CITY OF LAS CRUCES
PUBLIC WORKS
ANNUAL REPORT

LETTER FROM THE DIRECTOR

David Maestas, P.E., C.G.P.M., Public Works Director

It is my distinct pleasure to bring you the inaugural Public Works Annual Report. In an effort to ensure that we are meeting and exceeding customer expectations, we want to provide background about the Department Programs so that our customers have a better idea of who they can approach with specific questions. We also want to highlight some projects and initiatives so that our customers have additional insight about services that have been provided this past fiscal year.

When asked to summarize the services that Public Works provides and the impact we have on our customers’ experience; I ask that each customer simply think about their everyday lives. When someone leaves a property that they are on and begins to travel to any other property in the City, they will be impacted by the services that Public Works has provided. The instant they walk off, bicycle off or drive off their property, they encounter a sidewalk, bike lane or path, or roadway that was managed, installed, and/or maintained by Public Works.

As they continue their route, they encounter signs, markings or signals that help direct them efficiently and safely throughout the City. Or maybe they do not encounter something based on the efforts of Public Works. The water that was on the road an hour ago due to a heavy rain, or the dirt left over yesterday from a heavy rain, or the pothole that was there yesterday, is no longer in the road.

And finally, when they reach their destination, if it is a City facility such as a Museum, Library, Senior Center, Transit or Emergency Service Center, the experience they have will have been complimented by the custodial and maintenance services as well as the design and construction of the facility.

This is our opportunity to express our gratitude to the staff of Public Works for their exemplary efforts in meeting our customers’ needs and to thank our customers for their support.

It is our sincere hope in Public Works that we continue to hear from, interact with, and provide updates to our customers to continue to improve the services that we provide.

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For more information about the Public Works Department, please visit us at: http://www.las-cruces.org/Public-Works
To report an incident or make a request please visit: https://selfservice.las-cruces.org/TIMPublicLive/importal/Map.aspx
ABOUT US: ENGINEERING AND ARCHITECTURE

Engineering and Architecture provides technical surveys and engineering design work to develop plans and specifications to build, maintain, and replace public infrastructure as well as manage the design and construction of City facilities. This program is also responsible for the City’s Stormwater Pollution Program, which provides the public with awareness on pollutants that could be harmful to the environment.

Concurrently, Engineering and Architecture is responsible for the City’s National Flood Insurance Program/Community Rating System. Because of the diligent review and oversight of this program, the City has earned a rating such that residents of Las Cruces are provided a 20% discount on their flood insurance premiums.

SURVEYING

The City of Las Cruces GIS staff is partnering with Engineering and Architecture Survey Staff to pursue a High Resolution GIS as part of a nationwide trend to improve GIS data precisions. Staff is currently in the process of writing a GIS Strategic Plan with these High Resolution goals in mind.

For our purposes, we define a High Resolution GIS (HRgis) as being a spatially accurate and precise parcel network of City parcels, right-of-way, easements, and other City land features within the City limits. Implementing a High Resolution GIS will mean greater accuracy and precision for data, better coordination and data sharing between staff, and ultimately better service to our citizens.

GIS DATA COLLECTION

The City has been working with a consultant to collect data on our storm water facilities. To date, three phases of this project have been completed. Currently the City is finishing Phase 4 of data collection.

Using this data, we are developing a 3D storm drain management system with integration to our asset management system. This project will identify the assets and map the location and details of the key feature elements comprising the City’s stormwater system.
INFRAWORKS

During the design phase of projects, Engineering & Architecture hold public meetings to present the project to the public. For a more realistic view of the project, the staff has implemented new software called Autodesk Infraworks 360.

Infraworks is a planning and design platform that enables engineers to quickly and easily convey preliminary design intent in a real world environment for enhanced team decision making.

STORMWATER MANAGEMENT

The City of Las Cruces is permitted under the National Pollutant Discharge Elimination System (NPDES). This permit regulates stormwater discharges through the Clean Water Act (CWA) authorized by the Environmental Protection Agency (EPA). Our natural stormwater can contain sediment, trash, pet waste, oils and chemicals, that are generated everyday by human activities. The NPDES stormwater program regulates stormwater discharges from three potential sources: municipal separate storm sewer system (MS4), construction activities and industrial activities. The NPDES permit was designed to help communities reduce the negative impacts that stormwater pollution has on the regional watershed and local surface waters.

In the City of Las Cruces there are roughly 105 miles of storm drain pipes, 90 stormwater detention facilities throughout the city that temporarily hold runoff during and after storm events, and 2,487 catch basins that help mitigate flooding. The City Public Works Streets Weed and Flood section is responsible for the maintenance of 65 of these detention facilities.

INSPECTIONS

Inspections to the MS4 are carried out annually to determine the condition and maintenance required to keep the system operating effectively. In 2019 a new inspection camera system was purchased to confirm location, condition and functionality of existing storm drain pipes.

The camera is also utilized to verify proper installation of new pipes that will be added to the system. Video is captured and reviewed by staff engineers which helps them make decisions regarding quality, condition, and potential maintenance that may be required.
OUTREACH . WEATHER STATIONS

OUTREACH

Each year staff participates in outreach activities to educate the public about stormwater pollution prevention and stormwater management. These events include the Water Festival in which approximately 700 students from the Las Cruces Public School District received presentations. Students learn about their watershed and ways they can help protect and manage it.

Presentations on stormwater were given to educate students at Sunrise Elementary, Cesar Chavez Elementary, and Doña Ana Elementary. In addition to presenting to students, the outreach team gave presentations on stormwater sustainability to the PRC and the stormwater program to the Neighborhood Leadership Academy.

WEATHER STATIONS

Staff collaborates with the Doña Ana County Flood Commission to provide data for a website showing current and historical weather, rainfall and river level monitoring data. This network of weather and stream level gauge sites is a collaborative project of the Doña Ana County Flood Commission, the Elephant Butte Irrigation District, the City of Las Cruces, the National Weather Service, and New Mexico State University. This web interface incorporates data collected at gauge sites as well as weather and stream gauging sites operated in the area by other agencies such as the United States Geological Survey, the Jornada Experimental Range, local airports and other nearby cities and counties. This year, seven weather stations were installed using a FEMA mitigation grant to increase coverage.
The Engineering and Architecture Program of Public Works oversees over 125 miles of major roadways (arterials and collectors) and 332 miles of residential roadways, encompassing over 9.7 M square yards of asphalt and concrete surfacing. At a replacement cost approaching $1.1M per mile – not including the value of the land, the City has over $500.8 million invested in the paved roadway network.

Preservation while extending the life of existing road and street systems has become a major activity for the City and therefore funds that have been designated for pavement preservation must be used as effectively as possible.

One proven method to obtain maximum value of available funds is using a pavement management system. This system is a set of tools and methods that assists decision makers in finding optimum strategies for maintaining pavement in a serviceable condition over a given time period. Figure 1 illustrates the deterioration of a pavement through its life and the increase in cost to rehabilitate if maintenance is delayed.

Applying pavement management techniques allows the pavement to be revived and sealed, giving the pavement a longer lifecycle as shown in Figure 2. Applying the correct technique to the right pavement at the right time is imperative in increasing the pavement’s life.

The Engineering and Architecture section continues to analyze the current roadway network to maximize funding and continues to increase the number of roadway mile improvements by year. Staff begins with an objective computerized pavement management system to rate the condition of existing roadways, Pavement Condition Index (PCI), and provides the most cost effective method to rehabilitate roadways throughout the City.
The majority of the Las Cruces road network falls under the Good to Very Good (green) categories while the amount of Very Poor to Fair (red) streets is minimal when compared to cities similar to Las Cruces in size and funding. These “green” roads benefit the most from preventative maintenance techniques, similar to changing the oil in your car to help increase its life cycle.

Following the improvements for 2018-2019, the current PCI rating for the City of Las Cruces is 65.52. Typical roadway networks drop approximately 2 points per year on average without maintenance. Las Cruces has effectively minimized any noticeable drop in condition. Staff’s long-term focus is to ensure that the overall condition does not drop and that the number of red streets does not grow excessively over time thereby saving millions of dollars by preventing roadway failure. Streets are surveyed, evaluated, scored, and categorized as shown in the following table:

All street segments are represented in a map with corresponding colors. This map is updated each time any pavement maintenance or rehabilitation has occurred.

<table>
<thead>
<tr>
<th>PCI RANGE</th>
<th>DESCRIPTION</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>85-100</td>
<td>Excellent</td>
<td>Like new condition—little to no maintenance required when new; routine maintenance such as crack and joint sealing</td>
</tr>
<tr>
<td>70-85</td>
<td>Very Good</td>
<td>Routine maintenance such as patching and crack sealing with surface treatments such as seal coats or slurry.</td>
</tr>
<tr>
<td>60-70</td>
<td>Good</td>
<td>Heavier surface treatments and thin overlays. Localized panel replacements.</td>
</tr>
<tr>
<td>40-60</td>
<td>Fair to Marginal</td>
<td>Heavy surface based inlays or overlays with localized repairs. Moderate to extensive panel replacements.</td>
</tr>
<tr>
<td>25-40</td>
<td>Poor</td>
<td>Sections will require very thick overlays, surface replacement, base reconstruction, and possible subgrade stabilization.</td>
</tr>
<tr>
<td>0-25</td>
<td>Very Poor</td>
<td>High percentage of full reconstruction.</td>
</tr>
</tbody>
</table>
PREVENTATIVE MAINTENANCE

In order to maintain good to excellent streets at their current PCI or better, it is necessary to apply preventative maintenance.

Crack seals are used to fill any cracks that have formed in the roadway to minimize any moisture from entering and affecting the pavement.

Micro-Surfaces are thin layers of asphalt applied over an entire roadway to help protect and keep the asphalt below in good conditions. In fiscal year 2018-2019, the Engineering & Architecture section identified approximately 85 streets that received preventative maintenance.

<table>
<thead>
<tr>
<th>Amount Expended on Preventative Maintenance FY 18-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRACK SEAL</td>
</tr>
<tr>
<td>$286,000</td>
</tr>
<tr>
<td>MICRO-SURFACING &amp; CAPE SEALS</td>
</tr>
<tr>
<td>$1,141,000</td>
</tr>
</tbody>
</table>

REHABILITATION

Streets that may have fallen below the Very Good PCI level require more invasive rehabilitation like a mill & overlay or pavement replacement. Mill & Overlay rehabilitation includes removing the top layer of asphalt and replacing it with new asphalt. Pavement Replacement consists of removing all asphalt and replacing it. In the fiscal year 2018-2019, 13 streets received a mill & overlay and 33 streets were selected to receive pavement replacements.

<table>
<thead>
<tr>
<th>Amount Expended on Rehabilitation FY 18-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILL &amp; OVERLAY</td>
</tr>
<tr>
<td>$1,200,000</td>
</tr>
<tr>
<td>PAVEMENT REPLACEMENT 17-18</td>
</tr>
<tr>
<td>$1,200,000</td>
</tr>
<tr>
<td>PAVEMENT REPLACEMENT 18-19</td>
</tr>
<tr>
<td>$1,100,000</td>
</tr>
</tbody>
</table>
FULL RECONSTRUCTION

For streets from Poor to Very Poor condition, it is required that the entire roadway be reconstructed. Along with replacing the asphalt on these streets, they are completely improved including Utilities, Street lights, ADA Ramps and sidewalks. In the fiscal year 2018-2019, four were full reconstruction projects.

Amount Expended on Reconstruction FY 18-19

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHURCH &amp; WATER TWO WAY CONVERSION</td>
<td>$13,200,000</td>
</tr>
<tr>
<td>PALMER SUBDIVISION RECONSTRUCTION</td>
<td>$6,400,000</td>
</tr>
<tr>
<td>ALAMEDA ESTATES RECONSTRUCTION</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>COURT AVE. IMPROVEMENTS PHASE II</td>
<td>$2,300,000</td>
</tr>
</tbody>
</table>
ABOUT US: CONSTRUCTION MANAGEMENT

Construction Management is a program within the Public Works Department that focuses on construction of City projects, including the project management and inspection of Capital Improvement Projects as well as maintenance projects within the City of Las Cruces. Construction Management also provides oversight and contract administration of projects to ensure compliance with applicable plans, specifications and standards. It includes both roadway and facility projects within the City of Las Cruces.

Construction Management also provides inspection and oversight for private infrastructure installed through subdivisions, right of way permits, and commercial development permits that will become public.

Construction Management oversees approximately 45 projects, every year totaling: $50 Million

ANIMAL SERVICES CENTER OF MESILLA VALLEY EXPANSION

The project was substantially complete on April 15, 2019 and consisted of adding 1,930 Sq. Ft. of new reception lobby area, offices and conference room space, as well as 2,510 Sq. Ft. of renovated existing offices and a new Cat Room.

The ASCMV has served the community since 1985, and additional space will help in their day to day operations as the animal population has increased throughout the years. This project was completed on time and on budget.

Project Cost: $1.2 Million
**DOWN TOWN T W O - W A Y C O N V E R S I O N P R O J E C T**

**L A S C R U C E S C O N V E N T I O N C E N T E R E X P A N S I O N**

This project consisted of a complete street rehabilitation in the Downtown Las Cruces area which included the streets of Water, Church, Bowman, Griggs, Las Cruces, and Main. The improvements included utilities, storm drain, street lighting, sidewalk, curb and gutter, and paving, as well as converting the streets of Water and Church from one-way to two-way traffic. In addition, improvements were made to the three callesitas (May, Court, and Hadley) located downtown.

**Project Cost:** $13.2 Million

**L A S C R U C E S C O N V E N T I O N C E N T E R E X P A N S I O N**

This addition to the Convention Center was completed in July 2019. This project consists of adding approximately 12,038 Sq. Ft. of functional space areas (meeting rooms, storage areas, bathrooms, offices, and expansion of a large conference room), and 8,010 Sq. Ft. of outdoor terrace at the North, South and West of the facility. Originally built in 2010, the Convention Center is located on the corner of University Avenue and El Paseo Road on the New Mexico State University Campus. The facility is designed to accommodate events of all kinds, such as conventions, trade shows, meetings, fundraisers, employee events, as well as weddings and other special events. The additional space will allow for bigger events.

**Project Cost:** $4.9 Million
NATIONAL FITNESS CAMPAIGN OUTDOOR FITNESS COURT #1
FRANK O’BRIEN PAPEN CENTER RE-ROOF PROJECT

NATIONAL FITNESS CAMPAIGN OUTDOOR FITNESS COURT #1

This project was initiated by the Parks and Recreation department; and provided a new outdoor fitness gym as part of the National Fitness Campaign. This project was substantially complete on January 15, 2019, and it consisted of adding 1,600 Sq. Ft. of new fitness equipment and a shade structure.

This gym is located on Hadley avenue next to the skateboard park and is in place for use by the general population.

Project Cost: $225,000

FRANK O’BRIEN PAPEN CENTER RE-ROOF PROJECT

This project was initiated by the Public Works Facilities Maintenance department and provided a new roof to the Frank O’Brien Papen Community Center. This project was complete in May 2019 and consisted of replacing approximately 21,000 Sq. Ft. of asphalt shingles at the Papen Center. The facility was originally built in 1907 and serves as a community center for youth and Seniors of Las Cruces, Mesilla, and Dona Ana Community.

Due to the building being occupied during construction, the General Contractor worked diligently to complete the construction as quickly as possible. This project was completed within budget and 30 days ahead of schedule.

Project Cost: $65,000
Bulb replacement maintenance project at Lion’s Park Tennis Courts on East Picacho Ave.

Surface repair and restripe of Branigan Cultural Center parking lot on North Water St.

ABOUT US: FACILITIES MANAGEMENT

Facilities Management is responsible for implementing the overall operation and maintenance strategy as it relates to buildings and grounds for the City. This program consists of three functional areas that collectively maintain approximately over 1,000,000 square feet of building space spread across 100+ buildings and also provides support to more than 100 parks and recreation sites throughout the city.

CUSTODIAL EFFICIENCY EQUIPMENT – WAND

As part of enhancing the customer experience, providing a safe environment, improving indoor air quality, and making more efficient use of budgetary resources, Custodial Services implemented an in-house solution featuring the SpaceVac Cleaning System.

Using this system helps address the various challenges faced by custodial staff on a day-to-day basis to keep the building interiors and exteriors clean. These include windowsills, light fixtures, ventilation grills, vestibules, ceilings, and other hard-to-reach areas. Where height is involved, some areas only allow limited movement in a small space. For safety reasons, ladders and mechanized lifts are not necessarily the best tools. They typically require two persons to operate safely, which adds time, cost, and materials to the activity. Utilizing the equipment yielded a savings to the City in just the first year of use based on the elimination of costly equipment needed to reach the heights required.
OPERATION EFFICIENCY CHANGES

The City has engaged in what is called the PEAK gement, as part of Public Works, is tasked with making sure facilities are safe, available for use, and provide an inviting environment for customers and staff. To help move down that path, the facilities program has implemented a Facility Management Plan that was adopted by City Council on April 1, 2019 which identifies various initiatives to raise the bar and provide improved services. Establishing such a plan helped meet one of the identified milestones as outlined in the Strategic Business Plan as part of the PEAK Performance process. The purpose of such a plan is to manage and preserve the City’s facilities and prepare for the acquisition of future facilities.

One area of focus is the preventive maintenance program. This involves taking steps that are performed on a regular basis, whether it is a parking lot, building, piece of equipment, etc. to reduce the likelihood that the item will fail unexpectedly while increasing the life cycle of that item. In addition, by focusing on this area, the City can plan for future repair or replacement costs which will yield a budget more closely aligned with needs to provide a higher level of service to our customers.

A second area of focus is the annual walk-throughs that have been instituted at 65 buildings. These are facilities that serve our citizens directly. A walk-through of the entire building, including but not limited to: common areas, offices, storage rooms, restrooms, mechanical service rooms, and custodial support areas as well as a complete outside perimeter inspection is conducted.

As all these inspections are completed and reviewed, work orders are generated or inclusion in the Capital Improve-
**ENHANCED AUDIO/VISUAL CAPABILITIES FOR PUBLIC MEETINGS**

**MUNICIPAL COURT HVAC**

**ENHANCED AUDIO/VISUAL CAPABILITIES FOR PUBLIC MEETINGS**

As technology changes, the City is keeping its eye out on what equipment is available that would help improve presentations as part of public meetings. Previously, these rooms were served via older LCD projectors mounted on the ceiling which required costly maintenance parts and labor.

To address these issues and provide a better customer experience, and to make availability of these rooms more consistent, the City added monitor screens and computers in each room. The equipment is connected to the City network and to the Internet. This allows staff when making presentations to upload their documents and then display them on screen – all without needing additional equipment computer, flash drives, etc. This has improved the customer and staff experience significantly and reduced maintenance costs.

**MUNICIPAL COURT HVAC**

New Municipal Court Heating, Ventilation, and Air Conditioning Components Installed to Provide Improved Occupant Comfort and More Consistent Operation Resulting in Fewer Closures and Relocations of Court Services.

Approximately one year ago, the main water chiller unit (which provides cooling via chilled water pipes) at Municipal Court started to fail. Parts and components would be replaced, and then fail again a short time later. This resulted in inconveniences to our customers with Municipal Court either canceling their sessions, relocating, or closing. After conferring with the manufacturer, and given the age of the unit, the City chose to shut it down and install a rented unit. This allowed the City to keep Municipal Court open during the summer with minimal disruption to their operations.

The City then evaluated its options for replacement of the chiller unit. In addition, after review of maintenance records and consultation with heating, ventilation, and air conditioning staff, it was determined that the boiler (which provides heating via hot water pipes) would most likely experience similar issues during the upcoming winter heating season. The City then opted to replace both the boiler and chiller. The overall cost of the project was $141,000 and was completed by January of 2019. Both units have functioned smoothly without any major issues. Existing piping and heating/cooling units in the offices and the court rooms were left in place. This helped the City manage costs while planning for future use of the building.

In the City of Las Cruces Strategic Plan, a new Municipal Court facility is planned to be constructed in the next few years. City Council, through previous Resolution, has also identified this building to be used as a future Art Museum (as part of adjusting and relocating museum operations in the Downtown area), once the new Court is constructed. Since Facilities Management does not know yet what changes will be made to the Court building (concepts are currently being discussed), the remainder of the heating and cooling system was left alone. As part of planning ahead, if the new boiler and chiller are not able to be used in the remodeled building, then the City can repurpose the boiler and chiller and place them at other locations. This way, the investment in the equipment is preserved.
ABOUT US: STREETS MANAGEMENT

Streets Management aims to provide a safe and efficient transportation environment for vehicular, pedestrian, and bicycle traffic through the maintenance of operation of City streets, sidewalks, drainage system, and flood control facilities.

ROAD CONSTRUCTION

Road Construction oversees road maintenance which consists of pothole repair, utility cut patching, and special projects. Pothole patching crew received 2,784 pothole requests in fiscal year 2019. They averaged 232 potholes per month, with 85% of those completed within 24 hours.

The utility cut patching crews are tasked with patching cuts that Las Cruces Utilities creates after they make repairs to their systems. This includes repairs to both asphalt roadways and concrete infrastructure. This section averages 54 utility cuts per month, completing 650 work orders with 86% of those being completed within two weeks.

Special Project crews completed many projects to include 5 miles of chip seal, a major grading project of the safety area at the Las Cruces International Airport, and the installation of speed tables on various streets.

Streets Management also conducts de-icing operations and snow plowing in the winter months when needed.
WEED AND FLOOD CONTROL

Streets Management's Weed and Flood Control is responsible for maintaining 60 ponding areas throughout the city. Maintenance includes cutting weeds, mowing grass, fixing erosions and removing dirt from the bottom of the pond. They also fix and/or improve drainage infrastructure when needed. Other duties of the Flood Control program include cleaning out and maintaining storm water drop inlets, french drains and culverts throughout the city. Lastly, through a maintenance agreement with EBID and the Army Corps of Engineers, City crews maintain The Outfall Channel, Mesilla Drain, Las Cruces Lateral, Park Drains and the Las Cruces Dam to assure they are clean and maintain their structural integrity and capacity. Finally, flood control provides sandbags to all the fire stations and residents within the city of Las Cruces. During FY19, flood control made and distributed 7000 sandbags.

The Weed portion of this program is responsible for cutting and removing weeds, trash and debris from roadways and sidewalks. This section received 488 requests for services last year along with its maintenance for 71.61 miles of main arterial ROW's and medians in the City that are not landscaped.

ROAD MAINTENANCE

Road Maintenance consist of two sections: Street Sweeping and Concrete Maintenance. The Street Sweeping section consist of seven street sweepers and are tasked with sweeping all city streets every four to six weeks. Our city streets are divided into six zones and within each of those zones there are six sub-zones. Currently, they are averaging 260 miles per sub-zone and totaling an average of 1200 miles swept every four weeks, effectively sweeping the entire city in only four weeks.

The Concrete Maintenance crew is tasked with maintaining all city sidewalks, ADA ramps, curbs, and any concrete infrastructure. In the past year, they removed and/or repaired 236 linear feet of sidewalk and 12 ADA ramps. This crew averages 500 yards of placed concrete per year.
ABOUT US: TRAFFIC MANAGEMENT

The City of Las Cruces Traffic Management (TM) collaborates with other departments and residents to efficiently improve local traffic safety in terms of traffic devices and street lighting. Traffic devices that are seen throughout the city include: signage, traffic calming devices such as speed bumps, crosswalks, and traffic signals and markings.

TM is split into two groups: Traffic Engineering and Traffic Operations. Traffic Engineering focuses on performing the required studies that warrant traffic devices in the City. While, Traffic Operations specializes in the installation and maintenance of traffic devices throughout the city.

INTELLIGENT TRANSPORTATION SYSTEM (ITS) PROJECT

The Intelligent Transportation System (ITS) is a centralized system for live traffic signal network activity. ITS creates a bridge between individual traffic signals and TM without requiring the team to go into the field. ITS provides live traffic information to TM and allows the team to remotely change the timing of the signal. ITS focuses on the functionality of local traffic signals while saving time and increasing the efficient use of staff resources. TM continues to apply for state and federal funding for the utilization of the ITS throughout the City.

ADAPTIVE TRAFFIC CONTROL SYSTEM (ATCS)

The Adaptive Traffic Control System (ATCS) is a smart traffic management feature that allows TM to use live traffic data collection to improve travel times and therefore reduce the amount of red lights that motorists hit during their local travels.

The system continuously keeps track of traffic volumes to automatically adjust to daily traffic conditions. The ATCS automatically adapts the signal timing according to unexpected changes that occur in daily traffic, such as crashes and special events, and optimizes the flow of traffic during the affected time period.
WIRELESS INTELLIGENT STREET LIGHTING CONTROL SYSTEM

The Wireless Intelligent Street Lighting Control System is an efficient method of monitoring local street lighting. In 2012, the City of Las Cruces began testing different L.E.D. fixtures for street lighting. The testing of the fixtures encompassed functionality, compatibility with the current system, and durability. By the end of 2017 all City street lights had been upgraded to efficient L.E.D. fixtures.

The upgraded fixtures have the capability to support a Wireless Intelligent Street Lighting Control System. The Wireless Intelligent Street Lighting Control System allows for real-time feedback to include energy use, efficient lighting and notification of street light outages that may occur. The system allows for faster turnaround time for street light repairs to be completed by Traffic Management staff.

NEIGHBORHOOD TRAFFIC CALMING PROGRAM (NTCP)

The Neighborhood Traffic Calming Program (NTCP) is a City of Las Cruces program established by ordinance to create traffic calming in residential areas. The NTCP provides four options for reducing/calming traffic on concerned streets. The four options include: free yard signs, lendable radar dolly, Las Cruces Police Neighborhood Enforced Team (NET), or an active petition for study purposes.

Kilmer Street Traffic Calming was an initiative that followed the established NTCP. It was also a great collaborative effort between residents and multiple City programs working together to improve safety of motorists and pedestrians in the area. Kilmer Street provides motorized and pedestrian access from the neighborhood to other major roadways in the area and to Sierra Middle School where children walk to and from school. At the request of a neighborhood resident, the TM worked with the neighborhood residents to obtain the required signatures (75% or more) to begin the traffic studies.

TM performed a traffic study which identified a significant amount of speeding. TM held a community meeting with the neighborhood to present the results and proposed solutions to their speeding concerns. TM asked for and received feedback from more than 50% of residents voting for the installation of traffic calming. Speed tables were subsequently constructed by the City’s Streets Management Program.