



Monthly Report

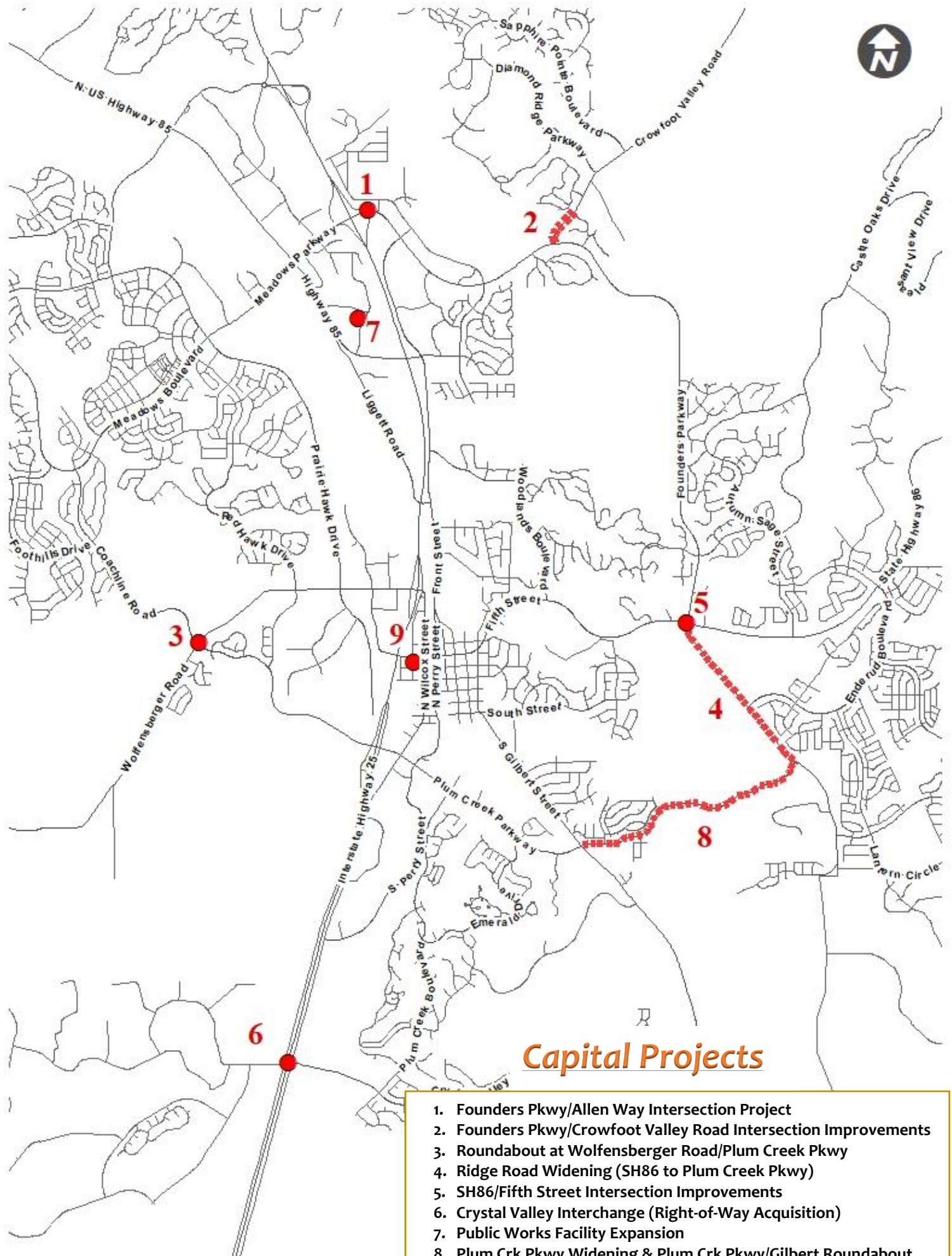
January 2020

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 continues to work on punch list items, including the installation of additional “No Turn on Red” signs, as weather permits.
- The contractor is working on illuminated Street Sign for Founders Parkway on the north bound off ramp sign pole.

Budget: \$2.64M

Construction Complete: 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:

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 consultant continues to work on 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 “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.
- Negotiations with CDOT to design and manage the project continues to move forward. CDOT has begun working in the IGA.
- CDOT to select a PM in early summer 2020

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 – Offers have been sent out. The billboards are being appraised.
- West Side of I-25 – Notice of Intent are being sent out

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 last phase of this project (renovation of the existing space) has been completed and the employees have been relocated into this space.

Renovation of Existing Office Space:

The renovation of the existing office space consisted of adding two restrooms, a breakroom, locker room, removing several cubicles which opened up the space for collaboration, and repurposing offices. Additionally, the space received new carpet, tile, paint, upgraded lighting, ceiling tiles, and t.v.'s.

New furniture has been installed and the streets division has moved into this space

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: Final ROW Acquisition and Construction

Contractor has been selected pending approvals.

- Bids for Phase 1B construction came in under budget. Staff plans to present Public Works Commission on March 2,

2020 and Town Council on March 3, 2020. Staff plans to award to Jalisco International, Inc. pending approval of Commission and Town Council. The project is tentatively scheduled to start in mid-March, weather permitting.

- Continued development of construction plans for Phase 2, the widening between Eaton St. and Ridge Rd., and the roundabout at Ridge Rd.
- Continued utility coordination for utility relocations
- Right of Way Acquisition / Appraisal is scheduled to be complete by February 2020. The Legal Department has filed for condemnation the Rolling Hills Apartment property.

Budget: \$6,817,147

Design & ROW Completion: October 2020

Phase 1A: Drainage package

- The contractor continues installation of improvements on Gilbert St. Gilbert St. was closed at Plum Creek Pkwy for the last week of January.
- Anticipated completion date is late March 2020.

Budget: \$1,158,300

Construction Completion: Spring 2020

9. **Downtown Alley Improvements** – This project will address the need for the following 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.

Status: Design – Design consultant, Bohannon Huston, is targeting submission of 30% design plans on 01/31/2020.

Budget: \$900,000

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 and CDOT have a letter agreement regarding travel time device installations on CDOT signals. The agreement is that the Town will purchase the devices and CDOT will install and maintain the devices. Data from the devices would be shared from a CDOT ITS server with the Town, so the Town and CDOT may perform analytics. A Purchase Order has been requested for approval to purchase the devices.
- Detection equipment replacement and upgrades are currently being ordered and install planned to further understanding of operations on Wolfensberger, Meadows Parkway, and at Plum Creek.

Budget: \$200,000

Construction Completion: Winter 2020

2020 Intersection Signalization Design / Construction Project – This project has been revised to design and construct one new signal at Meadows Boulevard / Cherokee Drive.

- In January, Town staff verified the traffic turning movement counts at Meadows Blvd and Morningview Drive did not meet signal warrants so this intersection will be built in a future year.
- Additional design progress was made in January with a design review set for early February.
- In January, signal pole quotes were obtained, a vendor was selected, and the order was initiated. We expect to receive shop drawings in early to mid-February which will complete the order for delivery within 14-16 weeks of that completion, April 30 to May 14. Signal poles are the longest lead time item and completing this order ensures timely delivery for summer construction.
- Staff completed a work order for IREA to provide power and remove street lights at this intersection, which is scheduled to occur in April ahead of construction.

Budget: \$610,000

Construction Completion: Fall 2020

2019 / 2020 Illuminated Street Name Sign Project –

This project is the 2nd 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.

- One sign from the 2019 project remains to be installed by the Allen Way signal contractor at northbound I25 and Founders Parkway.
- Another 2019 project sign at I25 southbound and Plum Creek Blvd, will be installed with the 2020 sign project due to the need for a davit arm to avoid obscuring other traffic signs.
- 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.
- Staff’s plan is to procure signs with installation through the 2020 signal construction project.

Budget: \$56,000

Install Completion: End of 2020

Rectangular Rapid Flashing Beacon (RRFB) 2020

Project – In 2019, staff received several requests for RRFB installation locations. These 20 locations have been evaluated in January and prioritized based on pedestrian exposure. Staff is preparing a project for installation of all 20 locations in 2020.

- Staff is reviewing locations to finalize a potential equipment purchase for the project.
- Staff is preparing typical intersection design plans to bid once a budget has been approved.
- A 2020 budget amendment is planned to allow for the installation of the 20 total locations.

Budget: TBD

Construction Completion: Fall 2020

Engineering Division

2020 Pavement Maintenance Program (PMP)

With all 7 project bid openings complete in January, staff is in the process of evaluating the bids submitted and begin the contract award recommendations.

This process includes checking and verifying all bid proposals and contractor references.

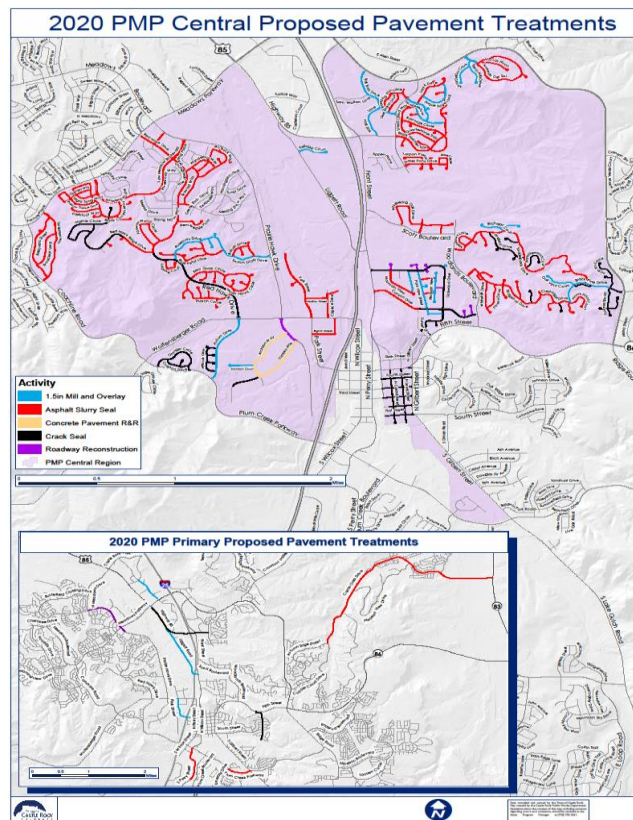
Contracts under consideration this year are:



- Asphalt Overlay
- Full Depth Reclamation
- Meadows Blvd. / Prairie Hawk Reconstruct
- Town Facilities Parking Lot Improvements
- Slurry Seal
- Mastic and Crack Seal
- Curb, Gutter & Sidewalk Replacement

Once the evaluation is complete, staff will prepare all contract documents to present to the Public Works Commission on March 2 and to Town Council at the March 3 meeting.

The PMP map indicates the proposed scheduled treatments for street within the Central PMP area and Primary Streets. This map may change based on maintenance treatments and resources available.



2020 Facilities Parking Lot Improvements Program

With the project's bid opening complete in January, staff is in the process of evaluating the bids submitted and begin the contract award recommendations. This process includes checking and verifying all bid proposals and contractor references. The scheduled parking lots include the front and back of the Service Center parking lots, Red Hawk Maintenance Shop, Rhyolite Park, Recreation Center upper and lower lots, Milestone Pump Station, Miller Treatment Plant, Prairie Hawk Well Field (A7), Castle Oaks Lift Station and the north half of the Red Hawk Club House Parking lot. Once the evaluation is complete, staff will prepare all contract documents to present to the Public Works Commission on March 4 and to Town Council at the March 5 meeting.

2020 Bridge Maintenance Program (BMP)

Bids for the 2020 Bridge Rehabilitation for 5th Street Bridge over I-25 will be posted once all documents have been received from CDOT. Staff is working with

FHU in cooperation with CDOT to compete the process. Once complete, package will be submitted for competitive bids.

2020 Miscellaneous Concrete Replacement Program

The 2019 Miscellaneous Concrete Replacement project continues. This contract is providing the Town a 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 project addresses damaged concrete to improve drainage and improve safety. The contractor is working to complete the project as soon weather allows.



Development Review and Permitting

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

Permitting – 31 right-of-way permits were issued.

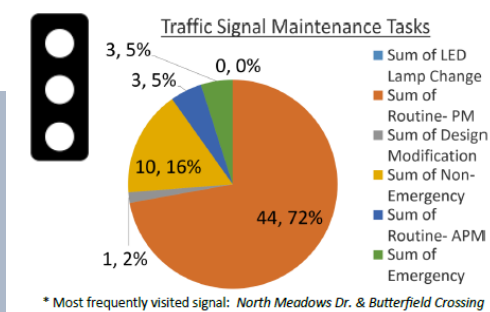
Transportation Planning & Traffic Engineering Division

Taxi Voucher Program

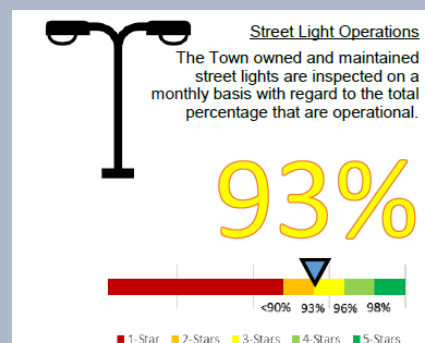
For the month of January, the Taxi Voucher Program funded 129 rides; this was slightly less than last January's total of 136 rides. Ridership this month is up 14 rides from last month. Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do not have access to a vehicle. In January, 20 individuals used the Town's Taxi service. Of those that used the service, 61% of the rides were for work, 22% were for shopping trips, and 17% for medical appointments. Two new people registered for the service bringing the total of registered riders to 429 in the Taxi Voucher Program. The Castle Rock Senior Center provided a total of 722 rides in January.

Traffic Engineering and Operations

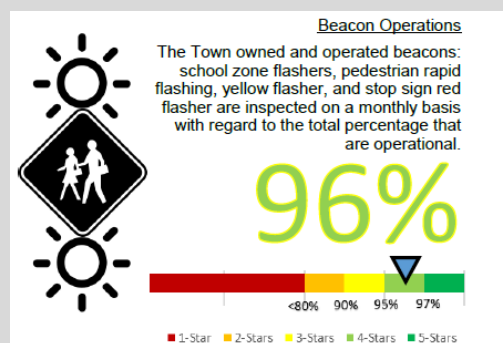
Traffic Signal Operations and Maintenance



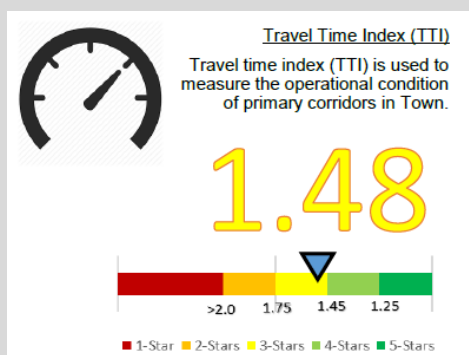
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

During the month of January, the crew accomplished over 3,500 tasks. Of these tasks 65 of them were sign work activities related to fabrication, installation, repairs and replacements. A total of just over 3,200 sign inspection tasks were completed that were located within the 2020 Central Pavement Maintenance Program area. This is the first year of a new inspection cycle created as a part of the Department's sign asset management program. In addition, the team responded to and assisted with the work zone associated with the Diamond Ridge traffic calming trial project. This trial tested the effectiveness of a temporary center median and a chicane to see how effective the treatments might be at slowing vehicles.

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 speed study inquiry in December. Homeowners along N. Meadows Drive near Elegant Street wanted to know more information about the NTCP. The speed study along Manobrier Circle is being conducted again due to equipment malfunctions. The new speed study will be conducted when weather conditions permit. There are two streets that are currently active in the traffic calming program;

- Diamond Ridge Pkwy: Town staff conducted a two-week long demonstration project based on the homeowners' draft traffic calming plan. The objective of the demonstration project was to set up temporary conditions that mimicked the design of the draft plan. Staff is currently analyzing the data to determine if the draft plan achieved the necessary speed reductions.
- Bittern Street / Loon Circle: Back in December a working group for the neighborhood recommended replacing both existing traffic circles with speed cushions. In January, ballots to vote on the proposed modification plan were sent to residents living on each street. The vote will be tallied in February.

Castle Rock Transit Feasibility Study:

Town staff continues to gather public input for the study. During January, staff attended two Councilmember open houses soliciting public feedback, as well as the Public Works Commission and the Douglas County Transit Solutions quarterly meeting. As of January 31, the public input period has closed. The team will begin compiling the data and responses to share with stakeholders and the Focus Group. The next Focus Group meeting is planned to occur in February.

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 off to a very busy start to 2020 “Keeping Castle Rock on the Move”. Fleet Services had one of our most productive months ever in January 2020. The Fleet Division billed out \$100,000 of parts and labor and completed 148 work orders. As well as meeting the following objectives and benchmarks:

The Fleet Division billed out \$58,000 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 75.2% of the work orders within 24-hours of opening repair requests or service requests. This is an amazing number considering we had 20-open work orders for most of January. This 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 97.9% 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 75.5%. This was well above our benchmark, out of 574 available hours of technician time 434 hours were direct billed time.

Overall we completed 148 work orders and processed \$100,000 in parts and labor and another \$30,000 in fuel transactions. The fleet parts division returned a

large number of obsolete parts and received a big credit of \$2,000. Fleet technician Rod Claassen was recertified as an ASE Master Technician. Fleet also received are last two vehicles of 2019 one F350 truck for Signs & Markings and one F350 truck for Castle Rock Water. New vehicle orders for 2020 have started with 12 new vehicles on order.



New F350 Dump Truck for the Signs & Markings

Street Operations & Maintenance Division

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

- Crack Seal Operations
- Roadway Ice Breaking
- Pothole Repair
- Sweeping

Crack Seal Operations

Streets personnel took advantage of the fair weather by continuing with maintenance operations. Crews completed 12.28 lane miles of roadway working to make up ground from operations interrupted last year by weather. Crews used just over 21,000 pounds of crack seal material.

Roadway Icebreaking

Crews worked diligently to clear the roadway of ice impeding upon the travel lanes. Crews equipped with Icebreakers, Motor Graders, and Dump Trucks cleared ice buildup 20.89 lane miles of roadway. The Crew was

able to address icing complaints within about 4.5 days from the receipt of the complaint on average.

Pothole repair

Due to the break in winter storms, a significant portion of the crew's time was spent on pothole repairs in the month of January. The Streets team used a combination of Hot Mix Asphalt and Cold Mix Perma-Patch to repair the equivalent of 537 potholes. The intense freeze thaw cycle experienced by Castle Rock makes this an ongoing process.

Sweeping

Crews have completed sweeping up the Town's roadway of leaves and trash. The late fall of the leaves likely due to the early onset of winter drew these operations out into January. Crews wrapped this up in mid-month by removing 58.4 tons of trash and leaves off the streets and hauling them to the landfill.

Looking Ahead

In February, a large number of early snow showers has already begun and crews are working to keep the roadways clear and passable. Post storm sweeping operations will be undertaken to mitigate air pollution. Crews are also preparing to begin Ice mitigation operations between snowstorms as possible as well as equipment maintenance.