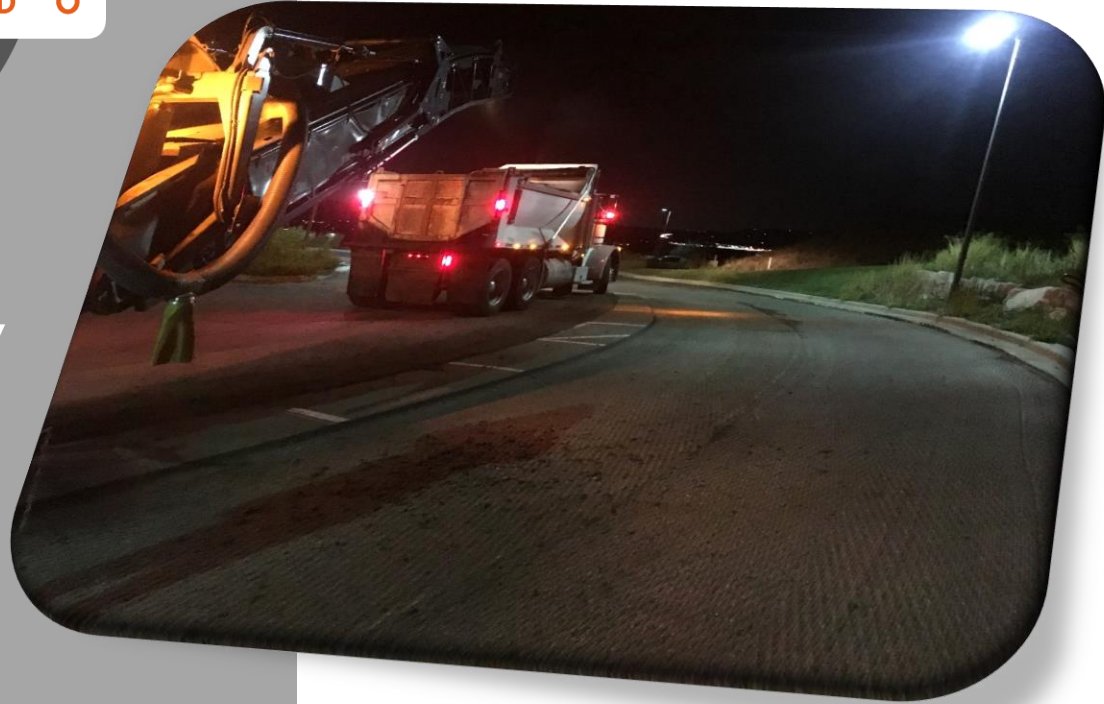




# Monthly Report

September 2019

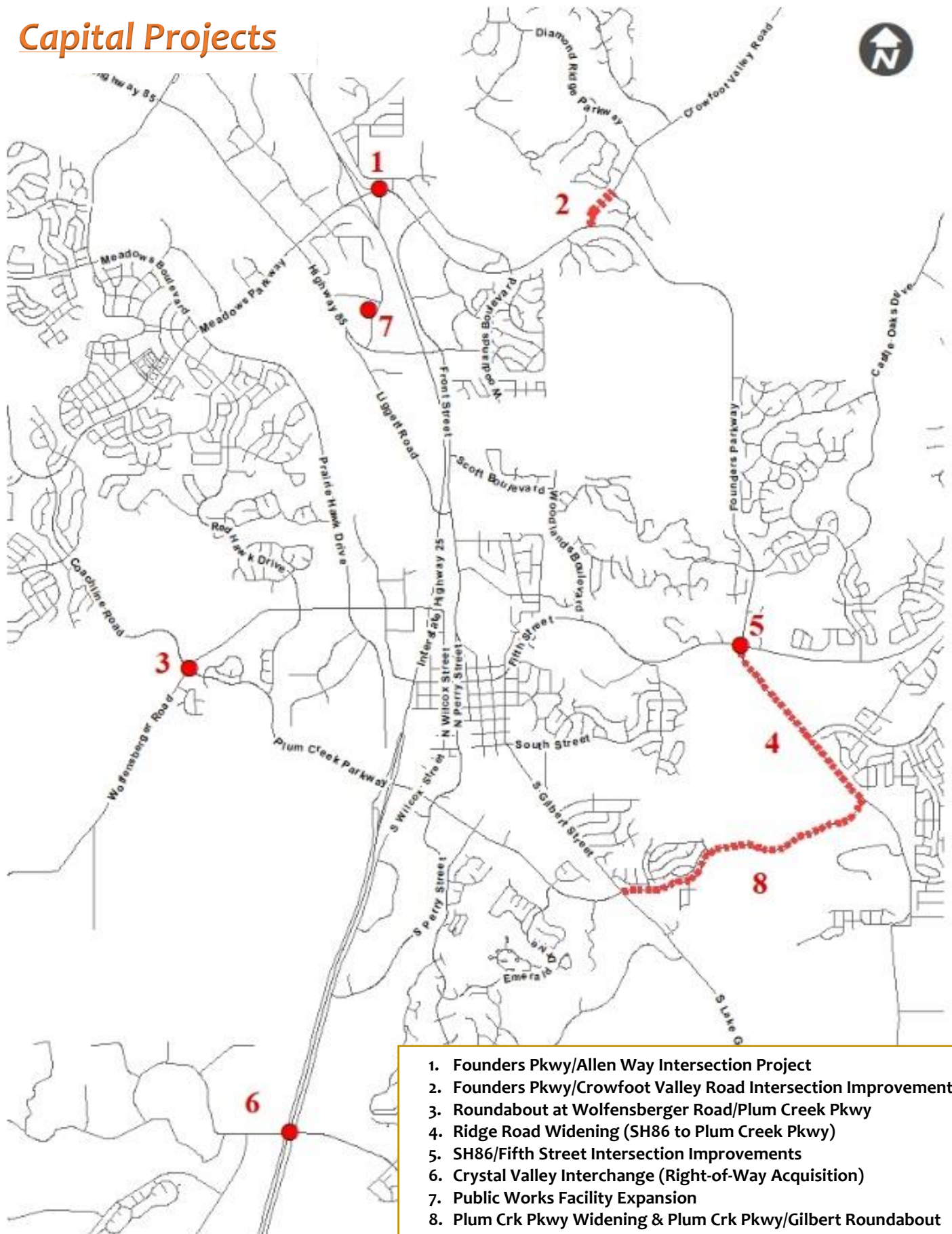


The Public Works Department operates under the CAN DO philosophy – We are committed to doing the job right with a positive attitude while staying dedicated to meeting the needs of our Town values and continually searching for opportunities to improve.

**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 – Noraa Concrete Construction Corporation was awarded the construction contract and a pre-construction meeting was held on June 19. The following is a summary of the construction activities that took place during this month:

- Continued removals of existing concrete pavement, sidewalk and curb & gutter
- Continued work on traffic signals; including conduit and erecting poles
- Paved new concrete pavement on half of the NB I-25 On-Ramp
- Paved temporary asphalt pavement and switched traffic on the NB I-25 On-Ramp
- Removed remaining existing pavement on NB I-25 On-Ramp
- Began construction of a retaining wall with natural stone
- Constructed new drainage inlets

**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 has placed the lower lifts of asphalt pavement along the south side of Founders Pkwy, the remaining items include the top lift of asphalt pavement and general clean up in this area.
- The contractor continues constructing retaining wall on the west side of Crowfoot.
- Pavement subgrade preparation has begun along the west side of Crowfoot, with anticipation of paving the week of October 1<sup>st</sup>.
- Work has begun on the additional storm sewer that was required on Crowfoot.
- The project continues to run approximately a week behind schedule with the addition of the storm sewer on Crowfoot. The contractor is indicating additional forces are scheduled to be assigned to the project, and the project will be back on schedule by the mid- October.

**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 – The following construction activities were performed by Rocky Mountain Excavating:

- Completed punch-list items
- Closing out project

**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 - Stanley Consultants, Inc., has been awarded the design contract for this project. 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

**Design Completion:** 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.

Work has continued on the new office space on the south side of the existing building. The remodeling of the restrooms was completed.

The fleet service bays have been turned over to Fleet Services and placed into full service.

**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 –

- Continued working on the Widening of Plum Creek Pkwy from Eaton St. to Ridge Road design package.
  - Continued development of construction plans
- Cont. the development of the project specifications and bid package.
- Cont. to update the plans to reflect the drainage design package.
- Cont. utility coordination for utility relocations

Drainage design package

- Finalized construction bid package
- Advertised for construction bids

Right of Way Acquisition / Appraisal

- Acquisition Services
  - Continued coordination with property owners who are obtaining appraisal
  - Mailed out offer letters to property owners.

**Budget:** \$794,375

**Design & ROW Completion:** Spring 2019

**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 will focus 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., & Morning View 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 2019 Miscellaneous Concrete Replacement project’s bid opening was August 1, 2019. The contract, once approved, is scheduled to begin late September 2019. This contract is providing the Town the 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.

Public notification planning and web site updates are continuing with assistance from the Community Relations team.

### **2020 PMP**

The PMP team has begun working on the field reconnaissance for the 2019 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.

## 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:

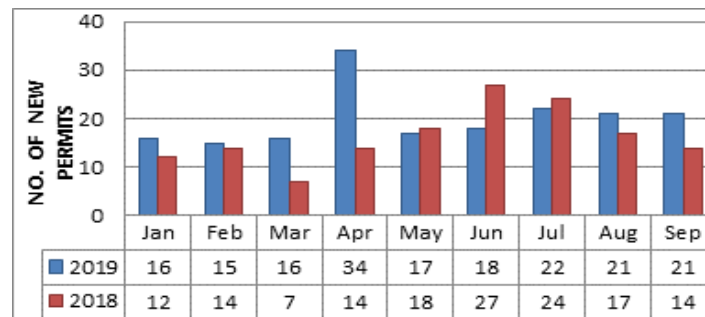
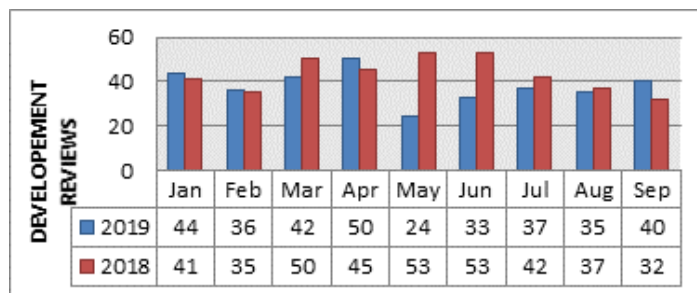
- Crystal Valley Tank
- Coachline Tank
- Red Hawk Golf Course (South half)
- Founders Park (Asphalt and Concrete sections)



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

## Development Review and Permitting

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



**Permitting** - 21 right-of-way permits were issued.

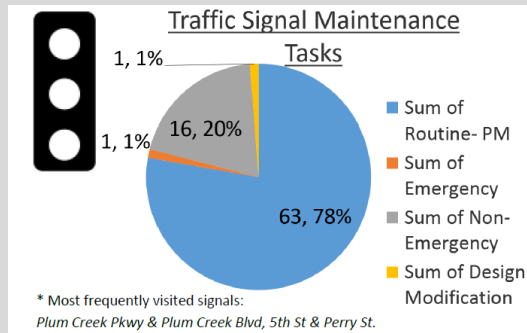
## Transportation Planning & Traffic Engineering Division

### Taxi Voucher Program

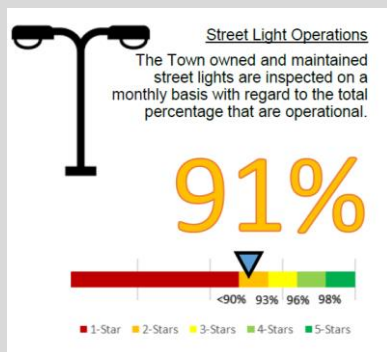
For the month of September, the Taxi Voucher Program funded 119 rides; this was less than last September's total of 133 rides. Ridership this month is down 20 rides from last month. Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do not have access to a vehicle. In September, 19 individuals used the Town's Taxi service. Of those that used the service, 63% of the rides were for work, 14% were for grocery shopping trips, and 23% for medical appointments. One new person registered for the service. The Castle Rock Senior Center provided a total of 737 rides in September.

## Traffic Engineering and Operations

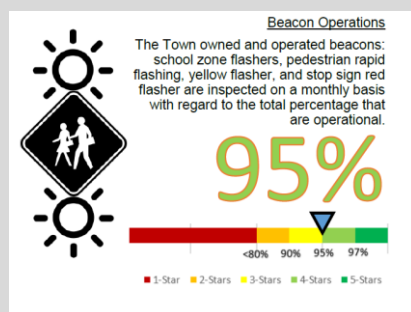
### Traffic Signal Operations and Maintenance



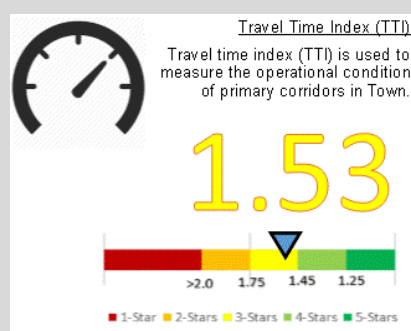
### Street Light Operations



### Beacon



### Operations



## Street Signs and Pavement Marking Maintenance

During September, the Signs & Markings crew completed 1,446 tasks. Tasks included windshield inspections of both contractor and Town staff work. This included inspections to prepare for the fall contractor striping effort coming in October. In addition, special event coordination was completed for the on-going Farmer's Market, Artfest and Oktoberfest. The crew painted arrows on the east side of Town along with crosswalks and stop bars too. Finally, several new rapid flash beacons were installed on Wilcox and on Butterfield Crossing.

## Transportation Planning

### Neighborhood Traffic Calming Program (NTCP):

The NTCP exists to verify and address resident speeding concerns on local neighborhood streets and certain collector roadways. There was one new inquiry September for Desert Ridge Circle in the Terrain. The following streets have active traffic calming programs occurring;

- Diamond Ridge Pkwy
- N. Meadows Drive

### DRCOG 2021 – 2023 Transportation Grant Funding Applications:

Town staff submitted two grant applications for Community Mobility Planning and Implementation (CMPI) funds. The projects included a study to conduct the Downtown Alley Master Plan and funding to reconstruct the alley from Festival Park to 3rd Street. DRCOG staff and committees are recommending the Board provide \$180,000 in funding to the Downtown Alley Master Plan with a Town match of \$40,000. The other application for reconstruction is not being recommended for funding since the Master Plan is not yet complete. 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 met with the Community Relations Department and consultant to finalize the



communications plan for the study. Currently, the project team is developing a stakeholders list and a participant list for the Focus Group. Public outreach is expected to begin in October. Members of the Technical Advisory Committee also attended a webinar discussing Microtransit or Mobility On-Demand service occurring in other cities. This type of service will be evaluated as one possible option in the study.

## 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 September 2019 Keeping Castle Rock on the move. The Fleet Division billed out \$82,000 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 77% 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 95.7% 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 80.7%. This was above our benchmark of 70% compared to the standard set by the American Public Works Association (APWA).

This past month the Fleet Division was handed over the additional fleet bays for operation. We have begun to move technicians and equipment into those bays and are using those bays to work on Town vehicles & equipment. The overall work orders completed were 120, which is right at our average.

## Street Operations & Maintenance Division

During the month of September, the Street Operations & Maintenance Division (SO&MD) performed work in six (6) maintenance operations:

- Vegetation Control
- Asphalt and pothole patching
- Equipment Maintenance
- Special Operations
- Bridge Maintenance
- Training

### Bridge Maintenance

Crew's pressure washed and painted the bridge on Plum Creek just east of I-25, completing this year's bridge maintenance program. These operations work to enhance the ability of the bridge to withstand the salt and grime from the roadway and enhance the safety and the life expectancy of the span.

### Asphalt Patching

In September, Streets O&M crews used 68.26 tons of hot mix asphalt to repair patches in numerous areas of Town and fill transverse cracks in the PMP Central area. The primary areas where full depth patching operations were conducted on Prairie Hawk Drive, Echo Hollow Street, Plum Creek Parkway, and Ridge Road.

### Vegetation Control

Crews completed 24 edge line miles of road verge vegetation control this last month. This includes the removal of trash, mowing and trimming in the road verge areas maintained by the Public Works Department.

### Special Operations

Crews carried out a number of special operations this month. These include mixing salt/sand for the



upcoming snow season. Preparing and planning for the creation of new parking spaces for Town Hall.



Engaging in volunteer operations such as *Touch A Truck* and *The Household Chemical Round Up*.

### **Equipment Maintenance**

Crews began to ready the plow trucks for the upcoming snow season, spending nearly 200 hours to ensure the trucks are ready when the snow flies.

### **Training**

Crews have been undertaking various training operations with the large majority coming from the Local Technical Assistance Program. Crews also developed, set up, and conducted an improved Annual Snow Plow Operations Training program. This program

trains every person involved with the Town wide



Snow Control Program in the methods, equipment, level of service, operations, and expectations for a more consistent and capable plow crew. This training included a new “hands on” portion that was well received and served to familiarize plow drivers with the equipment and the techniques in a controlled setting.

### **Looking Ahead**

Looking into the month of October the Streets Division will continue to make the equipment ready for snow operations. Crack Seal operations as well as installing a new parking lot for Town Hall. The Fall sweep is planned but may continue to be delayed as the leaves have yet to fall from the trees. Gravel Road maintenance operations are scheduled to improve the road surfaces of Castle Oaks and Rocky View prior to the snow season beginning.