$ 51,520,697	\$ 12,963,853	\$ 35,370,194	\$ 14,272,100	\$ 128,206,844
Bike Paths	-	-	-	1,431,468	-	1,431,468
Fire Stations	5,000,000	8,365,000	-	-	-	13,365,000
Parks	4,900,000	18,180,697	7,063,853	5,009,050	-	35,153,600
Streets and Roads - Modifications	4,180,000	24,975,000	5,900,000	28,929,676	14,272,100	78,256,776

General Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 6,650,000	\$ 11,750,000	\$ 16,150,000	\$ 17,250,000	\$ 20,250,000	\$ 72,050,000
Landfills	900,000	-	900,000	-	-	1,800,000
Sidewalks	400,000	400,000	1,400,000	1,400,000	1,400,000	5,000,000
Storm Water	5,350,000	11,350,000	9,850,000	10,850,000	12,850,000	50,250,000
Streetlights	-	-	1,000,000	1,000,000	1,000,000	3,000,000
Streets and Roads - Pavement	-	-	3,000,000	4,000,000	5,000,000	12,000,000

Golf Course Enterprise Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ -	\$ 9,500,000	\$ 900,000	\$ 4,100,000	\$ -	\$ 14,500,000
Parks	-	9,500,000	900,000	4,100,000	-	14,500,000

Grants

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 23,369,076	\$ 172,000	\$ -	\$ -	\$ -	\$ 23,541,076
Bridges	20,058,076	-	-	-	-	20,058,076
Parks	2,311,000	-	-	-	-	2,311,000
Sidewalks	500,000	-	-	-	-	500,000
Streets and Roads - Modifications	500,000	172,000	-	-	-	672,000

Maintenance Assessment Districts

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 70,000	\$ 480,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 745,000
Bridges	5,000	25,000	-	-	-	30,000
Streets and Roads - Modifications	65,000	455,000	65,000	65,000	65,000	715,000

Mission Bay Improvements Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 7,984,739	\$ 8,444,435	\$ 8,678,879	\$ 8,915,667	\$ 9,154,824	\$ 43,178,543
Parks	7,984,739	8,444,435	8,678,879	8,915,667	9,154,824	43,178,543

Proposition 42 Replacement - Transportation Relief Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 1,893,750	\$ 2,401,365	\$ 2,908,979	\$ 4,416,593	\$ 5,924,208	\$ 17,544,895
Streets and Roads - Pavement	1,893,750	2,401,365	2,908,979	4,416,593	5,924,208	17,544,895

QUALCOMM Stadium Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 3,750,000
Facilities	750,000	750,000	750,000	750,000	750,000	3,750,000

Regional Park Improvements Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 2,661,580	\$ 2,814,812	\$ 2,892,960	\$ 2,971,889	\$ 3,051,608	\$ 14,392,849
Parks	2,661,580	2,814,812	2,892,960	2,971,889	3,051,608	14,392,849

Sewer Funds

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 113,290,243	\$ 126,360,272	\$ 109,669,162	\$ 70,608,398	\$ 93,892,440	\$ 513,820,515
Wastewater	113,290,243	126,360,272	109,669,162	70,608,398	93,892,440	513,820,515

Sunset Cliffs Natural Park Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 72,906	\$ 72,906	\$ -	\$ -	\$ -	\$ 145,812
Parks	72,906	72,906	-	-	-	145,812

TransNet Funds

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 18,829,521	\$ 19,300,000	\$ 21,334,995	\$ 22,520,025	\$ 23,568,407	\$ 105,552,948
Bike Paths	30,000	-	750,000	750,000	750,000	2,280,000
Bridges	13,000,000	3,250,000	500,000	500,000	500,000	17,750,000
Sidewalks	-	-	1,200,000	1,200,000	1,200,000	3,600,000
Streetlights	-	-	100,000	100,000	100,000	300,000
Streets and Roads - Modifications	4,450,000	15,950,000	10,884,995	9,070,025	8,118,407	48,473,427
Streets and Roads - Pavement	-	-	6,000,000	9,000,000	11,000,000	26,000,000
Traffic Signals	1,349,521	100,000	1,900,000	1,900,000	1,900,000	7,149,521

Trench Cut/Excavation Fee Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 10,000,000
Streets and Roads - Pavement	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000

Undergrounding Utilities Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 25,000,000
Streets and Roads - Modifications	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	25,000,000

Water Fund

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Projected	\$ 119,042,027	\$ 186,730,031	\$ 171,647,444	\$ 170,554,835	\$ 319,423,525	\$ 967,397,862
Water	119,042,027	186,730,031	171,647,444	170,554,835	319,423,525	967,397,862