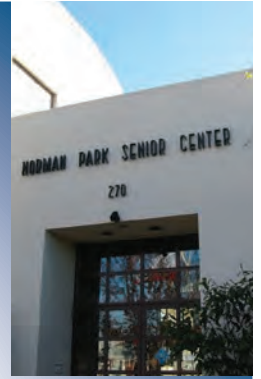




Infrastructure, Facilities and Equipment Expenditure Plan



Funding Critical Priorities for
a Stronger, Safer Chula Vista

Introduction

The City of Chula Vista, like many cities throughout the country, is struggling to properly fund our infrastructure needs. The City of Chula Vista (City) has been developing and implementing its Asset Management Program to operate and maintain the City's natural and built infrastructure. Staff has provided several updates to the City Council on the Asset Management Program. The presentations and related publications can be found at www.chulavistaca.gov/infrastructure.

To address the City's infrastructure needs and other City facilities and services, the City Council placed a funding measure on the November 2016 ballot to address high priority infrastructure projects. On November 8, 2016, Chula Vista voters approved Measure P, authorizing a temporary ½ cent sales tax increase on retail sales within the City for a period of ten (10) years. Staff prepared the *Infrastructure, Facilities and Equipment Expenditure Plan* to identify the recommended allocation of the temporary ½ cent sales tax revenues which were originally estimated to generate \$16 million per year. The updated 2018 revenue estimates are projected to generate \$18 million per year. The recommended funding is based on the criteria established through the Asset Management Program which identifies the major citywide infrastructure systems considered in critical need of repair or replacement. Analysis conducted by consultants experienced in evaluating infrastructure system conditions, ranked infrastructure from lowest to highest probability of failure, identified a timeline for repair and replacement, and estimated associated cost. The sales tax revenues generated over the 10 year timeframe could address all infrastructure assets designated with the highest probability of failure which, if not addressed, could result in significant impact to public safety response or availability of highly used community infrastructure.

Given the needs and limited availability of funds, the items proposed for funding under this plan represent one-time allocations of funds and not ongoing commitments. Funding of ongoing commitments, such as salary and benefit increases, is not included in the Plan as they would result in continuing financial obligations beyond the ten year temporary tax period. Therefore, this Plan focuses on the areas where one-time funds could be used to address critical deferred maintenance or replacement of city infrastructure improving safety and reducing risk to the City as well as strengthening the City's overall financial condition by avoiding costly emergency repairs or further deterioration of existing failing infrastructure.

The following are the highest priority items for funding:

- Pave, maintain and repair neighborhood streets and fix potholes
- Upgrade or replace aging police, fire and 9-1-1 emergency response facilities, vehicles and equipment
- Replace storm drains to prevent sinkholes
- Upgrade irrigation systems to conserve water and save energy
- Make essential repairs to older libraries, senior center and recreation centers

- Improve our Traffic Signal Systems
- Repair our Sports Fields and Courts and Park Infrastructure

This *Infrastructure, Facilities and Equipment Expenditure Plan* also includes long-term financing of approximately \$70.8 million in order to expedite the most critically needed repairs or replacements of citywide infrastructure. City Council approved the issuance bonds via Resolution 2017-089 on June 6, 2017. This Plan also provides a component which identifies the potential annual allocations to projects which could be included in the annual City Manager proposed Capital Improvement Budget for City Council consideration and action.

Process for Creation of the Plan

Asset Management Program (AMP)

Since March 2014, the City has been working to enhance its asset management practices to promote effective use of financial and physical resources and to develop a proactive approach to managing infrastructure assets. As part of this effort, the City embarked on developing a comprehensive, citywide Asset Management Program that includes the following asset management systems:

- Wastewater Management System
- Urban Forestry Management System
- Building Management System
- Drainage Management System
- Parks Management System
- Roadway Management System
- Fleet Management System

AMP Goals

The goal of the City’s Asset Management Program is to shift from reactive to proactive planning and management of our infrastructure assets. The effort has helped the City to:

- Gain better understanding of the current state of the infrastructure and its future needs
- Proactively identify the asset replacement and rehabilitation needs and plan the budget and resources accordingly
- Understand the probability and consequence of failure of each asset so that the City can manage high risk assets before failure and minimize the City’s overall risk profile
- Minimize the life-cycle cost by incorporating latest technological advances in infrastructure to develop efficient and effective preservation and restoration strategies
- Develop a consistent and defensible methodology for prioritizing work and budget expenditure
- Focus on high benefit-to-cost ratio to ensure the budget is spent in the right place, for the right reason, at the right time, at the right cost

- Be transparent by involving the City Council and the public in the development of the Asset Management Program and the associated decisions

It is important for the City to gain a better understanding and quantify current and future asset needs, asset risk profile, appropriate levels of service, cost to provide services, and financial requirements to sustain the delivery of services. City staff has worked to communicate this improved understanding of the infrastructure status with the public and decision makers. This analysis and information has enabled City staff to develop management strategies that deliver the established levels of service while managing individual assets to minimize life-cycle cost with an acceptable level of risk.

With this information, the City can better answer the following questions:

- *Catch Up* – What levels of work, resources, and budget are required to bring the asset back to required conditional state to meet the safety, regulatory, and level of service requirements?
- *Keep Up* – Once the asset is caught up, what levels of work, resources, and budget are required to keep up the level of service?
- *Moving Forward* – What levels of work, resources, and budget are required to sustain the level of service?

Asset Management Program Advisory Committee

To help identify the needs of our community and to evaluate the state of our infrastructure, the City formed the Asset Management Program Advisory Committee (AMPAC) in March 2014. The committee continues to provide input into setting priorities for the Asset Management Program.

Members of the AMPAC are residents, business owners, community leaders, and stakeholders. AMPAC members visited various asset management systems and observed and discussed the issues associated with each system. AMPAC reviewed the City’s overall Asset Management Program methodology and helped to guide and reach consensus on how to address infrastructure deficits.

A technical committee was formed within AMPAC to further engage the public in the understanding and review of the asset management methodologies and logic used to define preservation and restoration costs and schedules.

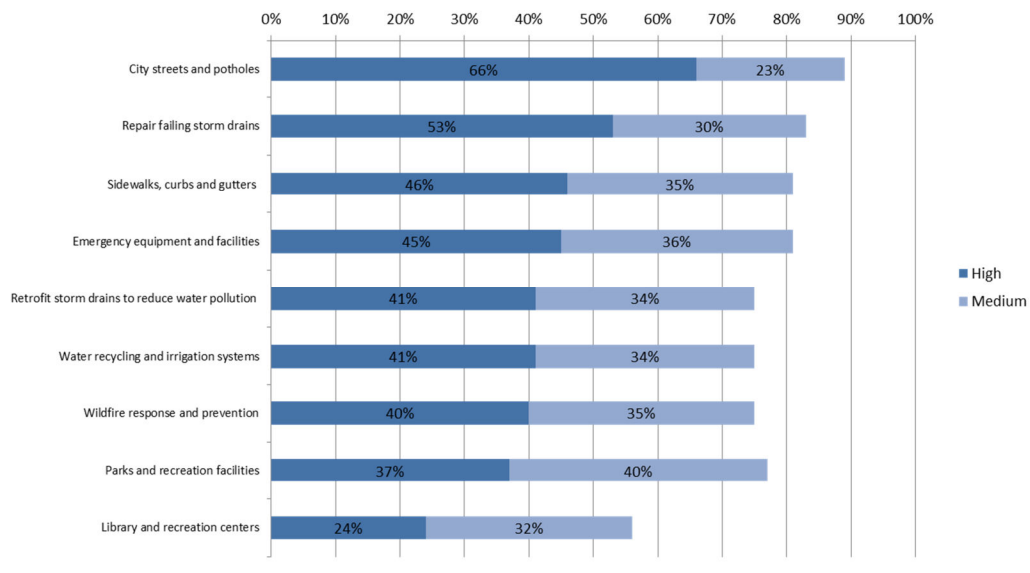
A comprehensive inventory of assets took place for each asset management system. Where accessible, assets were visited and their conditions were assessed. Based on the condition, actions required to restore the asset were identified, and the cost and timing were estimated. Through assessment of risk (probability and consequence of failures), activities were prioritized and communicated regarding urgency and the financial and resource requirements.

Public Outreach and Public Opinion Surveys

In July and August 2015, the City of Chula Vista engaged a research firm to conduct a public opinion survey to identify resident priorities and secure input on potential local funding mechanisms (bond or

sales tax) to upgrade, repair and maintain critical infrastructure. In addition, a survey mailer was distributed to 54,000 households and an online version posted on the City website from January through May 2016 to secure broad public input on infrastructure priorities. More than 3,000 responses were received.

Public Opinion on Prioritizing Infrastructure Projects



Infrastructure, Facilities and Expenditure Plan

With the information gathered through the Asset Management process and community input, staff developed this Plan taking into account projected available funding, priorities and timing considerations. The actual allocations will be dependent on updated engineering cost estimates, project specific criteria and available funding at the time the individual projects are proposed.

The following table presents the *Infrastructure, Facilities and Expenditure Plan* by Major Category. On page 14 of this Plan is a 10-year outlook by fiscal year which includes long-term financing to expedite the most critically needed repairs/replacement of citywide infrastructure.

Infrastructure, Facilities and Equipment Expenditure Plan (By Major Category)

Citywide Infrastructure, Facilities and Equipment Expenditure Plan
 1/2 cent Sales Tax Revenues over 10 year period
 Summary Table - July 2018 Revision

<u>Total by Major Category</u>	<u>10-Year Timeframe</u>
Fire Stations Repairs/Replacement	\$ 24,611,549
Fire Response Vehicles (Apparatus)	\$ 19,847,580
Fire Safety Equipment	\$ 5,197,913
Total Fire Services	\$ 49,657,042
Police Response Vehicles	\$ 13,301,470
Public Safety Communication Systems (Dispatch and Regional Communication Systems)	\$ 8,678,862
Police Facility Repairs	\$ 2,101,000
Police Equipment	\$ 611,145
Total Police Services	\$ 24,692,477
Streets (Arterials/Collectors/Residential)	\$ 24,474,861
Other Public Infrast. (Public Bldgs, Storm Drains, Drainage Systems, Sidewalks, Trees etc)	\$ 14,154,295
Sports Fields and Courts	\$ 16,966,595
Non-Safety Vehicles (i.e. Public Works Crews)	\$ 11,195,100
Public Facilities (i.e. Senior Center, Recreation Centers, Libraries, Living Coast Discovery Center, Public Works Center)	\$ 14,286,000
Traffic Signal Systems	\$ 7,000,000
Park Infrastructure (Playground Equipment, Gazebos, Restrooms, Benches, Parking etc.)	\$ 10,307,740
Citywide Network Replacement	\$ 2,080,700
Citywide Telecommunications	\$ 2,000,000
Total Infrastructure	\$ 102,465,291
Total Proposed Allocations	\$ 176,814,810

Notes:

42% allocated to Public Safety and 58% allocated to Citywide Infrastructure
 Actual allocations to specific projects will be brought forward as part of the annual budget with the intent to allocate resources in the major categories noted above.
 Total proposed allocation is for project categories only, it does not include allocations for debt service or administrative expenses.

Plan Implementation

The ballot measure approved by the voters is anticipated to generate an estimated \$186 million over a 10-year period. The projected revenues from the sales tax measure will address the items which are considered high risk and in critical need of repair or replacement. The estimated revenues will also address approximately 11% of the assets identified as having medium probability of failure.

The measure provides that any proposed expenditures of new sales tax revenues in the initial year will be presented in a form consistent with this Plan as budget amendments for City Council consideration. For each subsequent year, the spending plan, after review by a Citizen Oversight Committee, will be included in the City Manager’s proposed budget for Council consideration as part of the annual budget process.

The measure requires that expenditure of new sales tax revenues be tracked in a variety of ways. First all new revenues will be accounted for in the General Fund as a separate line item. Second, an independent audit of measure revenues and expenditures will be performed and presented for public review. Finally, a Citizen’s Oversight Committee will review all proposed expenditure plans and all audits.

Note: This Plan is intended to guide City expenditures consistent with its terms. It does not, however, constitute a binding legal commitment on the City Council to approve any of the expenditures proposed herein. Provided that all proposed expenditures continue to be for City infrastructure, facilities and/or equipment, this Plan may also be updated or amended from time to time by City staff, or by action of the City Council, in order to address changed priorities, standards and/or funding availability. There shall be no third party beneficiaries to the terms of this Plan. This Plan does not modify the terms of the sales tax measure. To the extent of any conflict between the terms of this Plan and the sales tax measure, the terms of the sales tax measure shall govern.

Summary Description of Major Infrastructure Categories

To follow are descriptions of the major infrastructure categories within the Expenditure Plan. Included within several of the categories described below is an emphasis on repairing and replacing existing inefficient systems and equipment with newer, more efficient systems. Funding for efficient systems has been incorporated into the existing funding for police facility repairs, sports courts and fields, park infrastructure, recreation and senior centers, libraries, and other public buildings. Specific projects will include: citywide lighting upgrades; citywide irrigation upgrades; citywide HVAC equipment replacement; and other facility and park efficiency upgrades. The projects will be consistent with the priorities laid out in the original Measure P Expenditure Plan as well as the City's Smart Cities Plans. The projects will extend the life of the City's facilities and parks, allow for easier and more efficient maintenance, and provide flexibility to allocate proper maintenance funds are in place to "keep up" with ongoing maintenance on newly repaired facilities. Measure P funds will not be used to provide ongoing maintenance.

Street Pavement:

One of the greatest challenges a City faces is maintaining, preserving and restoring its paved streets. The City of Chula Vista utilizes the Streetsaver Pavement Management System to develop a multi-year pavement preservation program. The program has primarily been focused on sustaining more heavily traveled major arterial and collector streets in good condition. Through the Pavement Management System, city streets are given a Pavement Condition Index (PCI). The purpose of the pavement management system is to enable the City to use its pavement dollars in the most cost effective manner so that the overall pavement condition is as good as possible. The pavement preservation approach significantly prolongs the life of existing pavements for a fraction of what it would cost to rehabilitate the street once it reached failure. Unfortunately, local/residential streets have reached a failed state (0-25 PCI) and the typical strategies used for preventative maintenance would be inadequate. These residential streets would require major rehabilitation. The Measure P funding for Street Pavement repair is intended repair these failed residential streets. Additional information is available in the *Roadway Assessment Plan* located at www.chulavistaca.gov/infrastructure.

Pavement Condition Index



PCI = 21



PCI = 40



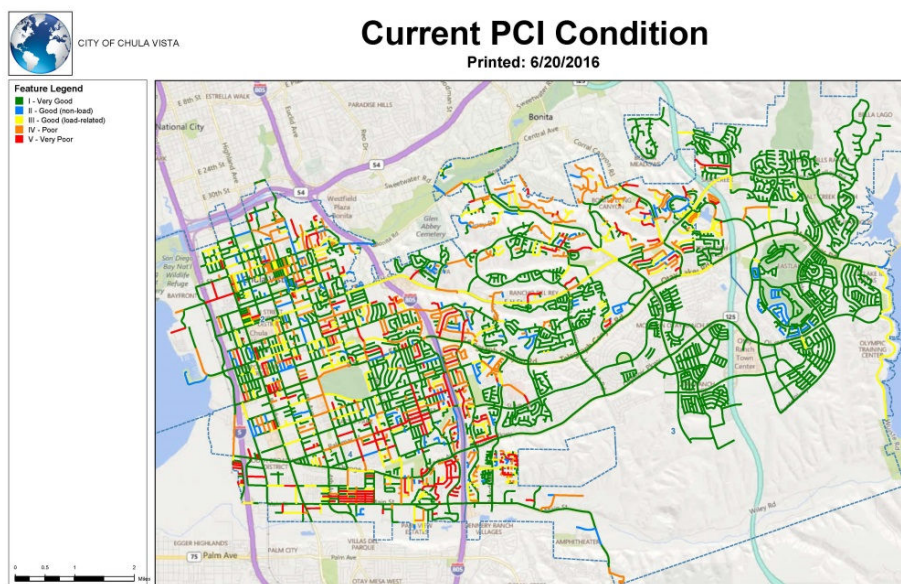
PCI = 68



PCI = 75



PCI = 95



Other Infrastructure (Storm Drains, Sidewalks, Trees, Drainage Systems)

Much of the City’s storm drain system is more than 50 years old. There are approximately 13 miles of corrugated metal pipes (CMP) located in the City of Chula Vista. Some of the CMP have been deteriorating due to their age and corrodible nature of the material. According to the 2005 condition assessment data, 1.8 miles of CMPs were recommended to be lined with CIPP liner and 0.4 miles of CMP were recommended to be replaced immediately. In order to accelerate the replacement of CMP and address infrastructure needs in Western Chula Vista, the City issued \$10.5 million in debt but despite the City’s effort to reline and replace as much as possible of the problematic CMP based on the 2005 study, not all pipe failures could be predicted. In February 2015, a CMP located near one of the elementary schools failed and created a sinkhole. In order to prevent future failures and to drive lower life-cycle cost, the City utilized the asset management strategies to identify which CMPs have a greater risk of failing. As a result, the City repurposed \$1.2 million from streets to fund CMP replacement or lining. Additional information on the City’s Drainage system is located in the *Drainage Asset Management Plan* located at www.chulavistaca.gov/infrastructure.

Traffic Signal System:

Proposed funding could advance traffic signal replacements and upgrades that focus on improving two major objectives: safety and performance. Each objective listed has a direct correlation to enhancing safety at intersections or of City roadways while also improving efficiency and operability of the traffic signal systems. Tax measure funds could also be used as matching funds for federal, state and local grants.

Improvements could include:

- Replacement of aging or legacy traffic controllers and signal cabinet and equipment
- Replacement of rusted, faded or missing traffic signal back-plates or signal heads
- Replacement of obsolete pedestal-mounted traffic signals to overhead mounted traffic signals
- Repair and/or replacement of broken inductive pavement loops and failing video cameras
- Converting non-actuated intersections to actuated
- Installation of pedestrian countdown indications and ADA compliant push buttons citywide
- Replacement of obsolete 8" traffic signal lamps to standard 12" traffic signal lamps
- Installation of Bicycle Detection System Citywide
- Replacement of legacy communications equipment and expansion of City Fiber Optics, Wireless, and/or Twisted Pair Communications
- Expansion of Adaptive Signal System
- Installation of Traffic Monitoring Devices:
 - Closed-Circuit Television (CCTV) Cameras at intersection along Major Trolley, Freeway interchanges, or major cross streets in the City of Chula Vista
 - Expansion of Data Collection Systems to actively monitor Level-of-Service of City Streets
 - Changeable Message Sign System along Main Street to mitigate special event traffic for Sleep Train Amphitheater
 - Installation of Traffic Calming Devices
- Comprehensive Coordination Retiming Project Citywide

Fire Response Vehicles (Apparatus):

The Fire Department's fire apparatus fleet is currently experiencing excessive years of service. This has led to increased downtime, decreased reliability, and obsolete safety features. The Fire Department and Public Works Department are challenged on a daily basis with maintaining an adequate fire apparatus fleet (frontline and reserve) due to the above factors. The current fleet downtime report shows, for every five days a fire apparatus is in service, it then requires one full day out of service for maintenance and repair. Fire apparatus replacement standards call for 10 to 12 years for front line service with five years in reserve capacity. Over half (10 of 17 fire apparatus) of the fire apparatus fleet exceeds 12 years of service, three of which are beyond 20 years of service. Funds could be used to replace Fire Engines and Fire Trucks that are overdue for replacement by excessive maintenance expenses or obsolete equipment improving response times.

Fire Equipment:

Major fire equipment needs include radio communications equipment, mobile data computer (MDC) communications equipment, and respiratory protection breathing apparatus.

The City of Chula Vista participates in the Regional Communication System (RCS), which provides public safety and public service radio communications to the San Diego County area. Federal Regulations, require the upgrade of the RCS to become compliant. This requires its users to upgrade their handheld, vehicle mounted, and dispatch radios to match the system backbone upgrade.

The Fire Department also uses mobile data computers (MDCs) to communicate critical emergency incident information between response units and dispatch. These MDCs are ruggedized, military grade laptops to withstand use during emergency response. These MDCs are beyond their useful life, exceeding 10 years old and also no longer meet new operating system requirements to properly communicate with dispatch.

The Fire Department is required to provide and maintain proper respiratory protection breathing apparatus equipment for firefighting activity. The current fleet of breathing apparatus is between 13 to 15 years old and beyond the useful life. This has led to increased downtime, decreased reliability and obsolete safety features. Breathing apparatus are utilized when fighting fires and critical to the protection of firefighter personnel.

Police Equipment:

Major equipment needs for the Police Department include body worn cameras, video management system and replacement of network servers. Use of body worn cameras has helped the Police Department gather more evidence leading to successful prosecution of cases, as well as protecting both the officer and citizens from allegations of excessive force or misconduct. The video management system will enable the Police Department to view recordings from different cameras when conducting investigations and responding to calls. In order to keep up with technology, network servers will be updated in 5 year increments.

Fire Station Repairs/Replacements:

The Fire Department currently operates nine fire stations to provide a network of emergency response service delivery. Three of these fire stations are well beyond their service life. Fire bay doors must be enlarged to accommodate new fire apparatus and extensive termite treatment and repair is needed. In addition, these fire stations are not compliant with seismic building codes. Also, as emergency response volume increases beyond the current network of response capacity, existing Fire Station 4 will require expansion to accommodate a secondary response unit in order to meet the service delivery demand. Funding is needed in order for the expansion to move forward and improve response times to the community.

Police Vehicles:

There are 128 police vehicles in the Police Department. The vehicles in this fleet are technologically complex and specially outfitted for law enforcement work. In addition to being very sophisticated pieces of equipment they are subjected to very high levels of utilization. Approximately 41% of the fleet is identified as needing replacement due to excessive repairs from high mileage and heavy use. The failure of operating patrol vehicles would impact response times to the community.

Police Facility Repairs:

The Police facility is 12 years old and is in relatively good condition. Although, the facility is in good condition it is given the highest rating possible for Consequence of Failure. This is because the facility operates 24 hours a day, 7 days a week. The Asset Management Plan did identify a few items which need immediate attention to avoid operational impacts with the most immediate being the replacement of the heating and air conditioning system. Failure of the system could cause disruption to critical service delivery and the ability to dispatch police personnel.

Public Safety Computer Aided Dispatch System (CAD):

The Computer Aided Dispatch (CAD) system is a critical Information and Technology (IT) component, which serves as the lynchpin of the 911 emergency service frame work for the police department. CAD is critical because it is used to dispatch police officers to citizens' calls for service, and its efficiency and performance directly impact response times and officer safety. In 2015, the police department processed 97,632 calls for service in the CAD system. The department's CAD system is also the central repository for all records and data related to calls for service. It is a key performance measurement tool used by supervisors and managers to make important tactical and strategic decisions. Finally, the CAD system's reliability and stability are critical because it must have continuous availability. In short, CAD is the virtual and technical heart of all police department operations, especially pertaining to emergency service delivery.

Public Safety Regional Communications System (RCS):

The Regional Communications System (RCS) provides public safety and public service radio communications service to San Diego County, Imperial County, 24 incorporated cities, and a multitude of other local, state, federal and tribal government agencies in the San Diego County/Imperial County Region. The RCS infrastructure is approaching the end of its life cycle and must be replaced. The County of San Diego has been working with member RCS partner agencies to plan for the replacement of the RCS system with a "Next Generation" public safety interoperable communications system which will comply with Federal Communications System (FCC) and the national Association of Public Safety Communications Officials standards. These regulations set in place standards for communication systems which allow for interoperability between different cities, agencies, and various state and federal agencies. This has been done to ensure that during emergency events, various public safety and emergency response personnel can communicate with each other. The City of Chula Vista currently has

737 radios operating on the RCS. Based upon the radio count for the City, the approximate cost to the City for participating in the Next Gen RCS project would be \$4.5 million, not including financing cost. This does not include the mandatory radio and equipment upgrades that would be needed at the City.

Other City Vehicles:

The “Other City Vehicles” comprises the remaining vehicles in the City’s inventory and supports all other City provided services with the exception of those supporting the wastewater section. These vehicle replacements have been deferred for many years resulting in excessive repair costs. The “out of service” rates for many of these vehicles are at record highs impacting staff’s ability to provide services to the community. Funding is needed to replace these vehicles (including lawnmowers, pick-ups, dump trucks, forklifts, etc.) and help the City move toward a more environmentally friendly and economically efficient fleet composition reducing emissions, fuel and related operating costs. In addition, this category includes the Fleet Infrastructure project for replacement of fuel systems, installation of EV charging stations, a heavy duty in-ground lift and replacement of the City’s obsolete fleet information management system.

Sports Courts and Fields:

There is a high demand for use of the City’s various sports fields. Most sports fields are reserved for City programs coordinated through the Youth Sports Council. The Youth Sports Council, which represents 22 member organizations in the City of Chula Vista, was formed in 1989 to assist the City in coordinating youth sports programs and allocate field use in the City. Due to the combination of budgetary cuts and water use restrictions, the City’s sports fields are overdue for renovation including re-seeding, aeration, fertilizing, and in some cases sod replacement. The Public Works department prepares a Field Management Report which identifies the condition of the various fields. The current Field Management report, located at www.chulavistaca.gov/infrastructure identified four fields that are closed due to poor condition of the fields. Another 20 were classified as fair condition but at risk of deteriorating further. This significantly limits the number of fields available to the various organizations providing youth sports activities in the City of Chula Vista which includes participation of over 10,000 kids.

With additional funding, the sports fields could be brought back to good standings and available for field allocation. In addition, funds could be allocated to upgrade the irrigations systems to a smart system allowing for efficient and effective water allocation which would assist in keeping the fields healthy even through the drought.

In addition to the sports fields, there are a total of 62 tennis courts and basketball courts. Based on the most recent Court Management Report, located at www.chulavistaca.gov/infrastructure a total of 31 courts are considered in fair condition due to worn surfaces, visible cracks or separation and lifting which will require replacement.

Park Infrastructure:

The City owns and manages 56 parks that cover approximately 560 acres. The largest park, Rohr Park, covers nearly 60 acres. The asset management study identified several assets under the Park Infrastructure category which included items such as barbeque grills, benches, drinking fountains, irrigation controls, lights, picnic tables, play structures, playground surfacing, signage, trash bins, etc. This *Infrastructure, Facilities and Equipment Expenditure Plan* recommends funding assets identified in the AMP which are beyond their service life and in need of repair or replacement. Additional details are available in the *Parks Asset Management Plan* located at www.chulavistaca.gov/infrastructure.

Recreation and Senior Centers:

In 2015, there were nearly 800,000 visits to our recreation facilities participating in sports, recreation, senior programs and other activities. With nine recreation centers, two aquatic facilities and 56 parks, the Recreation Department offers a myriad of opportunities for everyone to enjoy. Due to the high volume use of these facilities any interruption or reduction in their availability directly impacts the City's residents. Additional funds could be used to replace roofs, water and waste water plumbing, heating and air conditioning elements that have all reached or exceeded your expected service life.

More specifically, at the Norman Park Senior Center the condition assessment indicates that there is a need to repair the perimeter exterior eaves, paint the interior and exterior of the building, repair the kitchen and the restroom. At Loma Verde Recreation Center the pool pump system, decking, lighting and shower areas are also in need of repair. The City's newest recreation facilities, Salt Creek and Montevalle, are now over 10 years old and are beginning to experience heating and air conditioning failures and are in need of floor resurfacing throughout the gyms and classrooms. Other facilities, such as the Women's Club, are also in critical need of repair or replacement.

Civic Center Library and South Chula Vista Library:

The Chula Vista Civic Center Library opened its doors in 1976 and is celebrating its 40th Anniversary. The Civic Center Library and South Chula Vista Library are highly valued and well used by the community. Funding for the Library Department has been focused on increasing access to services and materials. Over the years, through fundraising efforts by the Friends of the Chula Vista Library and Chula Vista Public Library Foundation as well as State grants, the City has been able to do some cosmetic upgrades to the interior of the buildings. At this point, there is a need to address some more significant infrastructure repairs such as the roof, water and waste water plumbing, bathroom upgrades, heating and air conditioning systems that have all reached or exceeded their expected useful life.

Other Public Buildings: (Animal Care Facility, Living Coast Discovery Center, Ken Lee Building)

In addition to the buildings discussed previously, there are other public buildings such as the Animal Care Facility, Living Coast Discovery Center, and Ken Lee Building which are also in need of heating and air conditioning replacements, roof and plumbing repairs, flooring replacements, restroom renovations and upgrades to meet ADA standards.

Citywide Network Replacement

The overall computer network which provides all the connectivity between PC's, servers, phones and other network attached devices throughout the City is outdated with 20% of the equipment beyond end-of-life status, and a majority of the rest of the equipment within a year of end-of-life status. Due to advancements in technology the City is proposing a complete restructuring of the City's computer network in order to bring it up to industry standards in terms of: 1) Capability to handle high-volumes of data traffic; 2) Provide industry standard reliability and redundancy to ensure near 100% up-time across the network; and 3) To ensure high levels of security and resistance to modern day malware/hacking attacks. Measure P funds will be used to upgrade the network, which will directly benefit the community by allowing for Smart City functionality which will reduce traffic congestion on streets, reduce associated carbon emissions, enable enhanced energy savings in City buildings, provide advanced citizen engagement through data sharing and capabilities of virtual City Hall, and enable enhanced security at City parks and other locations.

In addition to updating the City's network, the Public Works Department deploys approximately 45 laptops in the field in order for crews to be able to receive work orders in the field, and then capture data regarding issues they see in the field back into our asset management systems. The current fleet of laptops is over 5 years old and only has 3G wireless modems which allow them to transmit data back to the Public Works Department. 3G's data footprint in Chula Vista is shrinking due to wireless carriers focusing on 4G and 5G deployments. There are many areas in the eastern portion of Chula Vista which do not have 3G connectivity. This means crews must return back to the Public Works Department to enter data. Types of data transmitted include photos and videos which require high-speed connections. Additionally, older laptops are limited in terms of processing speed and memory, which affects overall productivity of the laptop in a data rich environment. Measure P funds will be used to replace these laptops which will provide time savings and better work productivity allocating more time for the crews to be out in the field serving the public.

Citywide Telecommunications

Measure P funds will be used to upgrade its telecommunications system which is nearly 20 years old. Although functioning, the back-end equipment required to keep the phone system working is no longer manufactured. This requires the City to find replacement parts through used equipment if any equipment fails. Due to the age of the phone system, it is becoming extremely difficult to find used equipment to keep the system working. The phone system is also very limited in terms of how it can be used in a modern business environment. New modern systems are run over a computer network (Voice Over I.P. – VOIP) rather than by an analogue system. Analogue systems have significant limitations on how a phone system can be used, while more modern systems allow for video conferencing, computer screen sharing, call following ("desk phone" can be accessed regardless of location), and other features which increase productivity and responsiveness for employees to the public. An updated telecommunications system will also significantly reduce the risk of systematic failure.

Infrastructure, Facilities and Equipment Expenditure Plan 2018

Infrastructure, Facilities and Equipment Spending Plan
 One-half cent Sales Tax Revenues over 10 Year period
 July 2018 Revision

	ADOPTED BUDGET		ESTIMATED										TOTAL	
	Fiscal Year 2016-17	Fiscal Year 2017-18	Fiscal Year 2018-19	Fiscal Year 2019-20	Fiscal Year 2020-21	Fiscal Year 2021-22	Fiscal Year 2022-23	Fiscal Year 2023-24	Fiscal Year 2024-25	Fiscal Year 2025-26	Fiscal Year 2026-27	Fiscal Year 2027-28	10 Year Term	
Estimated Revenues:														
Estimated 1/2 cent Sales Tax Revenues	\$ 3,906,919	\$ 17,859,000	\$ 18,085,000	\$ 18,265,850	\$ 18,448,509	\$ 18,632,994	\$ 18,819,324	\$ 19,007,517	\$ 19,197,592	\$ 19,389,568	\$ 14,687,598	\$ 186,299,869		\$ 186,299,869
ESTIMATED TOTAL REVENUES	\$ 3,906,919	\$ 17,859,000	\$ 18,085,000	\$ 18,265,850	\$ 18,448,509	\$ 18,632,994	\$ 18,819,324	\$ 19,007,517	\$ 19,197,592	\$ 19,389,568	\$ 14,687,598	\$ 186,299,869		\$ 186,299,869
Proposed Expenditures														
Fire Vehicles	\$ 385,000	\$ 1,730,680	\$ 2,807,500	\$ 2,626,500	\$ 2,768,500	\$ 1,687,450	\$ 522,550	\$ 2,215,400	\$ 317,900	\$ 513,700	\$ 563,000	\$ 16,138,180		\$ 16,138,180
Police Vehicles	\$ 463,940	\$ 1,758,760	\$ 1,003,000	\$ 494,850	\$ 1,693,000	\$ 1,547,200	\$ 944,950	\$ 285,500	\$ 1,641,720	\$ 2,794,317	\$ 633,733	\$ 13,301,470		\$ 13,301,470
Total Public Safety Vehicles	\$ 848,940	\$ 3,529,440	\$ 3,810,500	\$ 3,121,350	\$ 4,462,000	\$ 3,234,650	\$ 1,467,500	\$ 2,500,900	\$ 1,959,620	\$ 3,308,017	\$ 1,196,733	\$ 29,939,650		\$ 29,939,650
Non-Safety City Vehicles (i.e., Public Works Crews)	\$ -	\$ 2,818,000	\$ 1,749,000	\$ 1,520,100	\$ 1,674,000	\$ 2,434,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,195,100		\$ 10,195,100
Fleet Infrastructure	\$ -	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000		\$ 1,000,000
Total Non-Safety City Vehicles	\$ -	\$ 3,818,000	\$ 1,749,000	\$ 1,520,100	\$ 1,674,000	\$ 2,434,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,195,100		\$ 11,195,100
Fire Equipment (i.e. breathing apparatus, Radios etc)	\$ 183,000	\$ 1,202,000	\$ -	\$ -	\$ -	\$ -	\$ 358,216	\$ -	\$ 272,356	\$ 1,435,251	\$ 1,747,090	\$ 5,197,913		\$ 5,197,913
Police Equipment (i.e. body worn cameras, video camera equip etc)	\$ -	\$ -	\$ 187,384	\$ 28,000	\$ 28,000	\$ 63,377	\$ 37,384	\$ 178,000	\$ 28,000	\$ 28,000	\$ 33,000	\$ 611,145		\$ 611,145
Police Communications & Dispatch System	\$ 17,660	\$ 183,261	\$ 86,153	\$ 196,994	\$ 205,459	\$ 214,299	\$ 194,862	\$ 204,466	\$ 214,530	\$ 225,076	\$ 236,123	\$ 1,978,883		\$ 1,978,883
Total Public Safety Equipment	\$ 200,660	\$ 1,385,261	\$ 273,537	\$ 224,994	\$ 233,459	\$ 277,676	\$ 590,462	\$ 382,466	\$ 514,886	\$ 1,688,327	\$ 2,016,213	\$ 7,787,941		\$ 7,787,941
Fire Station Repair/Replacements	\$ 46,000	\$ 13,000,000	\$ 3,080,855	\$ 3,865,830	\$ 1,941,091	\$ 2,727,773	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,611,549		\$ 24,611,549
Police Facility Repairs	\$ 9,000	\$ 1,500,000	\$ 492,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,101,000		\$ 2,101,000
Total Public Safety Buildings	\$ 55,000	\$ 14,500,000	\$ 3,572,855	\$ 3,965,830	\$ 1,941,091	\$ 2,727,773	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,712,549		\$ 26,712,549
Recreation Centers and Senior Center	\$ -	\$ 5,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000,000		\$ 5,000,000
City Center and South Chula Vista Libraries	\$ -	\$ 3,000,000	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,250,000		\$ 3,250,000
Other Public Bldgs (i.e. Animal Care Facility & Living Coast DC)	\$ -	\$ 5,100,000	\$ 436,000	\$ -	\$ 375,000	\$ 125,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,036,000		\$ 6,036,000
Total Other Public Facilities	\$ -	\$ 13,100,000	\$ 436,000	\$ 250,000	\$ 375,000	\$ 125,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,286,000		\$ 14,286,000
Sports Courts and Fields	\$ 85,000	\$ 4,500,000	\$ -	\$ -	\$ -	\$ 240,921	\$ 2,428,135	\$ 2,428,135	\$ 2,428,135	\$ 2,428,135	\$ 2,428,135	\$ 16,966,595		\$ 16,966,595
Park Infrastructure	\$ 250,000	\$ 5,500,000	\$ 1,550,000	\$ 137,654	\$ 717,048	\$ 220,298	\$ 386,548	\$ 396,548	\$ 386,548	\$ 386,548	\$ 386,548	\$ 10,307,740		\$ 10,307,740
Street Pavement (Arterials/Collectors/Residential)	\$ 363,940	\$ 15,318,626	\$ -	\$ -	\$ -	\$ -	\$ 2,148,074	\$ 2,148,074	\$ 2,148,074	\$ 2,148,074	\$ -	\$ 24,774,861		\$ 24,774,861
Traffic Signal System (Fiber Network)	\$ -	\$ 3,000,000	\$ -	\$ -	\$ -	\$ -	\$ 1,250,000	\$ 1,000,000	\$ 1,000,000	\$ 500,000	\$ -	\$ 7,000,000		\$ 7,000,000
Other Infrastructure (Storm Drains, Sidewalks, Trees etc)	\$ -	\$ 9,400,000	\$ -	\$ -	\$ -	\$ -	\$ 1,057,003	\$ 1,046,298	\$ 1,921,161	\$ 496,309	\$ 233,522	\$ 14,154,295		\$ 14,154,295
Citywide Network Replacement	\$ -	\$ 2,045,000	\$ 35,700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,080,700		\$ 2,080,700
Citywide Telecommunications	\$ -	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000		\$ 2,000,000
Total Infrastructure	\$ 698,940	\$ 41,963,626	\$ 1,585,700	\$ 137,654	\$ 717,048	\$ 461,219	\$ 7,269,760	\$ 7,259,055	\$ 7,885,918	\$ 5,959,066	\$ 3,048,205	\$ 76,984,191		\$ 76,984,191
Projects to be Financed through Annual Capital Lease Payments														
Police Communications & Dispatch System	\$ -	\$ 170,238	\$ 86,377	\$ 170,238	\$ 170,238	\$ 170,238	\$ 170,238	\$ 170,238	\$ 170,238	\$ 170,238	\$ 170,238	\$ 1,618,519		\$ 1,618,519
Regional Communications System (RCS)	\$ 1,396,460	\$ 535,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 5,081,460		\$ 5,081,460
Fire Response Vehicles	\$ -	\$ 244,400	\$ 385,000	\$ 385,000	\$ 385,000	\$ 385,000	\$ 385,000	\$ 385,000	\$ 385,000	\$ 385,000	\$ 385,000	\$ 3,709,400		\$ 3,709,400
Total Public Safety Capital Lease Pmts	\$ 1,396,460	\$ 949,638	\$ 821,377	\$ 905,238	\$ 905,238	\$ 905,238	\$ 905,238	\$ 905,238	\$ 905,238	\$ 905,238	\$ 905,238	\$ 10,409,379		\$ 10,409,379
TOTAL EXPENDITURES	\$ 3,200,000	\$ 79,245,965	\$ 12,198,969	\$ 10,125,166	\$ 10,307,836	\$ 10,165,556	\$ 10,232,960	\$ 11,047,659	\$ 11,263,662	\$ 11,850,648	\$ 7,166,389	\$ 176,814,810		\$ 176,814,810
Bond Proceeds:														
Bond Proceeds	\$ -	\$ 71,363,509	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 71,363,509		\$ 71,363,509
Cost of Issuance	\$ -	\$ (563,210)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (563,210)		\$ (563,210)
TOTAL BOND PROCEEDS	\$ -	\$ 70,800,299	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,800,299		\$ 70,800,299
Bond Debt Service:														
Debt Service Principal	\$ -	\$ 5,550,000	\$ 5,330,000	\$ 5,605,000	\$ 6,885,000	\$ 6,885,000	\$ 6,180,000	\$ 6,175,000	\$ 6,485,000	\$ 6,810,000	\$ 7,150,000	\$ 61,355,000		\$ 61,355,000
Debt Service Interest	\$ -	\$ 2,324,334	\$ 2,790,250	\$ 2,523,750	\$ 2,243,500	\$ 1,949,250	\$ 1,540,000	\$ 1,331,000	\$ 1,022,250	\$ 698,000	\$ 357,500	\$ 16,879,834		\$ 16,879,834
TOTAL DEBT SERVICE	\$ -	\$ 7,874,334	\$ 8,120,250	\$ 8,128,750	\$ 8,128,500	\$ 8,134,250	\$ 7,820,000	\$ 7,506,000	\$ 7,507,250	\$ 7,508,000	\$ 7,507,500	\$ 78,234,834		\$ 78,234,834
Administrative Expenses:														
Audit	\$ -	\$ -	\$ 5,000	\$ 5,100	\$ 5,202	\$ 5,306	\$ 5,412	\$ 5,520	\$ 5,631	\$ 5,743	\$ 5,858	\$ 48,773		\$ 48,773
Bond Administration	\$ -	\$ -	\$ 6,700	\$ 6,834	\$ 6,971	\$ 7,110	\$ 7,253	\$ 7,397	\$ 7,545	\$ 7,696	\$ 7,850	\$ 65,356		\$ 65,356
TOTAL ADMINISTRATIVE EXPENSES	\$ -	\$ -	\$ 11,700	\$ 11,934	\$ 12,173	\$ 12,416	\$ 12,664	\$ 12,918	\$ 13,176	\$ 13,440	\$ 13,708	\$ 114,129		\$ 114,129
Annual Surplus/Deficit	\$ 706,919	\$ 1,539,000	\$ (2,245,919)	\$ -	\$ -	\$ 320,771	\$ 753,699	\$ 440,940	\$ 413,504	\$ 7,480	\$ -	\$ 1,596,395		\$ 1,596,395
¹ Audited Total														
² Projected Total														