



Monthly Report

October 2019

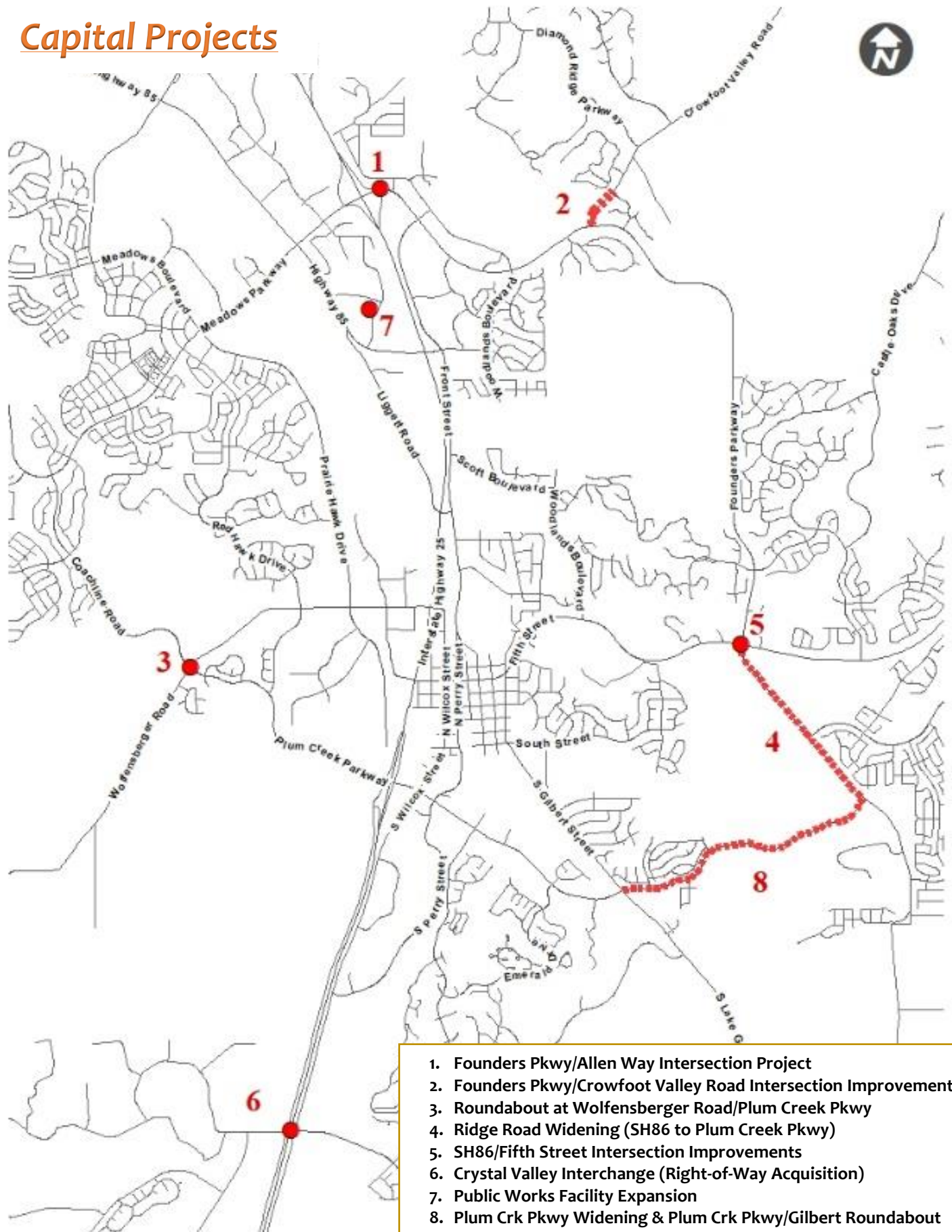


The Public Works Department operates under the CAN DO philosophy – We are committed to doing the job right with a positive attitude while staying dedicated to meeting the needs of our Town values and continually searching for opportunities to improve.

PW Mission: To provide outstanding service, safety and support for transportation infrastructure and maintenance.



Capital Projects



1. **Founders Pkwy/Allen Way Intersection**

Improvement Project – This project will address the need for the following improvements:

- An additional eastbound left turn lane from Founders Parkway to Allen Way
- A dedicated right turn lane from Founders Parkway to Allen Way
- An additional southbound right turn lane from Allen Way to westbound Founders Parkway
- An additional I-25 northbound on-ramp lane
- A second through lane at Allen Way and Allen Street

Phase: Construction – Close out phase. The following is a summary of the construction activities that took place during this month:

- Traffic signal post and mast arms were installed; the contractor continues to work on issues with the detection system.
- The project was walked for final acceptance punch list.
- The project is expected to be 100% complete by November 15, 2019.

Budget: \$2.64M

Construction Completion: 4th Quarter 2019

2. **Founders Pkwy (SH86)/Crowfoot Valley Road Intersection Improvement Project and Crowfoot Valley Road Widening Project**

– This project will address the need for the following improvements:

- An additional eastbound left turn lane from Founders Parkway to Crowfoot Valley Road
- An additional northbound lane on Crowfoot Valley Road between Founders Parkway and Knobcone Drive
- A southbound free right turn lane from Crowfoot Valley Road to westbound Founders Parkway
- Widen Founders Parkway both eastbound and westbound between the Crowfoot Valley Road and Woodlands Boulevard
- Widen Crowfoot Valley Road from Founders Parkway to Knobcone Drive

Phase: Construction, Intersection Improvements:

- The contractor continues constructing retaining wall on the west side of Crowfoot.
- The contractor shifted traffic to the western portion of Crowfoot Valley Road to construct the eastern portion of Crowfoot Valley Road from Founders Pkwy to Knobcone Drive

- Pavement subgrade preparation has begun along the east side of Crowfoot, with anticipation of paving the week of November 4th.
- Work has begun on the additional storm sewer that was required on Crowfoot.
- The project is currently on schedule with a completion date of November 16, 2019.

Budget: \$3,550,000

Construction Completion: Winter 2019

3. **Wolfensberger Road/Plum Creek Parkway Roundabout Project**

– This project will accomplish the design and construction of a roundabout at this intersection to improve operations and minimize potential accidents.

Phase: Construction – Substantial completion was issued in Spring 2019. Punch list items are complete, with the exception of submitting as-built plans. The Town is working with the adjacent property owners to complete the final landscape tie-ins and adjustments.

Budget: \$1.14M

Construction Completion: Spring 2019

4. **Ridge Road Widening**

– Ridge Road will be widened from two to four lanes between the Founders Parkway (SH86)/Fifth Street/Ridge Road intersection and Plum Creek Parkway. The goal is to reduce traffic congestion on the Ridge Road corridor.

Phase: Design -100% plans have been provided. A service agreement has been approved to initiate the ROW acquisition. Staff is working with IREA to initiate agreements to have their facilities relocated.

Budget: \$400,000

ROW Acquisition: Early 2020

5. **Founders Parkway (SH86)/Fifth Street Intersection Improvements**

– The Town's design consultant, Short Elliott Hendrickson, Inc. (SEH) investigated multiple alternatives to address safety concerns and capacity issues at this intersection. A roundabout was the preferred alternative by CDOT, who owns the right-of-way for this intersection.

Phase: Design

- The DRCOG grant was awarded to the Town.
- Project will be designed per Federal requirements/standards.

- Town is in negotiations with CDOT to establish rolls and responsibilities for the design and construction of the intersection improvements

Budget: \$340,000

Design Completion: Pending award

6. Crystal Valley Interchange – Right-of-Way

Acquisition – The purpose of this project is to achieve acquisition of remaining right-of-way and set aside future project funding allowing potential funding partnerships to assist with advancing construction.

Phase: Right-of Way Acquisition

- Appraisal Services – Working on Appraisals
- Acquisition Services
 - East Side of I-25 – Continued initial appraisal discussion
 - East Side of I-25 – Continue to work on offer letters.
 - West Side of I-25 – Town gave the go ahead to start the Appraisals and Acquisition Services for the West Side of I-25.

Budget: Development Escrow

Completion: Fall 2020

7. Public Works Facility Expansion – This project consists of the addition and renovation of the Service Center building.

Summary: The new office addition has been completed and staff has been relocated. The last phase is now under construction. Once this phase is completed, The Streets Division will be relocated into the building.

Office Addition: The office addition, received the final inspections on October 17th and 18th. This allowed the new furniture to be moved in and installed on October 23rd through the 29th. With an enormous amount of coordination between The Facilities Division, IT and Public Works the employees officially reported to their new space on November 4th.

Renovated Sign Shop: As part of the big move, the sign shop also relocated to the western side of the building. Their renovated shop received upgrades such as, upgraded electrical/IT, sealed concrete floors, raised garage door to accommodate the traffic truck, a monitor wall for monitoring traffic signals, and much more!

Upcoming Activities: The last and final phase of the project will be to remodel the existing offices on the east side of the building. This will include removing all the existing furniture, adding two restrooms, a break room, locker room, conference room, offices and a large collaboration room.

The exterior landscaping is ongoing and is scheduled to be completed by the end of this year.

Budget: \$4,960,349

Construction Finish: Spring 2020

8. Plum Creek Parkway Widening and Plum Creek Parkway/Gilbert Street Roundabout Project – This project will address the need for the following improvements:

- Convert Plum Creek Parkway/Gilbert Street intersection into a roundabout
 - Reconstruct the existing 2-lane section of Plum Creek Pkwy from Gilbert to Eaton streets
 - Widen Plum Creek Parkway from Gilbert Street to Eaton Street
 - Widen Plum Creek Parkway from Eaton Street to Ridge Road

Phase: Design and ROW Acquisition – Kimley-Horn is the consultant for this project. The following is a summary of design activities performed this month:

- Continued working on the Widening of Plum Creek Pkwy from Eaton St. to Ridge Road design package.
 - Continued development of construction plans
 - Continued finalizing the Roundabouts and Widening of Plum Creek Pkwy from Gilbert St. to Eaton St. plans and bid documents as listed below:
 - Continued the development of the project specifications and bid package.
 - Continued utility coordination for utility relocations
- Right of Way Acquisition / Appraisal
 - Acquisition Services
 - Continued coordination with property owners

Budget: \$794,375

Design & ROW Completion: Winter 2019

Phase: Drainage design package

- Awarded a Contract to 53 Corporation for the Plum Creek Parkway Roadway and Widening Improvements Phase 1A Storm Sewer on 9/18/2019.
- Construction started November 4, 2019

Budget: \$1,158,300

Construction Completion: Spring 2020

Traffic Signal System Upgrades (Phase 3) –This project is the third phase of a multi-year signal system upgrade project that was first approved as part of the 2015 budget process. The two main components of the Phase 3 project are the installation of closed circuit television (CCTV) and travel time monitoring devices at key intersections.

- The Staff continued conversations with CDOT about travel time device installations on CDOT signals. The current plan is for the Town to procure the devices and CDOT will install and maintain the devices. A data feed will be shared through CDOT for the Town to perform analytics.
- Staff is still working with CDOT on how to share CCTV still images on COTrip.
- A continuation of the phase 3 project is being undertaken with the incorporation of Automated Traffic Signal Performance Measures (ATSPM). A proof of concept project is wrapping up along the Plum Creek Parkway corridor between Emerald and I-25.
- The use of ATSPMs provides a better understanding of system operation and maintenance needs and is helping better serve our stakeholders in a cost effective manner.
- In August, staff continued reviewing metrics on Plum Creek Parkway using the SPM data. There is enough information to conclude this trial and understand that continuing with SPM data implementation is beneficial.
- We plan to continue implementing SPM and advanced detection devices on the consistently lowest performing corridors and eventually the entire system.

Budget: \$520,000

Construction Completion: Winter 2019

2019 Intersection Signalization Construction Projects

This project constructed one new signal at Meadows Boulevard / Future Street and one replacement traffic signal at Factory Shops Boulevard / New Memphis Court. In September, punch-list items were being

addressed and are expected to be completed during Fall.

Budget: \$667,000

Construction Completion: Fall 2019

2019 Illuminated Street Name Sign Project –This project will be installing illuminated street name signs at several signalized intersections in Town along the major “ring” road that loops around the Town of Castle Rock. In September, we received all remaining signs on CDOT corridors and we will begin installing as projects are ready for them at I-25 northbound and southbound off-ramps and Meadows / Founders Parkway, at I-25 / Plum Creek Parkway, Founders / Crowfoot Valley Road, and Founders / Allen.

Budget: \$55,000

Design Completion: End of 2019

Engineering Division

2019 Pavement Maintenance

Program (PMP) – The 2019 PMP has focused its efforts in the West PMP area with additional work taking place on primary streets (Meadows Boulevard, Wolfensberger Rd., Butterfield Crossing, Foothills Dr., Cherokee Dr.) The remaining PMP primary street work consisted of asphalt mill, overlay, and full depth reclamation. These projects addressed some much-needed maintenance to improve drainage, address safety issues as well as improving the ride quality of the local roads.

PMP crack seal/mastic seal operations began mid-September 2019 in the West PMP area. This project will crack seal streets in the West PMP area that are in a condition that did not require a surface treatment such as a slurry seal or overlay. The project was complete in October.



The 2019 Miscellaneous Concrete Replacement project is currently underway. This contract is providing the Town means to repair concrete infrastructure, such as sidewalk, curb and gutter throughout the Town as well as work on Americans with Disabilities Act (ADA) compliance. This contract will construct needed pedestrian crossing improvements at the 8th and Wilcox intersection as well as placing curb at the Fire Station at 3rd & Jerry to improve drainage. Public notification planning and web site updates are continuing with assistance from the Community Relations team.



2019 Facilities Parking Lot

Improvements Program - This contract will see needed improvements to two parking lots at Town Parks, and paved entrances to CR Water storage tanks. The sites that are scheduled this year are:

- Crystal Valley Tank
- Coachline Tank
- Red Hawk Golf Course (South half)
- Founders Park (Asphalt and Concrete sections)

Currently, work continues for this project. Work began in early September and is expected to be complete in November.

2020 PMP

The PMP team has begun working on the field reconnaissance for the 2020 PMP. This consists of the Central PMP area, and scheduled primary streets, which include Meadows Boulevard

between Prairie Hawk intersection and North Meadows Drive, Prairie Hawk Drive from New Hope Way and, including the intersection. The purpose of the field reconnaissance is to quantify curb, gutter, and sidewalk as well as pavement areas, which are in need of repair prior to the application of the final maintenance surface treatments such as slurry seal, asphalt overlay, or pavement reconstruction. Changes in the proposed streets may occur due to current evaluation taking place and/or actual bid pricing received that may require some modifications.

Other

On-Call Professional Services RFQ

The new RFQ for On-Call Professional Services is now on Rocky Mountain BidNet and is due for selection at the beginning of 2020.

Position Hiring: Project Manager

In process of hiring a new project manager to fill the vacancy left by Frank Main.

Development Review and Permitting

Development Review - All 40 reviews were completed on or before the due date by the PW Development Services Team.

Permitting – 23 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

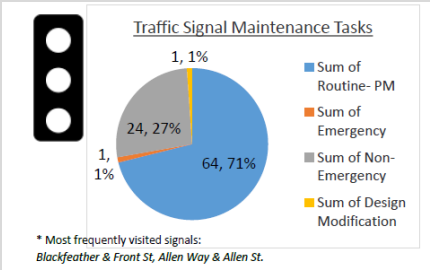
Taxi Voucher Program

For the month of October, the Taxi Voucher Program funded 126 rides; this was less than last October's total of 148 rides. Ridership this month is up 7 rides from last month.

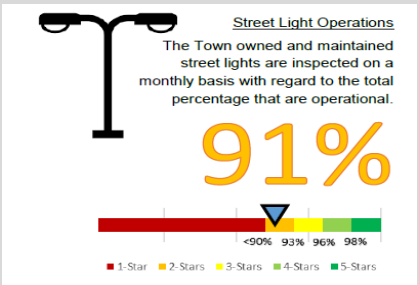
Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do not have access to a vehicle. In October, 20 individuals used the Town's Taxi service. Of those that used the service, 73% of the rides were for work, 12% were for grocery shopping trips, and 15% for medical appointments. One new person registered for the service. The Castle Rock Senior Center provided a total of 723 rides in October.

Traffic Engineering and Operations

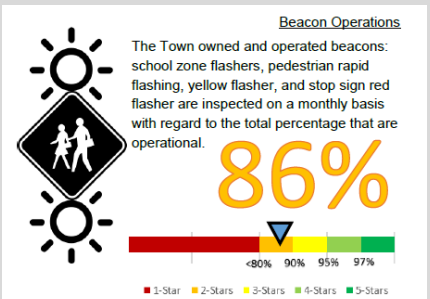
Traffic Signal Operations and Maintenance



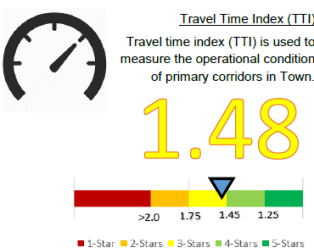
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

During the month of October the crew accomplished 393 tasks. Of these tasks 281 of them were sign work activities related to fabrication, install, repairs, replacements, etc. Marking work accounted for 17 tasks of replacements and burn on of symbols. The crew also completed a total of 7 tasks related to traffic counts. The team responded to and assisted the Streets Division with a few snow storms late in the month. The team worked at getting the sign shop cleaned up and moved over to the new building. Contractor long line painting was completed mid-October and our paint crew almost completed the final arrows and remaining markings before the end of paint season.

Transportation Planning

Neighborhood Traffic Calming Program (NTCP):

The NTCP exists to verify and address resident speeding and/or cut-through concerns on local neighborhood streets and certain collector roadways. Homeowners along Manobrier Circle in Crystal Valley and Ridge Oaks Drive near the Founders neighborhood were sent support petitions to determine if the neighborhood shares the same concern. Additionally, the speed re-evaluation study after Phase 1 traffic calming efforts for the N. Meadows Drive project showed a reduced speed of 28.9 mph. This speed is now below the 30 mph threshold to qualify for the program. According to the NTCP policy, the project is now considered complete and no further action is necessary. The point of contact for the neighborhood was notified of the results and agrees with the conclusion. Finally, there is

one case that is currently active in the traffic calming program on Diamond Ridge Pkwy.

DRCOG 2021 – 2023 Transportation Grant Funding Applications:

In October, the DRCOG Board of Directors approved the Town's grant application for the Downtown Alley Master Plan. The project was awarded \$180,000 in federal grants with a local Town match of \$40,000. The funding will be available over fiscal years 2020 – 2022. Unfortunately, the phase 1 construction grant application for constructing phase 1 did not receive funding due to a timing concern with the development of the alley plan. The construction project can be re-submitted in two years when the next call for projects is released.

Castle Rock Transit Feasibility Study:

Town staff has begun the public outreach component of the study. The Focus Group and Technical Advisory Committee have been established. The first Focus Group meeting is scheduled to occur Monday November 4th. At the meeting, the list of stakeholders will also be reviewed followed by meetings with each stakeholder over the next two months. Project webpages are now live and collecting public feedback. The Town wide postcard mailing is expected to reach homes in early November asking the public to visit the project webpage and provide feedback and take a short questionnaire. A public Open House is also scheduled on November 13 at Town Hall from 4 -7 pm.

Fleet Services



As you drive around Castle Rock and see many different departments providing first-class service, you will notice how they rely on their Town-issued vehicles. The Fleet Division takes great pride in knowing that those vehicles are reliable and safe to operate.

Fleet Services Division was busy in October 2019 Keeping Castle Rock on the move. The Fleet Division worked on shifts to keep the CDL snow plows in operation during the three storms Castle Rock had last month.

The new fleet-bay additions added to our efficiency by allowing us to keep the heavy trucks and equipment in those bays and let us have the smaller bays available for other vehicles.

The Fleet Division billed out \$90,000 of parts and labor and met the following objectives and benchmarks

Objective/Benchmark: Complete at least 75% of our Work orders within 24-hours of coming to shop.
Outcome: Fleet team completed 87% of the work orders within 24-hours of opening repair requests or service requests. This benchmark number shows how quick the Fleet Division is working on vehicles to get them back on the road.

Objective/Benchmark: Town vehicles and equipment available for use 95% of time.
Outcome: Town vehicles and equipment were available 98.7% of the time. This high fleet availability rate means that Town vehicles and equipment are ready when they are called upon to perform.

Objective/Benchmark: Technician productivity percentage of 70% (APWA standard)
Outcome: Technician productivity was 70.5%. This was above our benchmark of 70% compared to the standard set by the American Public Works Association (APWA).

Overall, we completed 159 work orders and processed \$57,199 in parts and fuel. Fleet was also able to auction off four old town vehicles and bring in an additional \$20,000 to the vehicle replacement fund.



Fleet technicians helping the Police Department during a crash inspection report

Street Operations & Maintenance Division

During the month of October, the Street Operations & Maintenance Division (SO&MD) performed work maintenance operations:

- Snow and Ice Control
- Equipment Maintenance
- Asphalt patching
- Special Operations
- Asphalt Crack Sealing
- Training

Snow and Ice Control

The Streets Division responded to three snow events this month. The crews achieved the first round clearance within 3-4 hours. The routes were completed within 2 hours of the cessation of snowfall. Snow from the center lanes of Down Town was removed 24 hours after plow operations ceased

Personnel from the Water Department, Parks Department, as well as the Traffic Division of the Public Works Department joined Streets Division in this effort.

Asphalt Patching

In October, Streets O&M crews used 13 tons of hot mix asphalt repairs on Hillside Drive as well as Echo Hollow Street. These roads had some significant damage and crews were able to execute these repairs prior to the major snow event.

Special Operations

Crews continued to get the salt and sand mixtures needed to carry out snow and ice control operations throughout winter. This task is important as the salt mixture will melt ice down to zero degrees while the sand mixed in will allow some measure of traction should temps drop below zero

Equipment Maintenance

Crews inspected, maintained and made repairs to the plow trucks, spending over 300 hours to ensure the trucks are ready when the snow flies. In addition to this crews also prepared the street sweepers to carry on the task of cleaning up the streets after storms. This allows the Town to keep in compliance with DRCOG (Denver Regional Council Of Governments) air quality program.

Training

Crews continued with LTAP (Local Technical Assistance Program) taking the Winter Maintenance courses offered. This was the final course needed for three Streets personnel to obtain their Road Scholar certification. New personnel are getting familiar with the equipment they will be using for the winter season.

Looking Ahead

Looking into the month of November, Streets crews will continue to monitor and address snowstorms. During periods of favorable weather, the completion of the PMP crack seal program is expected to be achieved, as well as the fall sweep.

