



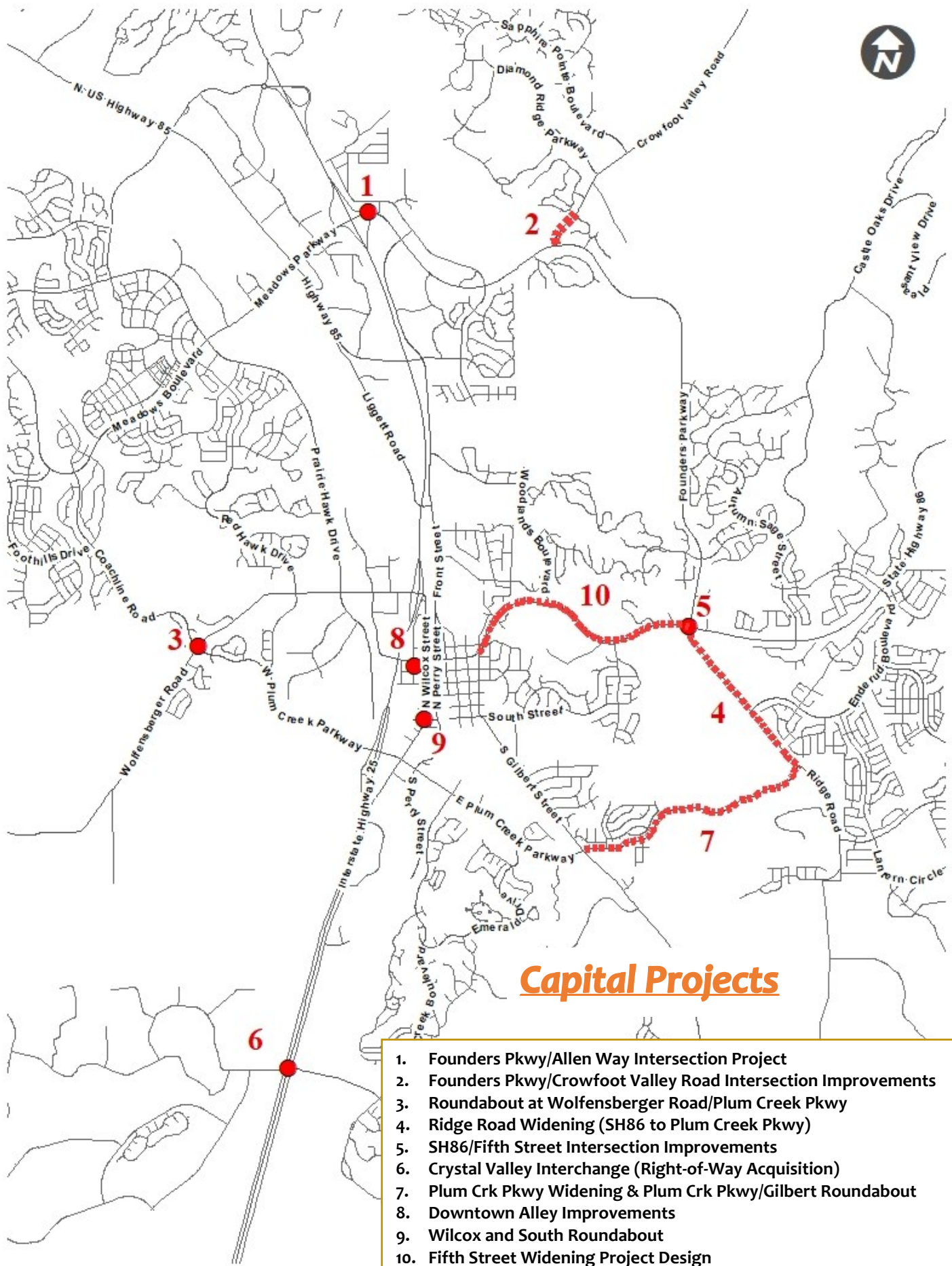
Monthly Report

March 2021

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. Town staff, project consultant and the contractor are working to complete required project documents for close out with CDOT.

Budget: \$2.64M

Close Out: Spring 2021

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: Closeout phase. Town staff, project consultant and the contractor are working to complete required project documents for close out with CDOT. The Grading, Erosion, and Sediment Control permit remains open to monitor vegetation coverage and growth. Inspections will be performed until the requirements of the permit are achieved.

Budget: \$3,550,000

Close Out: Spring 2021

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 accident potential.

Phase: Closeout – Substantial completion was issued in Spring 2019. Punch list items are complete. The Town is working with the adjacent property owners to complete the final landscape tie-ins and adjustments. The final landscaping work is anticipated to be complete by Fall 2021. The work completed this month in progression to project close-out is as follows:

- Completed contract agreement with CRDC, submitted for execution

Remaining Budget: \$137,000

Final Completion: Fall 2021

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 has received initial cost estimate from IREA. Staff plans to review and coordinate with IREA on possible phasing of the relocations.

Budget: \$400,000

ROW Acquisition: Winter 2023

Targeted construction: 2024

5. Founders Parkway (SH86)/Fifth Street Intersection “Four Corners” Improvements – With new traffic studies submitted, the consultant will investigate multiple alternatives to address safety concerns and capacity issues at the intersection. Improvements under evaluation include:

- Southbound traffic – add left turn lane, add a free right turn lane, convert right turn lane to through/right
- Eastbound traffic – convert right turn lane to through/right, add free right turn lane
- Northbound traffic – add left turn lane, add second through lane, add a free right lane
- Westbound traffic – add through lane, add a free right turn lane

Phase: Design: David Evans & Associates (DEA) is the design consultant for this project. The following is a summary of the activities performed this month:

- Town staff and DEA met with FHWA and CDOT to discuss project scoping, which included design alternatives.
- Town staff and DEA held an internal meeting to discuss FHWA and CDOT feedback from the scoping meeting.
- The project team met to discuss the project’s communications plan, which will include soliciting public input. A schedule for public outreach meetings is being developed.

Budget: \$1,200,000 for design in 2020 with DRCOG Grant Reimbursement (Town share \$240,000)

Design Completion: Winter 2021

Targeted construction: 2022

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

- o Eastside of I-25 – Offers continue to be sent out, with several properties in negotiations. The Kuna property continues to be on hold until grant agreements are in place.
- Westside of I-25 – Appraisals are complete. Town staff and consultants are preparing Notice of Intent for several property owners. The Peachy property closing is being scheduled

Phase: Interchange Access Request and Environmental Assessment Reevaluation

- Town staff continues to meet with CDOT and FHWA to establish priority activities for the interchange approval.
- The Town received notice of the Federal BUILD Grant award. Staff has been meeting with CDOT and FHWA to develop a plan to maximize efficiencies on getting the grant agreement and the Intergovernmental Agreement (IGA). The IGA is between CDOT and the Town which identifies the general terms of the grant, scope of work, and funding provisions awarded to the Town. Staff received approval on the Advanced Pre-Construction application from FHWA, which will allow the Town to get reimbursement for design activities prior to the grant agreement being complete. The funding of the grant is reimbursement of up to \$5.4M with the Town covering the cost of any preconstruction activities that exceed this amount.
- The advertisement for the Design Request for Proposal (RFP) ended in mid-March. We received 5 proposals all together from reputable firms (AECOM, Atkins, FHU, HDR and Jacobs). Staff is working with all stakeholders, including FHWA and CDOT to evaluate the proposals, and schedule interview for the final selection. Tentative schedule at this time will have staff approaching the Public Works Commission and Town Council in June for approval of the Design Consultant.
- Staff is working on the delivery method workshop. This will consist of a panel of stakeholders determining which method of delivering will be most beneficial to the project schedule and budget. The initial workshop was held on March 10, 2021, with follow up and final decision workshops being held in late March. The final delivery method will be determined by the end of March.

Budget: \$4,600,000, and Development Escrow

Completion: Spring 2021 (right of way acquisitions)

Targeted construction: 2023

7. **Plum Creek Parkway Widening and Plum Creek Parkway/Gilbert Street Roundabout Project** – This project will implement the Transportation Master Plan's identified improvements for this corridor. The addition of the remaining two lanes of the master planned four-lane roadway on Plum Creek Parkway between Eaton Street and Ridge Road. Not only will it include the addition of 2 lanes, but also bicycle and pedestrian multi use lanes. It will also include roundabout modifications at Ridge Road. The improvement has

been broken out into 3 phases in order to meet the department's objectives. Phase 1A included portions of storm sewer improvements between Gilbert and Eaton. Phase 1B includes all roadway/utility/pedestrian access improvements between Gilbert and Eaton, including the implementation of roundabouts at the intersections of Gilbert and Eaton. Phase 2 includes all roadway/utility/pedestrian access improvements between Eaton and Ridge Road.

Phase 1A: Drainage Improvements: Construction (100%) -

The following is a summary of activities performed this month:

Town staff awaiting a May, 2021 project final inspection (warranty walk)

Budget: \$1,158,300

Construction Completion: Complete

Phase 1B: Plum Creek Pkwy Widening and Roundabout:

Construction (83% Complete) - The following is a summary of activities performed this month:

- Refresh striping throughout project
- Began work to replace damaged curb & gutter
- Planning final paving operations
- Installed erosion controls

Topsoil, seeding and final punch list activities are scheduled to be completed in the spring of 2021 when conditions for seeding and final stabilization are favorable.

Budget: \$7,507,723

Substantial (Roadway) Completion: February 2021

Construction Completion: May 2021

Phase 2: Design and ROW Acquisition (30% Complete) –

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

- Coordination meetings with adjacent Developer
- Submitted 404 permit to the Army Core of Engineers
- Progressed drainage design for on and off-street systems
- Evaluated roadside development items (slopes, walls, channel, easements, ROW)

Budget: \$794,375

Design Completion: March 2021

ROW Completion: ROW – Fall 2021

Targeted construction: 2022

8. **Downtown Alley Improvements:** Four alleyways in the downtown area are beyond their service life and are not providing an appropriate level of service. 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 5th and 3rd streets
- 2 Alleys (Easterly Alleys) – Located East of Perry St. between 6th and 4th streets

Phase – Construction

- IREA relocation completed

- Century Link relocation completed
- Executed contract
- Outreach with residents/businesses

Budget: \$900,000

Completion: Fall 2021

9. **Wilcox and South Roundabout** – This intersection is currently controlled by stop signs in two directions. As the traffic volumes increase, this existing traffic control will not be the most efficient and could contribute toward increased congestion and accidents. This project is for the design of a roundabout intersection, which will improve operations and minimize accident potential.

Phase: Design: The consultants continue to work on design. ROW acquisition is complete. The Consultant and Developer are working on developing a schedule for construction which includes pros and cons of closing Wilcox for the construction of the Roundabout. With adverse weather in March the anticipated start to construction is in early April 2021.

Budget: \$1,850,000

Construction Completion: Summer 2021

10. **Fifth Street Widening Project Design** – Fifth Street is a major arterial connecting local and regional travel between the easterly portions of Town and I-25. Roadway and pedestrian improvements for Fifth Street have been identified within the 2017 Transportation Master Plan (TMP) that will maintain adequate capacity and ensure efficient road network connections for future development.

The Fifth Street Widening project will complete all design elements for implementation of the full build-out transportation network from South Gilbert Street to Ridge Road as identified in the TMP. The transportation network improvements identified in the TMP are as follows:

- 4-lane major arterial configuration from Woodlands Blvd. to Ridge Road
- Implementation of on-street bike lane/shoulder from South Gilbert Street to Ridge Road
- Addition of sidewalk from Woodlands Blvd to Ridge Road along South side of Fifth Street

Fifth Street Widening Project Design (3%) - The following is a summary of activities performed this month:

- Advertised RFP for design
- Began consultant selection processes

Budget: \$1,500,000

Design Completion: December 2021

Right-of-way acquisition: 2022

Targeted construction: 2023 (Phases 1 & 2 which include pedestrian improvements and an eastbound climbing lane from Woodlands to Ridge)

Traffic Signal System Upgrades – This project is a multi-year signal system upgrade project that began in 2015 and is ongoing 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.

- Staff is a part of the CDOT managed, adaptive signal system review team, that will select a technology to implement adaptive signal timing on Founders and Meadows Parkway, as well as a few abutting Town signals. The committee has a preferred vendor, and is waiting for the protest period to end prior to making a public announcement. All parties are eager to get moving on the project which will begin as early as late spring and last about 10 months.
- Staff has a draft IGA from CDOT that has been submitted to the Town Legal department for review. The project will make automated traffic signal performance metric (ATSPM) system improvements, including installing advance detection equipment and improve ATSPM software dashboard functions. Staff has begun drafting procurement documents while awaiting Notice to Proceed from CDOT.

Budget: \$868,700

Construction Completion: End of 2022 (for grant project)

2020 Intersection Signalization Construction Project – Signals were constructed at Meadows Boulevard & Cherokee Drive (mast arm signal) and at Hwy 85 & Liggett Rd (temporary span wire signal).

- In March, both signals were operational with a primary flash operation followed by full operation. Both signals have video detection systems that are fully functional.
- The intersection of Hwy 85 & Liggett Rd is missing street light luminaire arms which will be delivered and installed by June 2021.
- Staff will be performing a walk through for remaining punch list items prior to acceptance and initializing a one-year warranty.

Budget: \$588,000

Construction Completion: Spring 2021

Rectangular Rapid Flashing Beacon (RRFB) 2021 Project – This project completes half of the requested pedestrian beacon crossing locations that staff received in 2019 at 11 locations.

- There are 10 RRFB locations slated for implementation in 2021. Procurement activities for purchase are currently being analyzed and prepared.
- Staff is preparing purchase order and contract documents to route through Town departments.
- Equipment will be procured and installed in summer and early fall of 2021.

Budget: \$250,000

Construction Completion: Fall 2021

Engineering Division

2021 Pavement Maintenance Program (PMP)

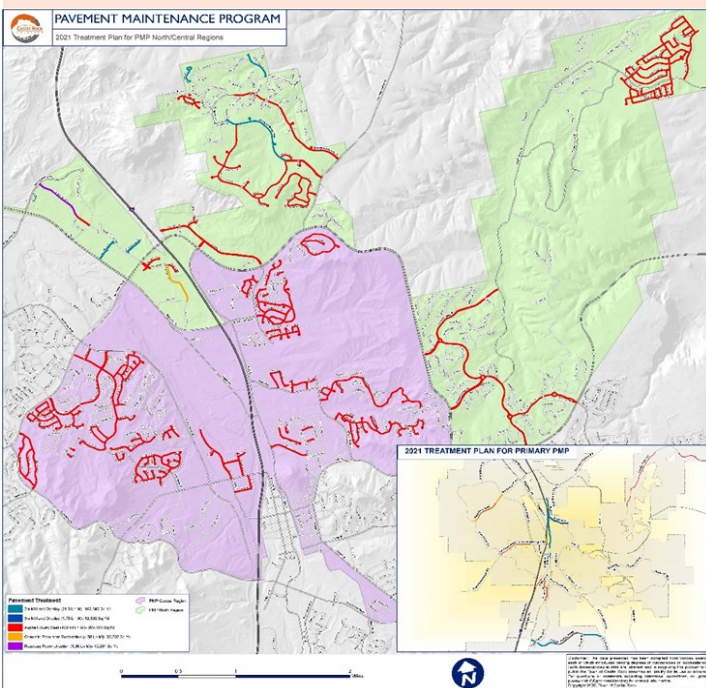
The 2021 PMP will focus its efforts in the North/Central PMP areas along with work taking place on several primary streets: (Meadows Blvd./Castleton Dr., Crystal Valley Pkwy., Front Street and Scott Blvd). W. Castlegate Drive will be the lone street to see reconstruction this year. All contracts were presented to the Public Works Commission on March 1, and Town Council on March 2. No recommendations were made and all contracts were approved.

2021 PMP Contracts under consideration are:

- Asphalt Overlay
- Full Depth Reclamation
- Curb, Gutter and Sidewalk Replacement
- Slurry Seal
- Concrete Pavement Restoration
- Town Facilities Parking Lot Improvements

A Public Outreach Open House was held March 25. Due to the ongoing pandemic situation, the meeting was in a virtual format. Staff attended to address each PMP project and answer any questions.

The PMP map (shown below) indicates the proposed scheduled treatments for street within the North/Central PMP area and Primary Streets. This map may change based on maintenance



treatments and resources available.

Staff is reviewing the performance and material bonds, insurance documents as well as material submittals. Sr. Inspectors conducted project coordination meeting with the contractors to go over the scope of work and address any concerns they may have. Staff is conducting pre-construction meetings via Jabber or Webex conference calls.

Several of the projects are scheduled to start April 12.

Condition Rating

Condition rating for the South PMP area began in February and was completed March 12. Staff complete all local streets as well as the Primary streets as of the 2022 PMP construction season.

2021 Facilities Parking Lot Improvements Program

The contract has been sent, and returned signed by the contractor. Public Works Commission approved the contract at its March 1 meeting, and Town Council at its March 2 meeting. Work scheduled to begin in September. This contract will see needed improvements to thirteen (13) Town facilities and parking lots as follows:

- Service Center front and back parking lot
- Red Hawk Golf Course Parking Lot (North Half)
- Red Hawk Maintenance Shop
- Rhyolite Park
- Rec. Center Parking Lot
- Castle Oaks 6 Well Field
- Castle Oaks 7 Well Field
- Prairie Hawk Well Field (A7)
- Canyon South Well Field
- Woodlands 1 Well Field
- Tank 16
- Sellars Gulch Lift Station
- Mitchell Creek Lift Station

2021 Bridge Maintenance Program (BMP)

Staff is currently working with a consultant for repairs to the S. Wilcox Bridge over E. Plum Creek. Once scope of work and cost estimates are determined, the project will be submitted for competitive bids. The project is expected to start in late August and be complete by the end of September 2021, pending weather.

Development Review and Permitting

Development Review - All 41 reviews were completed on or before the due date by the PW Development Services Team.

Permitting & Inspection – 28 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

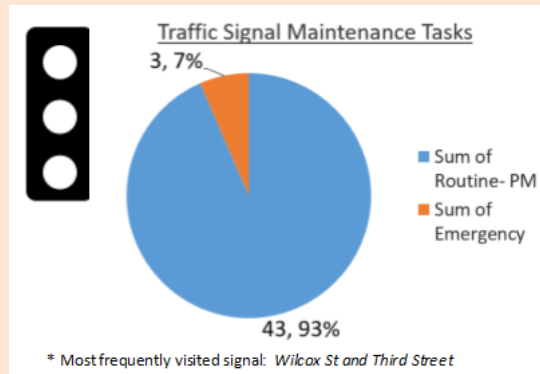
Taxi Voucher Program

For the month of March, the Taxi Voucher Program funded 148 rides; which is an 18% increase to last year's March total of 125 rides and a 9% increase from last month's total rides (135). 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, 17 individuals used the Taxi service. Of those individuals, 82% of the rides were for work, 16% for shopping trips, and 2% for medical appointments. 44 rides were provided for people without access to a vehicle, 37 rides to seniors, and 49 rides to disabled riders.

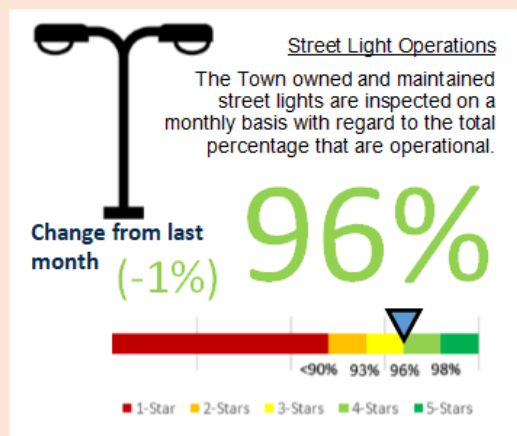
The Castle Rock Senior Center provided 766 rides in March

Traffic Engineering and Operations

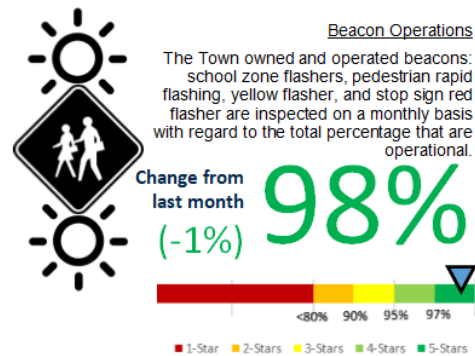
Traffic Signal Operations and Maintenance



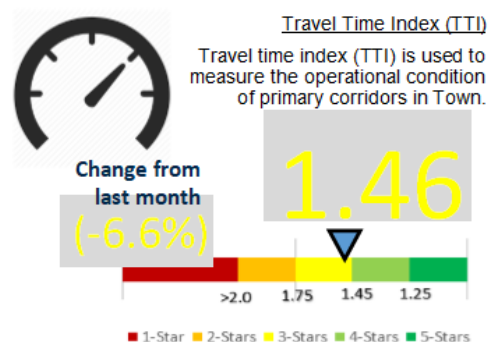
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

For the month of March, the crew accomplished 644 tasks. Of these tasks, 336 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. 145 were related to signs and markings projects. We had 163 RRFB tasks, including windshield inspections, repair tasks and investigations. The team also provided snow-plowing support for the fourth biggest storm in COLORADO HISTORY! Great job Signs and Markings team!

Transportation Planning

Neighborhood Traffic Calming Program (NTCP):

Town staff has scheduled a neighborhood meeting for homeowners on Rising Moon Way in the Meadows to modify the existing mini circle on the street. The meeting is scheduled for Wednesday March 24th. An inquiry about modifying the existing traffic calming on Appleton Way was received in January. In February, staff conducted a speed study and the Police Department also collected speed data along the street. The 85th percentile speed was recorded at or below the posted speed limit of 25 mph. The point of contact for the street will be contacted to

inform her that there is no speeding problem according to the NTCP. Town staff is not recommending any new improvements.

Castle Rock Downtown Alley Master Plan:

Town staff is revising the scope of work with HDR Inc. and preparing the service agreement for signatures. The project is expected to kick off in April.

Denver Regional Council of Governments (DRCOG):

DRCOG Board approved amendments to the 2020-2023 Transportation Improvement Program (TIP) in March. The amendments included the addition of the Crystal Valley Interchange (CVI) project into the TIP. It also recognized the federal BUILD grant awarded to the Town. The Board also approved the 2050 Regional Transportation Plan. The updated RTP includes the CVI and I-25/Founders interchange in the fiscally constrained list of regional projects. This means the projects are eligible for federal funds administered through DRCOG in future TIP cycles.

Fleet Services

Keeping Castle Rock on the Move



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 continues to make sure that Town vehicles and equipment are ready for operation. This includes public safety vehicles like Police & Fire but also other department vehicles that need to be in use to provide great service for our residents.

The Fleet Division had a very busy and productive month in March. Revenue from repair & maintenance of Town vehicles was way up to \$105,000 and technician productivity was high at 82.2%. Those two outcomes were mainly due to the March storms and all the repair and maintenance needed to keep the plow trucks on the road.

All four of the Fleet Technicians attended an training class for Ford engine performance and received manuals and certification. Fleet staff continues to work on ordering new vehicles and equipment for 2021, so far \$1.1M in new vehicles have been ordered.

Objective/Benchmark: Complete at least 75% of our Work orders within 24-hours of coming to shop.



You know when we have a tough repair when three technicians are working on one vehicle.

Outcome: Fleet team completed 77.3% 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. This benchmark number is above our monthly objective.

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

Outcome: Town vehicles and equipment were available 96.3% 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 82.2%. This productivity number was a very good increase considering the difficulty in getting some parts and some larger jobs that were completed.

Overall we completed 163 work orders and processed \$105,000 in parts and labor and another \$45,000 in fuel transactions. This production was well above levels of March 2020.

Street Operations & Maintenance Division

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

- *Roadway Inspection
- *Sweeping
- *Equipment Maintenance
- *Gravel Road Maintenance

- *Pothole Repair
- *Snow and Ice Control
- *Crack Seal

Inspection for Potholes

In the month of **March**, Streets personnel inspected **166.27** lane miles of pavements. This proactive approach helps to identify areas of need prior to them becoming large and potentially damaging.

Pothole repair Asphalt Patching

This month the Streets division completed repairs on 17.4 lane miles of roadway. Almost six tons of asphalt was used in completion of these repairs keeping the roadway in good condition

Sweeping

The crews worked hard to pick up the aggregate and salt applied to the roadways in March. In all the team swept 784 lane miles of the town protecting against airborne particulates and keeping those aggregates out of the storm water system. In all 219 cubic yards of material was picked up off of the streets

Snow and Ice Control

The month of March brought **4** snow events with a snowfall total of 33 inches. In all crews spent 603.5 labor hours plowing snow and applying deicers. Crews used **148** tons of granular deicers and hauled out **2592** cubic yards of snow from the downtown business area.

Equipment Maintenance

In March the crew worked tirelessly to keep plows on the roads during and after the blizzard. Crews also worked to paint the interior of a shop area increasing lighting and visibility and also protecting the walls so they may be washed and maintained more easily.

Crack Seal

During the month of March, the team completed crack seal on more than 17 miles of roadway. This annual maintenance is one of the most cost effective ways to manage the life cycle of our pavements. In doing so the crew applied over eighteen thousand pounds of rubberized sealant.

Gravel Road Maintenance

Crews completed gravel road maintenance on Rocky View in the month of March, keeping that roadway in good shape after the heavy snow and prior to the rainy season.

Looking Ahead

In April, crews will begin the spring sweep of the entire town, first working to remove the aggregate from the sidewalks and ADA ramps. Crews are also beginning to spray weeds in an effort to keep the ahead of the growth for areas that cannot be mowed.