

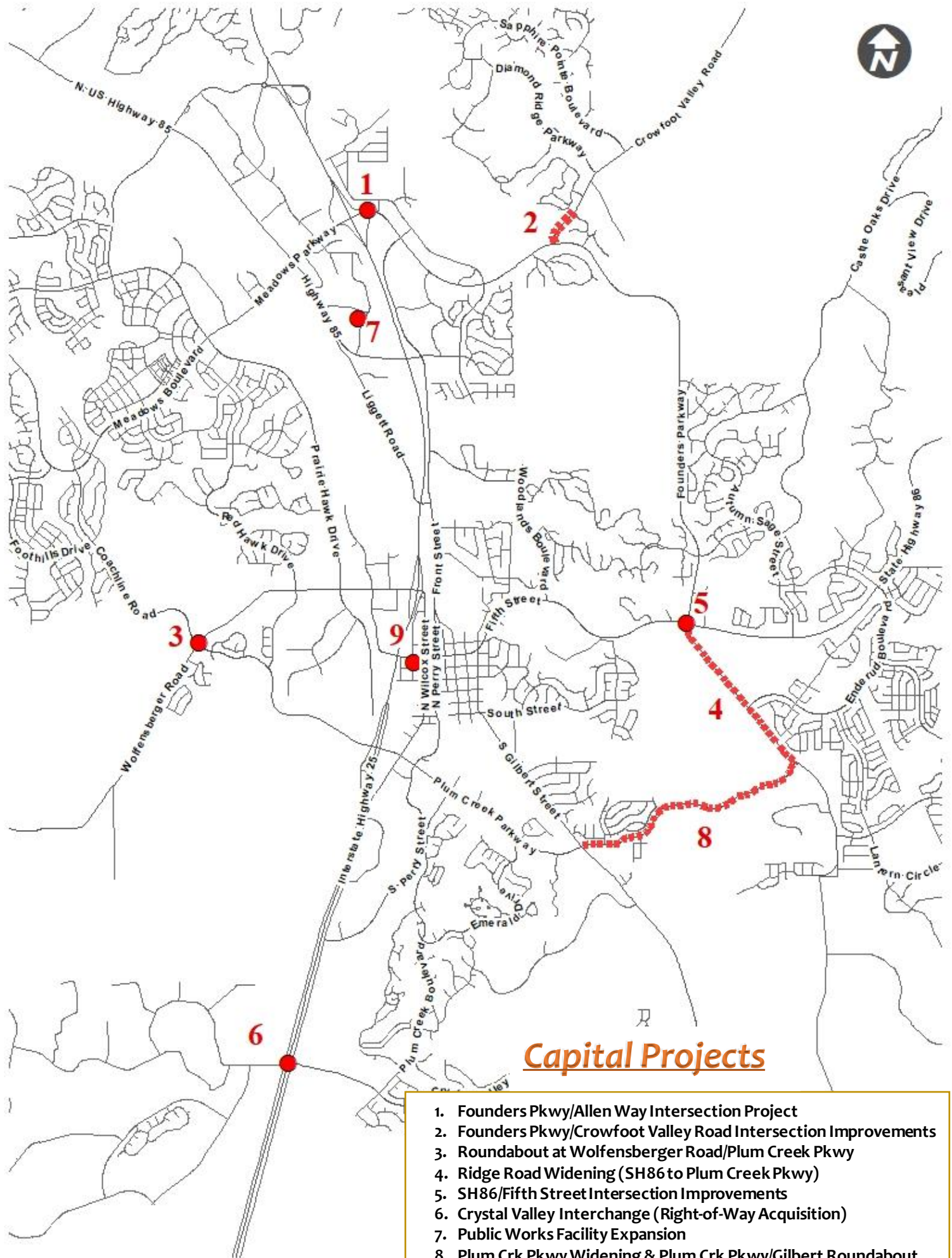
# Monthly Report

March 2020

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.**





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:

- The contractor is work on installing an illuminated Street Sign for Founders Parkway on the north bound off ramp sign pole.
- The contractor works on seeding and soil mitigation as weather allows.

**Budget:** \$2.64M

**Construction Complete:** 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 following is a summary of the construction activities performed this month:

- The contractor has completed punch list items until work resumes.
- The contractor has completed the installation of conduit for the permanent street light poles. IREA is scheduled to do the street light install in April.

- The contractor works on seeding as weather allows

**Budget:** \$3,550,000

**Construction Completion:** Spring 2020

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 2020

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. The consultants continue to work on ROW acquisition. Staff is working with IREA to initiate agreements to have their facilities relocated as needed.

**Budget:** \$400,000

**ROW Acquisition:** Early 2020

5. **Founders Parkway (SH86)/Fifth Street Intersection “Four Corners” Improvements** – With new traffic studies submitted, the Town, and CDOT will continue to investigate multiple alternatives to address safety concerns and capacity issues at this intersection.

**Phase: Design –**

- The DRCOG grant was awarded to the Town.
- Project will be designed per Federal requirements/standards.
- Town staff is reviewing submitted IGA with CDOT to design and manage the project

**Budget:** \$1,200,000, with DRCOG Grant Reimbursement

**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

- Acquisition Services
  - East Side of I-25 – Offers are being sent out on the majority of the properties. The bill boards are being appraised.
  - West Side of I-25 – Appraisals are targeted for completion in May and June, 2020.

**Phase:** Interchange Access Request and Environmental Assessment Reevaluation

- Town staff has been meeting with CDOT and FHWA to established priority activities for the interchange approval.

**Budget:** \$4,600,000, and 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 last phase of this project (renovation of the existing space) has been completed and the employees have been relocated into this space.

With all the employees moved into their permanent positions, the only work that remains is punchlist.

**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** – The following is a summary of design activities performed this month:

- Continued development of construction plans for Phase 2, the widening between Eaton St. and Ridge Rd., and the roundabout at Ridge Rd. Including finalizing ROW needs.
- Continued utility coordination for utility relocations

**Budget:** \$794,375

**Design & ROW Completion:** June 2020

**Budget:** \$794,375

**Construction Completion:** Winter 2020

**Phase 1A: Drainage design package: Construction**

- The following is a summary of activities performed this month:

- The contractor continues installation of improvements along Plum Creek Pkwy. The contractor crossed Oak Crest Dr. with the storm sewer.
- Anticipated completion date is late April 2020.

**Budget:** \$1,158,300

**Construction Completion:** Spring 2020

**Phase 1B: Plum Creek Pkwy Widening and Roundabouts: Construction** - The following is a summary of activities performed this month:

- Staff presented to the Public Works Commission on March 2, 2020 and Town Council on March 3, 2020. Jalisco International, Inc. was awarded the contract. The project is scheduled to start in March 30, weather permitting.
- The Contractor is scheduled to start excavating for the detention pond in early April, and have traffic shifted at the intersection of Plum Creek Pkwy and Gilbert to start construction of the roundabout.
- Continued utility coordination for utility relocations.

**Budget:** \$6,817,145

**Construction Completion:** Late 2020

**Phase 2: Widening Plum Creek Parkway from Eaton to Ridge Road – Designer Kimley-Horn, ROW Acquisition Western States** – The following is a summary of design activities performed this month:

- Continued development of construction plans for Phase 2, the widening between

Eaton St. and Ridge Rd., and the roundabout at Ridge Rd. Including finalizing ROW needs.

- Continued utility coordination for utility relocations

**Budget:** \$794,375

**Design & ROW Completion:** June 2020

9. **Downtown Alley Improvements:** Four alley ways in the downtown area are beyond their service life and are not providing an appropriate level of service to the Town. Reconstruction of alley pavement in addition to drainage improvements and sanitary sewer system replacement will renew the service life of both the pavement and sanitary sewer in the area.

- 2 Alleys (Westerly Alleys) – Located West of Jerry St. between 5<sup>th</sup> and 3<sup>rd</sup> streets
- 2 Alleys (Easterly Alleys) – Located East of Perry St. between 6<sup>th</sup> and 4<sup>th</sup> streets

#### **Monthly Progress & Status**

- Preliminary (30%) design is complete for the Westerly alleys. Town of Castle Rock stakeholders have completed their preliminary design review and returned comments. Final design (90%) for the Westerly alleys is anticipated to be completed by the end of April

#### **Target Milestones**

**Final Design (90%) Review – April 2020**

**Phase 1 Construction – Late Summer 2020**

**Phase 2 Construction – Summer 2021**

**Budget:** \$100,000 design, 300,000 construction

**Traffic Signal System Upgrades** – This project is a multi-year signal system upgrade project that began in 2015 and is on-going as funds are available. The project has included proven technology advances at signalized intersections, for our daily operations, and for communications between the center and each intersection.

- Town staff has the devices, CDOT is working on gathering network and server information for device programming, and we intend to schedule install with CDOT who is experiencing slow work time frames due to COVID-19.
- Detection equipment replacement and upgrades are being scheduled for installation

on Wolfensberger Road, Meadows Parkway, and on Plum Creek Pkwy.

- We are currently trialing a new detection system called GridSmart at Plum Creek Parkway and Plum Creek Boulevard through Spring.
- Town staff are preparing for upcoming DRCOG traffic signal system call for projects that will benefit operational efficiency and safety.

**Budget:** \$200,000

**Construction Completion:** End of year 2020

#### **2020 Intersection Signalization Construction Project –**

This project is the construction of one new signal in 2020 at Meadows Boulevard & Cherokee Drive.

- In March, Town staff completed a bid opening process where two bidders were 30% over budget from the engineering cost estimate. We are planning to rebid the signal construction project in August with expected 4<sup>th</sup> quarter completion. It's expected the regional signal construction companies may be less busy and more companies may bid on our project.
- IREA has been informed of our schedule change, and will remain on the current construction schedule to install power to the intersection this summer, in advance of signal construction. Street light removal is a separate work order, and this phase of the project will be initiated by the signal contractor once the project is awarded.

**Budget:** \$305,000

**Construction Completion:** End of year 2020

**2019 / 2020 Illuminated Street Name Sign Project** – This project is the 2<sup>nd</sup> year we 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.

- A sign from the 2019 project remains to be installed by the Allen Way signal contractor at northbound I25 and Founders Parkway
- A sign from the 2019 project at I25 southbound and Plum Creek Pkwy, will be installed with the 2020 sign project.
- Intersections to be installed in 2020, include Meadows Pkwy / Factory Shops Blvd, Meadows Pkwy / SH85, and two signs, one each at I25 northbound / Founders Pkwy, and I25 southbound / Meadows Pkwy. A request

for quotations for these signs is due in early April.

- 2020 illuminated street name sign installations are included with the Meadows / Cherokee signal construction package and may be installed as a part of that construction contract. Staff will procure the signs for the project

**Budget:** \$56,000

**Install Completion:** End of 2020

**Rectangular Rapid Flashing Beacon (RRFB) 2020 Project** – This project addresses the 20 requested pedestrian beacon crossing locations that staff received in 2019 at priority locations.

- In March, this project was put out to bid with bid opening in early April. The bid will include all 21 locations. The project is being phased over two years, 10 locations in 2020 and 11 locations in 2021.
- Staff is evaluating beacon equipment that are all compatible with current RRFB installations to ensure timely delivery, best pricing, and features for this order.

**Budget:** \$355,000

**Construction Completion:** Fall 2021

## **2020 Pavement Maintenance Program (PMP)**

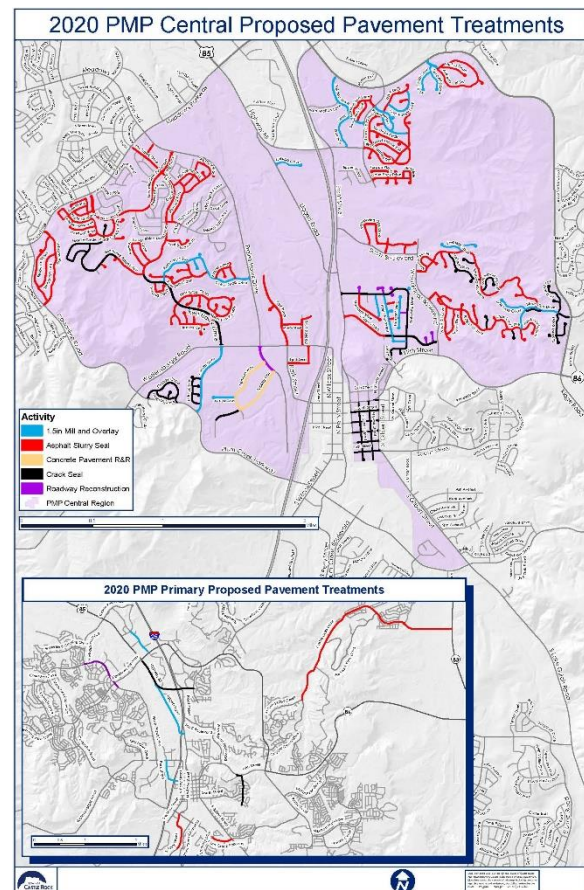
The 2020 PMP will focus its efforts in the Central PMP area along with reconstruct and concrete restoration work taking place on a primary street. (Meadows Blvd./Prairie Hawk Drive). All contracts were presented to the Public Works Commission on March 2, and Town Council on March 3. Approved contracts this year are:

- Asphalt Overlay
- Full Depth Reclamation
- Slurry Seal
- Mastic and Crack Seal
- Curb, Gutter & Sidewalk Replacement
- Reconstructions (Prairie Hawk Dr. / Meadows Blvd.)

A Public Outreach Open House was originally scheduled to be held March 26, at The Public Work Service Center, 4175 N. Castleton Ct., from 5:30-7:30pm. However, this was cancelled in accordance

with safety measures being taken during the COVID-19 epidemic.

The PMP map (shown below) indicates the proposed scheduled treatments for streets within the West PMP area and Primary Streets pending Council approval.



Notice of Award documents have been sent to the contractors, signed and returned. Staff is reviewing the performance and material bonds, insurance documents as well as material submittals. Sr. Inspectors conducted project coordination meetings with the contractors to go over the scope of work and address any concerns they may have. Staff is conducting remote pre-construction meetings. Several of the projects are scheduled to start April 6.

Staff will be spending the next few days marking up concrete and asphalt, placing variable message boards, and doing other prep work for their respective projects.



## Condition Rating

Condition rating began in February and will continue for the next few weeks. Staff is working to complete the North area as well as the Primary streets by April.

## 2020 Facilities Parking Lot Improvements Program

The contract has been returned signed by the contractor. Town Council approved the contract at the March 3 meeting. Work scheduled to begin in August. This contract will see needed improvements to four (9) Town facilities and parking lots as follows:

- PW Service Center (front & back lots)
- Red Hawk Maintenance Shop
- Red Hawk Golf Course Parking Lot (North Half)
- Rhyolite Park (Crystal Valley Blvd)
- Rec. Center Parking Lots (upper & lower)
- Milestone Pump Station (Founders Pkwy)
- Miller Treatment Plant (Plum Creek Blvd)
- Prairie Hawk Well Field (A7)
- Castle Oaks Lift Station

## 2020 Bridge Maintenance Program (BMP)

Bid for the 2020 Bridge Rehabilitation for 5th Street Bridge over I-25, will be submitted for competitive bids upon Colorado Department of Transportation's completion of the proper paperwork and environmental studies. The project is expected to start in May and be complete by the end of summer 2020, pending weather.

The schedule to begin the Bridge painting will be determined by the Streets Division.

Treatments and locations may change pending current evaluation taking place and/or actual bid pricing received that may require some modifications.

## Development Review and Permitting

**Development Review** - All 46 reviews were completed on or before the due date by the PW Development Services Team.

**Permitting** – 19 right-of-way permits were issued and over 200 inspections were conducted.

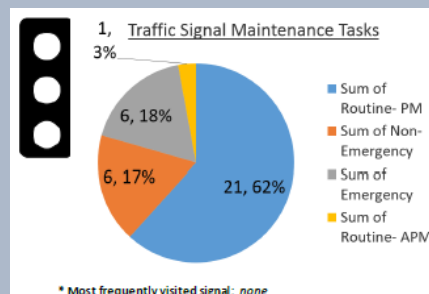
## Transportation Planning & Traffic Engineering Division

### Taxi Voucher Program

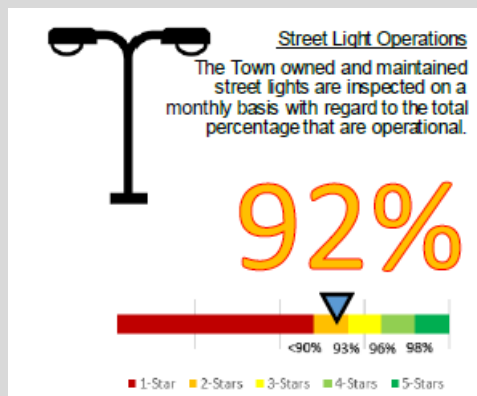
For the month of March, the Taxi Voucher Program funded 125 rides; this was slightly less than last March's total of 130 rides. Ridership this month is up 19 rides from last month. Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do not have access to a vehicle. In March, 20 individuals used the Town's Taxi service. Of those that used the service, 68% of the rides were for work, 10% were for shopping trips, and 22% for medical appointments. There were no new riders that registered for the service keeping the total of registered riders to 436 in the Taxi Voucher Program. The Castle Rock Senior Center provided a total of 538 rides in March.

## Traffic Engineering and Operations

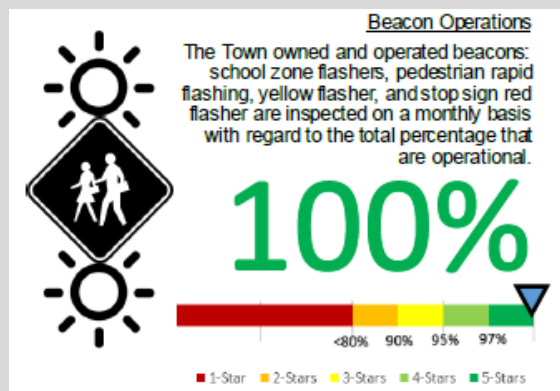
### Traffic Signal Operations and Maintenance



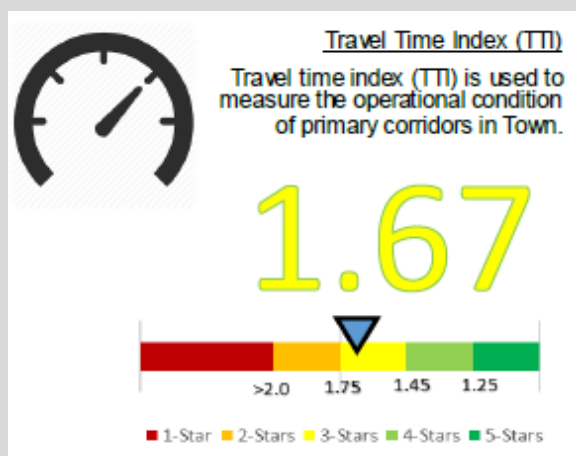
## Street Light Operations



## Beacon



## Operations



## **Street Signs and Pavement Marking Maintenance**

During the month of March the crew accomplished 468 tasks. Of these tasks 283 of them were sign work activities related to fabrication, install, repairs, replacements, etc. This month the team completed 36 original installs and 116 sign replacements as part of the tasks identified in the sign inspection we did back in January. These signs were either missing, never installed or needed replaced as they no longer met the thresholds to function as a safe and effective sign on the roadway. The team even worked together while following social distancing guidelines to complete a high priority task of creating 30 COVID-19 signs for the Parks Department. Finally, the team provided support to the snow plow program as well.

## **Transportation Planning**

### Neighborhood Traffic Calming Program (NTCP):

The NTCP exists to verify and address quality of life items associated with vehicular traffic on local neighborhood streets and certain collector roadways. There were no new speed study inquiries in March. There are two streets that are currently active in the traffic calming program;

- Diamond Ridge Pkwy: Town staff is continuing to work with the study area's working group. After talking with the point of contact, it was decided to postpone the meeting scheduled for April 1<sup>st</sup> to review the data from the January demonstration project. A new meeting will be scheduled in April or early May. At the meeting Town staff will discuss the results of the study and the goal of the homeowners as well as looking at other traffic calming devices that are better at reducing speeds
- Bittern Street / Loon Circle: Back in December, a working group for the neighborhood recommended replacing both existing traffic circles with speed cushions. A vote of the residents who live on the streets in question was conducted in February and the proposed plan was approved. A postcard was mailed to



the residents in March. The replacement work is set to occur this summer.

#### Castle Rock Transit Feasibility Study:

Stakeholder and public comments have been consolidated into a summary report, which will be placed on the project webpage. Based on this data, the project team developed transit needs and opportunities. Using this information, initial screening evaluations of the different transit service models was completed. At this time, the project team is looking to carry three service models forward for further consideration with regard to feasibility. However, funding sources have not been identified for these options. The three models are; Point to Point On-Demand Service, First/Last Mile Service and Microtransit. The next step of the study will further analyze these transit models before final recommendations are presented to Council. The study is anticipated to be completed later this fall.

#### DRCOG 2021 – 2023 Transportation Improvement Program (TIP) and Community Mobility Planning and Implementation (CMPI) Grant Projects:

Town staff has provided all data to CDOT to generate the draft agreement for review for the CMPI alley master plan project. CDOT continues to work on the agreement so that the Town can release the Request for Proposal to select a consultant. Once CDOT sends over the draft agreement it will be reviewed by all parties and then finalized. The project is still expected to begin in 2020 with a 10-12 month timeframe for completion.

## 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 quick to respond to the social distancing order this past month and split up our

division into two groups. One side was at the shop working on Town vehicles and equipment and the other half was working from home. Even with only two technicians working at a time in the later half of the month Fleet Services had a very productive month in March. Fleet staff was very proactive with the COVID virus and procured a disinfectant system to keep vehicles and shop equipment clean and free from the virus. Fleet also set up a cleaning service for inside Town vehicles at Motospa car wash.

The Fleet Division was recognized by the Government Fleet Magazine and APWA as a notable fleet in their 2020 competition for fleets. The Fleet Division was instrumental in the APWA reaccreditation with 100% of our practices rated as fully compliant. The Fleet Division billed out \$78,000 of parts and labor and completed 113 work orders. As well as meeting 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 94.6% of the work orders within 24-hours of opening repair requests or service requests. This benchmark number shows how quickly vehicles and equipment get serviced and repaired and back on the job.

**Objective/Benchmark:** Town vehicles and equipment available for use 95% of time.

**Outcome:** Town vehicles and equipment were available 98.1% of the time. This high fleet availability rate means that Town vehicles and equipment are ready when they are called upon to perform.



New work truck for the Water Department

**Objective/Benchmark:** Technician productivity percentage of 70% (APWA standard)

**Outcome:** Technician productivity was 81.3%. Very high productivity well above our benchmark.

Overall we completed 113 work orders and processed \$78,000 in parts and labor and another \$35,000 in fuel transactions. The fleet parts division returned a large number of obsolete parts and received a credit of \$2,000. Fleet technicians Chris Selheim, Eric Dena, Rod Claassen, and Caleb Wood all worked on ASE certifications and other training when not at the shop.

## Street Operations & Maintenance Division

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

- Snow and Ice Control
- Roadway Ice Breaking
- Pothole Repair
- Sweeping
- Gravel Road Maintenance

### Snow and Ice Control Operations

In March, three storms formed up in the area with two of them requiring deployment of the snow control teams bringing nearly 16 inches of snow. With support from Traffic, Development Services, Water, and Parks, these storms were taken care of and the roadways kept passable. The downtown area was cleared of snow within 36 hours of the end of the bigger snowstorm requiring the clearing operation.

### Roadway Icebreaking

There were a few opportunities for ice breaking shortly after two of the storms and crews responded to known problem spots and addressed the few issues that came up. In total 16 ice breaking tasks were completed, clearing up approximately 2700 linear feet of roadway surface. The warm weather is certainly helping to keep the icing down this year.

### Pothole repair

Potholes are forming all over due to Colorado's freeze/thaw cycle. Teams are proactively inspecting the roadway having inspected 105.61 miles of town

roadway to identify and repair pothole before they become problematic. Crews are also responding to pothole problems as soon as possible. Crews used 22.5 tons of both hot mix and cold mix asphalt to repair the equivalent of 3000 potholes.

### Sweeping

In March, crews kept up with post storm sweeping, cleaning up 373.95 lane miles of roads after the snow storms. This removed 330 cubic yards of material off the roadways to prevent it becoming airborne particulates.

### Looking Ahead

In April, due to the health concerns from the present situation crews are maintaining social distancing and working from home wherever possible. The health of the crew is the primary focus so they are still able to respond to snow storms and emergency potholes. Crews will be kept on a rotating work cycle consisting of regimented training from home when possible and smaller work crews in the field to minimize contact. The crews will also be looking to identify and catalogue repair needs and prioritize accordingly.



Demonstrating social distancing during a staff meeting