



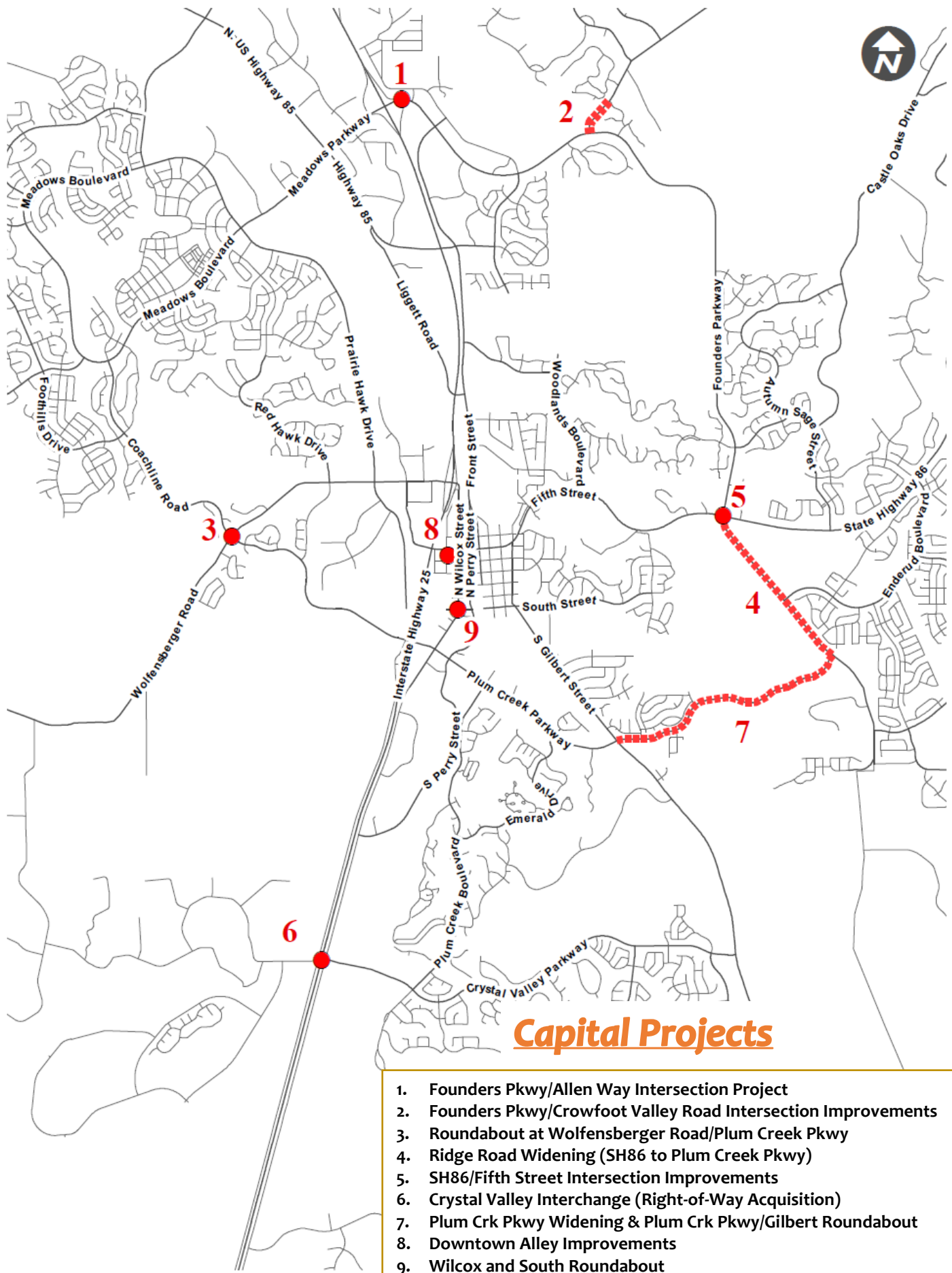
Monthly Report

November 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.





Capital Projects

1. Founders Pkwy/Allen Way Intersection Project
2. Founders Pkwy/Crowfoot Valley Road Intersection Improvements
3. Roundabout at Wolfensberger Road/Plum Creek Pkwy
4. Ridge Road Widening (SH86 to Plum Creek Pkwy)
5. SH86/Fifth Street Intersection Improvements
6. Crystal Valley Interchange (Right-of-Way Acquisition)
7. Plum Crk Pkwy Widening & Plum Crk Pkwy/Gilbert Roundabout
8. Downtown Alley Improvements
9. Wilcox and South Roundabout

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

Acceptance: Fall 2020

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: Close out 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

Construction Completion: Fall 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 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 draft final contract agreement for landscaping scope (in Town review)

Remaining Budget: \$120,000

Final Completion: Winter 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 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 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. 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 and CDOT to discuss project scoping, which included design alternatives.
- Town staff and DEA held a meeting with CDOT and County to discuss selection criteria for decision making on the intersection alternatives
- 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

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 partnerships to assist with advancing construction.

Phase: Right-of Way Acquisition

- Acquisition Services
 - o East Side of I-25 – Offers continue to be sent out. Several properties are in the negotiation phase.
 - o West Side of I-25 – Appraisals are complete. Town staff and consultants are preparing Notice of Intent for several property owners.

Phase: Interchange Access Request and Environmental Assessment Reevaluation

- Town staff continues to meet with CDOT and FHWA to established priority activities for the interchange approval.
- The Town received notice of the federal BUILD Grant award. Staff has been meeting with CDOT and FHWA staff to develop a plan to maximize efficiency's on getting the grant agreement and the Intergovernmental Agreement (IGA) done. 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 is also pursuing an Advanced Pre-Construction application 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 a cost sharing of 45% grant and 55% funded by the Town.

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

Completion: Spring 2021 (right of way acquisitions)

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 (75%) - The following is a summary of activities performed this month: Contract construction work is complete.

Budget: \$1,158,300

Construction Completion: Complete

Phase 1B: Plum Creek Pkwy Widening and Roundabout: Construction (68% Complete) - The following is a summary of activities performed this month:

- Paved Plum Creek westbound lanes from Gilbert to Valley Drive
- Installed Storm Drainage inlets for phase 2 (Northern half) of the Eaton roundabout
- Completed sidewalk construction along portions of Plum Creek Parkway
- Electrical conduits installed for street lighting
- Completed Valley Drive access (asphalt bottom lifts)
- Completed Westerly portion of Live Oak access (asphalt bottom lifts)

The project continues progressing to substantial completion by the January 2021, with roadway and pedestrian access improvements completed. Top mat asphalt, 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: January 2021

Construction Completion: Spring 2021

Phase 2: Design and ROW Acquisition (30% Complete) – The following is a summary of design activities performed this month:

- Progressed preliminary design
- Completed roadway plan and profile
- Completed storm drainage plan and profile
- Completed cross sections

Budget: \$794,375

Design Completion: March 2021

ROW Completion: ROW – Fall 2021

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 – Design/Advertisement

- IREA facility design complete and under review for approval
- Obtained relocation schedule from IREA (estimated completion, February 2021)
- Century link relocation design underway (estimated completion January 2021)
- Preparing construction contract bid documents, incorporating Utility relocation elements

Budget: \$900,000

Completion: Adjusted to Summer 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, with 90% design submittal in December
- Town Staff received PSAs on all properties and is finalizing ROW acquisitions for closings
- Confluence Company is developing construction phasing alternatives for consideration

Budget: \$1,850,000

Design completion: End of 2020

Engineering Division

2020 Pavement Maintenance Program (PMP)

The 2020 PMP has focused its efforts in the Central PMP area with additional work taking place on primary streets

2020 PMP projects completed to date are:

- Curb, Gutter & Sidewalk Replacement Project
- Asphalt Overlay Project
- Full Depth Reclamation Project
- Meadows Blvd. & Prairie Hawk Drive Reconstruction Project
- Crack Seal/Mastic Seal Project
- Slurry Seal Project
- Town Facilities Parking Lot Improvement Program
- Miscellaneous Concrete replacement Project

2021 PMP

The PMP team completed the field reconnaissance for the 2021 PMP projects this month. This consists of the North PMP area, and scheduled primary streets, which include; New Memphis Court between Factory Shops Blvd and the Outlet entrance gate, New Beale Street, between Hwy 85 and Factory Shops Blvd, Meadows Blvd, between Coachline Rd and Prairie Hawk Drive, Wolfensberger Rd, between Prairie Hawk Drive and Coachline Rd, Castle Oaks Drive, S. Perry Street, Front St, Scott Blvd, and Crystal Valley Pkwy. 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, asphalt pavement mill and overlay or reconstructs. Changes in the proposed streets may occur due to current evaluation taking place and/or actual bid pricing received that may require some modifications.

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

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.

- Trafficast, the travel time device vendor, connected the CDOT server to Town database. This connection will provide travel time information in Town on CDOT corridor's Meadows and Founders Parkway, and at the Wolfensberger interchange. Staff has added these "routes" to the monthly and annual report card travel time metrics.
- Vehicle detection equipment replacements are complete at four intersections. The new detectors are reporting to the Town's signal performance metric system,
- A detection system trial is still being concluded at Front and Black Feather. A purchase order request has been submitted to install new detection using the Town preference Iteris Next system at Front Street & Black Feather and N. Meadows & Butterfield Crossing.
- Staff submitted information to CDOT for an IGA after being awarded a traffic operation technology grant through a DRCOG application process. 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: \$993,700

Construction Completion: End of 2022 (for grant project)

2020 Intersection Signalization Construction Project – This project will construct two signals in 2020, at Meadows Boulevard & Cherokee Drive and a temporary span wire signal at Hwy 85 and Liggett Rd.

- Delivery date for Liggett Road poles has been confirmed for early December.
- Other Town supplied materials have been under procurement. The cabinet manufacturer expects our order delivery in early December. Other signal materials are arriving the last week of November. Signal poles are being fitted with hardware and stood the first week of December. The Contractor expects the project to be complete in early 2021.

Budget: \$588,000

Construction Completion: Early 2021

Transportation Planning & Traffic Engineering Division

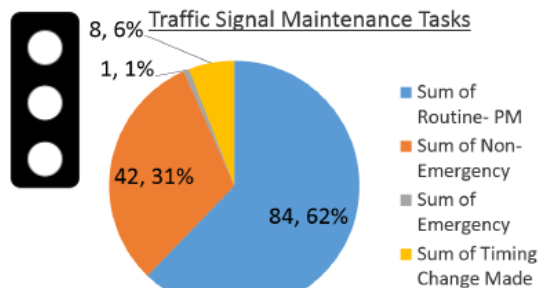
Taxi Voucher Program

For the month of November, the Taxi Voucher Program funded 119 rides; this was roughly an 8% decrease from last year's November total of 130 rides and a 19% increase from last month's total rides. 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 November 19 individuals used the Town's taxi service. Of those that used the service, 78% of the rides were for work, 10% were for shopping trips, and 12% for medical appointments.

The Castle Rock Senior Center provided 509 rides in November.

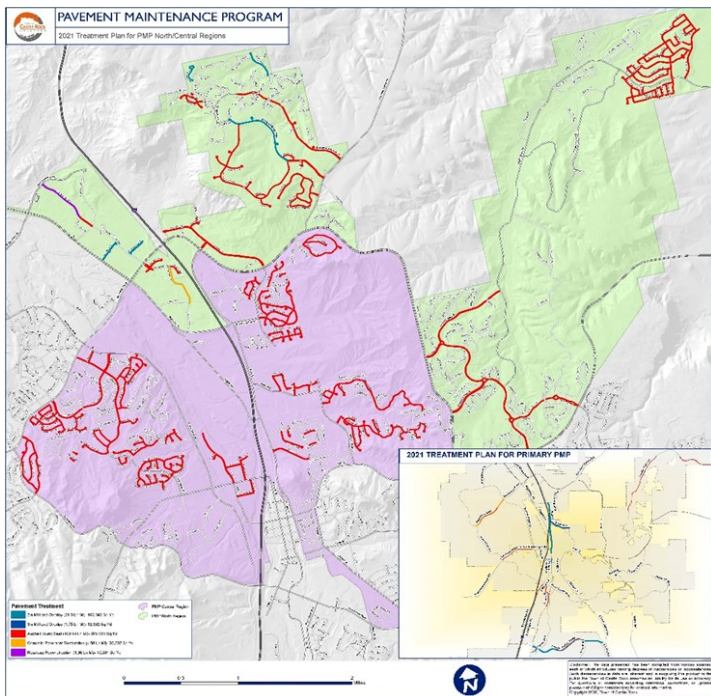
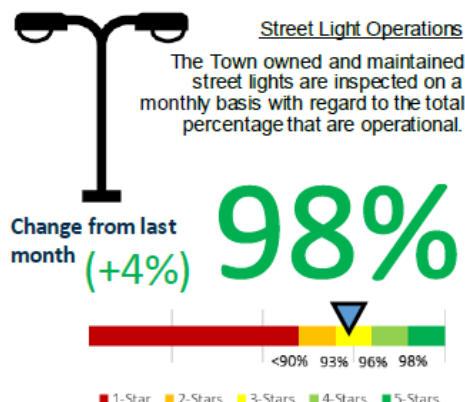
Traffic Engineering and Operations

Traffic Signal Operations and Maintenance



* Most frequently visited signal: N. Meadows & Butterfield Crossing at seven visits. Holiday signal timing was adjusted on Plum Creek Pkwy and Factory Shops Blvd.

Street Light Operations



2021 Facilities Parking Lot Improvements Program

The PMP team has completed field reconnaissance for the 2021 Town Facility Parking Lot Improvements Program. Changes in the proposed facilities may occur due to current evaluation taking place and/or actual bid pricing received that may require some modifications.

Facilities scheduled for 2021 are:

- 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

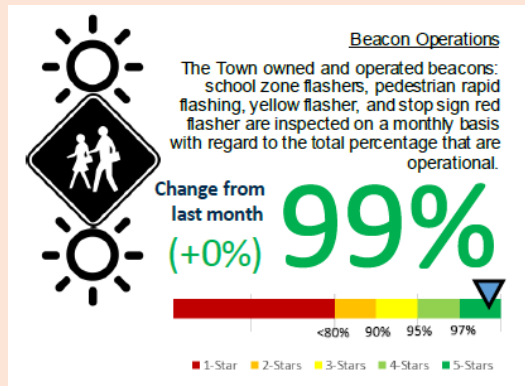
All PMP bid books were reviewed by the Town Legal Department and are being reviewed by staff prior to being placed on Rocky Mountain E-Purchasing for competitive bids.

Development Review and Permitting

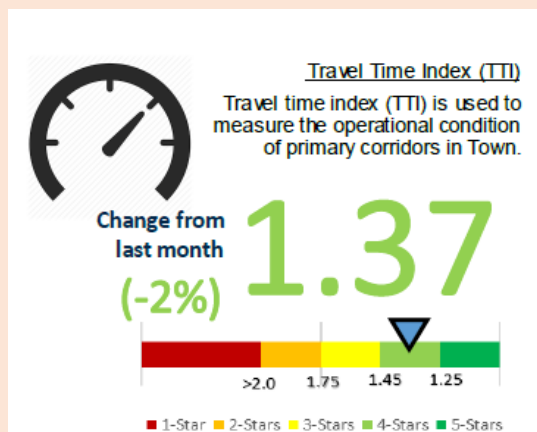
Development Review - All 21 reviews were completed on or before the due date by the PW Development Services Team.

Permitting & Inspection – 27 right-of-way permits were issued.

Beacon



Operations



Street Signs and Pavement Marking Maintenance

During the month of November, the crew accomplished 509 tasks. Of the tasks, 296 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. Six of these tasks were replacement markings for symbols. 90 were related to miscellaneous sign projects, seven work zone activities, and we performed 108 RRFB windshield inspections and two traffic counts.

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 traffic calming inquiries in November.

Design plans for traffic-calming at Diamond Ridge Pkwy are being finalized. The construction work will be included in the

Town's Pavement Management Program contract, which will be advertised in December for construction in summer 2021.

Castle Rock Transit Feasibility

Study:

Town staff received the final report from the project's consultant that will be distributed to other Town departments. The final report and appendices are also available for review on the Town's project web page (<https://www.crgov.com/3124/Transit-Feasibility-Study>).



Castle Rock Downtown Alley Master Plan:

Town staff released the Request for Proposals for the Downtown Alley Master Plan. Proposals are due to Public Works on January 15, 2021. The project is expected to begin in spring 2021.

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 was very productive and that shows in our benchmark comparisons listed below. The Fleet Division billed out \$76,000 of parts and labor and completed 115 work orders. The parts section continues to look for alternate parts in some areas as shortages have been occurring.

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

Outcome: Fleet team completed 68.8% of the work orders within 24-hours of opening repair requests or service requests.

Street Operations & Maintenance Division

This benchmark number shows how quickly vehicles and equipment get serviced and repaired and back on the job. Fleet technicians had some large repair jobs last month which caused longer repair times.

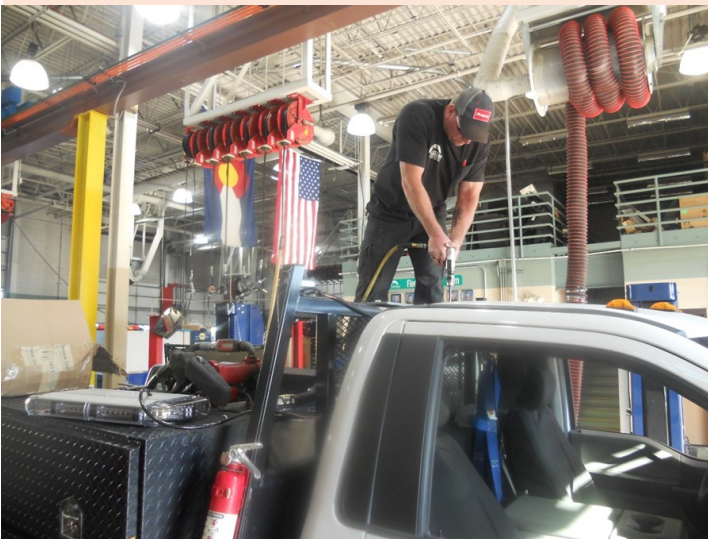
Objective/Benchmark: Town vehicles and equipment available for use 95% of time.

Outcome: Town vehicles and equipment were available 98.2% 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 73.7%. This productivity number was a very good considering the difficulty in getting some parts.

Overall we completed 115 work orders and processed \$76,000 in parts and labor and another \$22,000 in fuel transactions.



Technician Chris Selheim working on fleet vehicle installing emergency lighting

During the month of November, the Street Operations & Maintenance Division (O&MD) carried out operations in a number of core functionalities.

The Streets team performed work in the following maintenance operations:

- | | |
|------------------------------------|--------------------------|
| *Asphalt Patching & Pothole Repair | * Street Sweeping |
| *Pre PMP Crack Sealing | *Equipment Maintenance |
| *Road Shoulder Maintenance | *Snow Plowing Operations |

Asphalt Patching and Pothole Repair

During November, Streets Division crews completed a number of asphalt roadway repairs. These operations include full depth asphalt patches, asphalt potholes, and additionally pothole inspections. The pothole inspections are a newer operation in which crews surveil a predefined area of roadway looking for and logging for repair the potholes that are found. These operations comprised a total of 362 labor hours and utilized approximately 35 tons of hot mix asphalt.

Sweeping

Streets Division Crews have been busy undertaking the Fall Sweep program, Post Storm Sweeping program, in addition to sweeping the downtown and business areas twice during the month. In total crews swept up over 747.73 miles of roadways using 305 labor hours removing a total of 271 cubic yards of material off of the Town's roadways.

Pre PMP Crack Sealing

During November, crews completed the final 17.94 lane miles for the Pavement Maintenance Program (PMP). This operation was undertaken in preparation for further preventative maintenance or intensive repair or replacement of the roadway. In total, 404 labor hours were dedicated to this task and 19,180 pounds of crack seal material were used.

Road Shoulder Operations

Crews worked to ensure the aesthetic nature the Town enjoys by maintaining the vegetation, picking up trash along the roadway, and maintaining the road shoulder for safe roadway egress. Crews completed a total 84.57-edgeline miles of mowing operations as well as shoulder reconstruction. In addition to mowing, the crews also picked up 231 bags of trash from the side of the roadways. These operations are intrinsic to the proper drainage, visibility, and overall appearance of the roadways. Crews dedicated 305 labor hours to the completion of these tasks.

Equipment Maintenance

Crews dedicated 217 labor hours to ensure the equipment used for daily operations are available when they are needed. Much

of this time went into preparing for snow operations as well as keeping the street sweepers operational during the Fall Sweep.

Snow Plow Operations

A mild snowstorm hit the area on the 24th of November bringing with it severe cold and 3.5 inches of snow. Crews put down less than 10 tons of material as the road surfaces did not require much material. Snow operations are intrinsically variable and the crews work diligently to tailor the amount of material and labor for the conditions.

Looking Forward

During December, the Streets Division will maintain vigilance and preparedness for snow and ice operations. The fall sweep program is nearly completed and crews plan to wrap up the final few miles during the next month. Road grading and shoulder work is scheduled for the Towns few gravel roads.