



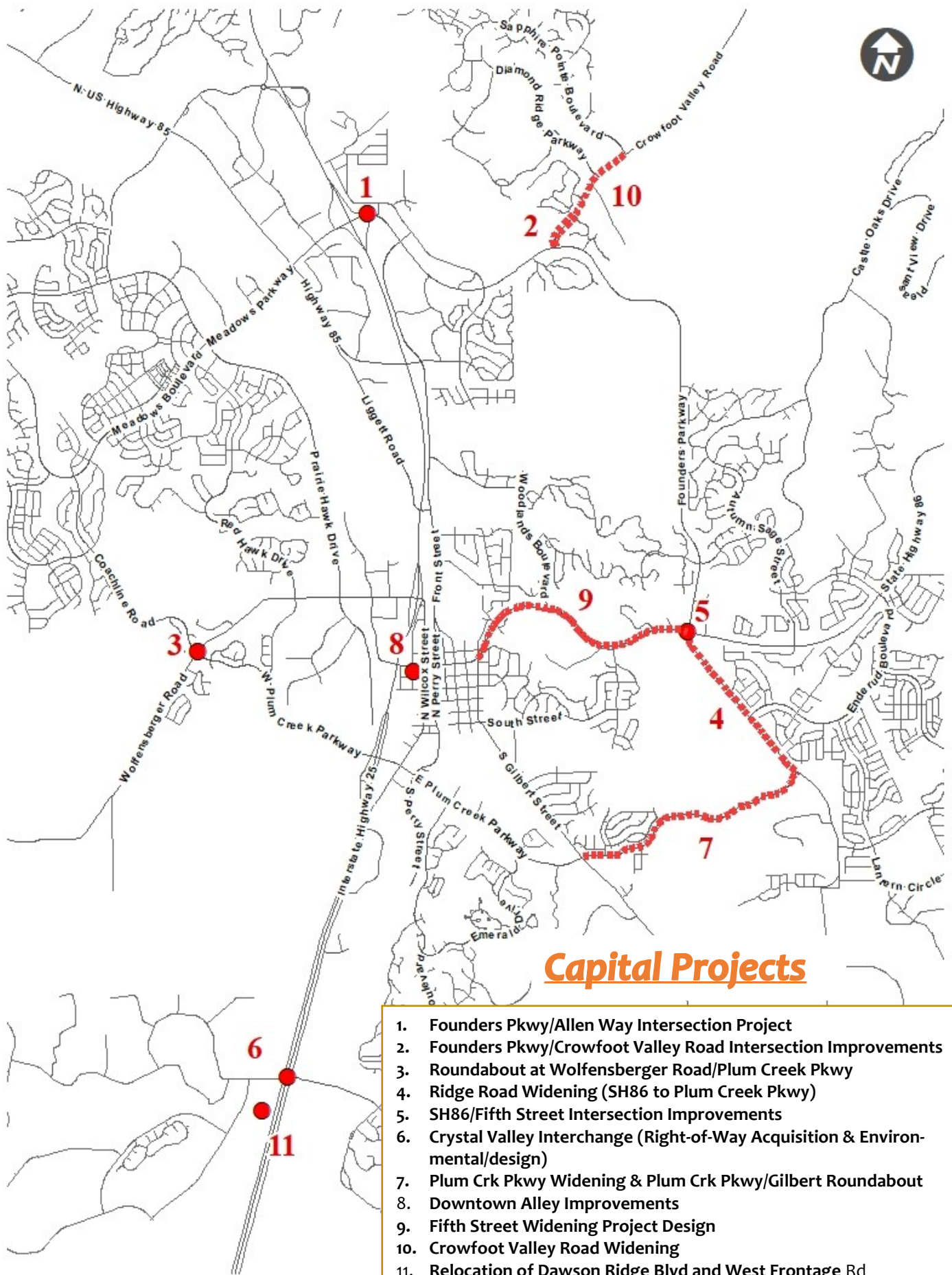
Monthly Report

September 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— Work continues on the close out phase with CDOT. The project team (Town of Castle Rock, NORAA Contractors, FHU, and CDOT) continues to meet weekly to finalize the documentation needed to obtain reimbursement on payments made to the contractor. Reimbursement #4 and #5 have been submitted to CDOT and approved. The Town is working with the contractor on pay request #6 and continuing to finalizing the material manuals to be submitted to CDOT.

Budget: \$2.64M

Close Out: Fall 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 - No Change: Town staff and the project consultant have submitted all required project documents to CDOT in June and are still waiting to hear from CDOT if any additional information is still required to finalize this project. 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: Fall 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 irrigation and landscaping work on adjacent property

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: ROW acquisition continues with the Memmen parcel slope and temporary easements have been executed. Negotiations with the remaining owners continues. The legal description for the CORE (IREA) easement was completed.

Stanley Consultants is the design firm for the project. The following is a summary of the activities performed this month:

- Initiated the Subsurface Utility Engineering (SUE), field work is complete
- Completed survey of new improvements
- Initial coordination with the Four Corners project and new adjacent developer
- Provided project information at Councilmember Johnson's District open house

Budget: \$900,000

ROW Acquisition: Spring 2021-Phase 1; Fall 2021- Phase 2

Targeted construction: 2022

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:

- Continue work on the design of the project
- Completed the evaluation of the traffic and bike lane movements
- Continuing the analysis of a full and $\frac{3}{4}$ movement at the Bader Court / Emmaus Anglican access off 5th street
- Had an additional meeting with the Emmaus Anglican Church and private property owners on access, and

analyzing the proposed access to the Emmaus Anglican Church which could require a retaining wall

- Continue to work on the utility plan for the entire project
- Continuing to work on environmental clearances and water quality with CDOT
- Continuing to work on establishing right of way needs and identifying areas in which additional right of way may be required
- Completed the analysis of the access to east bound State Highway 86 to and from Founders Marketplace and have received CDOT approval for a stop sign for this location (right in / right out)

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

Design Completion: 1st quarter 2022

ROW Acquisition: TBD during Preliminary Design stage

Targeted construction: Summer 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
 - East Side of I-25 – Town Staff is moving forward with properties which are in various states of negotiation.
 - West Side of I-25 – Town staff and consultants are preparing Notice of Intent for several property owners. The SWQ property closed in early May.

Phase: Design—Interchange Access Request and Environmental Assessment Reevaluation, and Design

- The BUILD grant agreement has been executed. Town staff is working with CDOT to begin reimbursement payments
- 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
- Jacobs continues working on the traffic count operations update, the traffic analysis, and survey.
- Design criteria was finalized
- Staff is working on the development of the RFP for proposals on the CMGC contract for the delivery method

Budget: \$6,500,000, and Development Escrow

Completion: Summer 2023

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 two lanes, but also bicycle and pedestrian multi use lanes. It will also include rounda-

bout modifications at Ridge Road. The improvement has been broken out into three 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: Close out - Town staff and the contractor are working on completing final documents to close out the project, and address issues discovered during construction of Phase 1B.

Budget: \$1,158,300

Construction Completion: Complete

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

- IREA light installations completed (7 lights remaining)
- Maintained site erosion control measures
- Began vegetative establishment period

Roadway and roadside improvements are complete. The project team begins procurement activities to restore Baldwin Park. Remaining work includes: Baldwin park irrigation and landscaping restoration work

Budget: \$7,507,723

Construction Completion: Fall 2021

Phase 2: Design and ROW Acquisition – The following is a summary of design activities performed this month:

- Continued property acquisition activities
- Completed Subsurface Utility Investigation for final design
- Continued refinement of 90% design for November final submittal

Budget: \$794,375

Design Completion: Winter 2021

ROW Completion: 1 qtr 2022

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 14 & 17) – Located West of Jerry St. between 5th and 3rd streets
- 2 Alleys (Easterly Alleys 10 & 11) – Located East of Perry St. between 6th and 4th streets

Phase – Construction

- Construction is in the punch list phase; all alleys are open
- Maintaining site erosion control measures

Budget: \$877,900

Completion: Fall 2021

9. **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:

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

- Completed and submitted traffic analysis
- Completed setting project survey control
- Obtained Town Council approval for construction IGA (grant funding)

Budget: \$1,500,000

Design Completion: December 2022

Right-of-way acquisition: 2022

Targeted construction: 2023 (looking to advance all construction to 2023 in order to use \$3.5M DRCOG grant funding)

10. **Crowfoot Valley Road Widening** – Crowfoot Valley Road will be widened between the Knobcone Drive and Macanta Blvd. Currently, this section of Crowfoot Valley Road is a two lane transition section of asphalt roadway with portions in the Town of Castle Rock and in Douglas County. Recent improvements have been completed at both ends of this project along Crowfoot Valley Road, and the intent of this project is to complete improvements to the “gap” between these improvements. The proposed roadway will be a four-lane section, including painted median / turn lanes, with bike lanes in both directions.

Phase: Design —The consultant has completed the utility locates and field survey. The consultant continues with data research, including drainage report review and typical section review. Town staff has submitted initial comments on the preliminary horizontal alignment design and conceptual intersection design and speed reduction elements. The consultant is working to evaluate and make recommendations on Town comments.

Budget: \$2,000,000 (Town contribution to construction funding; IGA to be executed with County)

ROW Acquisition: End of 2021

11. **Relocation of Dawson Ridge Blvd and West Frontage Rd** –

The purpose of this project is to relocate the I-25 West Frontage Rd to the west of the BNSF Railroad tracks to provide access to the surrounding neighborhoods and residents after the Crystal Valley Interchange is complete.

Phase: Design – Staff has completed the RFP for design and is working on executing a service agreement.

Budget: \$299,000

Completion: December 2022

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 project that will implement adaptive signal timing on Founders and Meadows Parkway, as well as a six abutting Town signals. In September, Town IT staff coordinated with the consultant and CDOT to establish protocol for data sharing. The adaptive system should be operational by February 2022.
- The Town’s ATSPM project is currently in the purchasing and bid process. For Phase I, detection purchases have been made, POs are circulating for approval, and three bids were received for installation. For Phase II, the request for proposal closes this Thursday.

Budget: \$868,700

Construction Completion: End of year 2023

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 September, punch list items were completed. Notice of construction completion will be issued in early October and the one-year warranty phase will begin.
- The last item to resolve is troubleshooting preemption devices. Town staff and the vendor are working on a solution to resolve the issue.

Budget: \$588,000

Construction Completion: Complete

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

- All locations were installed this month and striping and concrete work is underway.
- Staff will complete crosswalk marking in the next few weeks when materials are available.

Budget: \$250,000

Construction Completion: Fall 2021

Engineering Division

2021 Pavement Maintenance Program (PMP)

The 2021 PMP will focus its efforts in the Central/North PMP area with additional work taking place on primary streets (Meadows Blvd./Castleton Dr., Crystal Valley Pkwy., Front Street and Scott Blvd).

Meadows Blvd/Castleton Court concrete restoration was completed with planned quantities. The contractor will begin work on streets included in the expanded scope Monday, October 4. This work involves concrete panel repairs on Atchison Way and Topeka Way and Mount Royal Drive.

Slurry Seal Project began Tuesday, July 6, with the placement of slurry seal. The Contractor continues to work to complete the North area. Asphalt patching was completed in September. All slurry seal to be completed by Friday, October 1.



Sidewalk, Curb and Gutter project was completed in the month of May. The project came in under contract time and budget.

Full Depth Reclamation project was completed in the month of May. The project came in under contract time and budget.

Asphalt Overlay Project was completed in August. All expanded scope of work is complete. Project came in under contract time and budget.

Meadows Blvd/Castleton Court Concrete Restoration Project. The project came in under contract time and budget.

2021 Facilities Parking Lot Improvements Program

The contractor began work on Monday, September 20. The contractor will perform various surface treatments, from asphalt mill and overlay, slurry seal, seal coat application as well as concrete pavement and curb, gutter and sidewalk repairs.



Parking lots include the following:

- Service Center front & back (2 lots)
- Red Hawk Golf Course (North Half)
- Red Hawk Maintenance Shop
- Rhyolite Park
- Rec. Center
- 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

Work is scheduled to begin in early September and be complete by October 29.

2021 Bridge Maintenance Program (BMP)

Staff is working with the consultants to complete all documents in relation to the maintenance work. Bids for the 2021 Bridge Rehabilitation for S. Wilcox Bridge over E. Plum Creek, will be submitted for competitive bids upon completion of all submittals, the consultant will submit an estimation of costs. This project is expected to start in September and be complete by the end of October 2021, pending weather.

Development Division

Review and Permitting

Development Review - All 36 reviews were completed. One was late by one day by the PW Development Services Team.

Permitting & Inspection – 37 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

Taxi Voucher Program

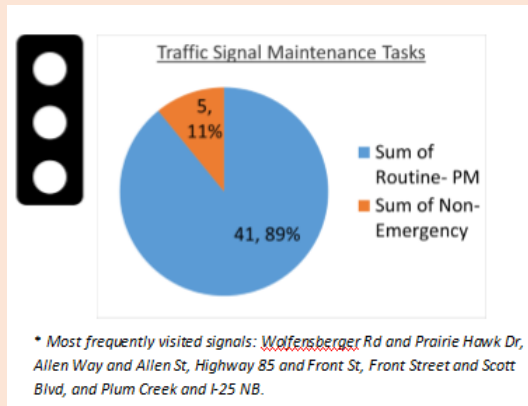
For the month of September, the Taxi Voucher Program funded 136 rides; which is a 20% increase to last year's September total of 113 rides, and a 5% increase from last month's total rides. Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do not have access to a vehicle. In September, 22 individuals used the Taxi service. Of those individuals, 72% of the rides were for work, 15% for shopping trips, and 13% for

medical appointments. Forty-eight rides were provided for people without access to a vehicle, 53 rides to seniors, and 35 rides to disabled riders.

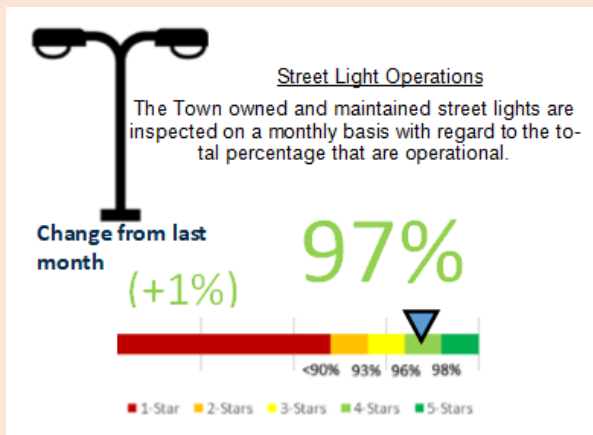
The Castle Rock Senior Center provided 756 rides in September.

Traffic Engineering and Operations

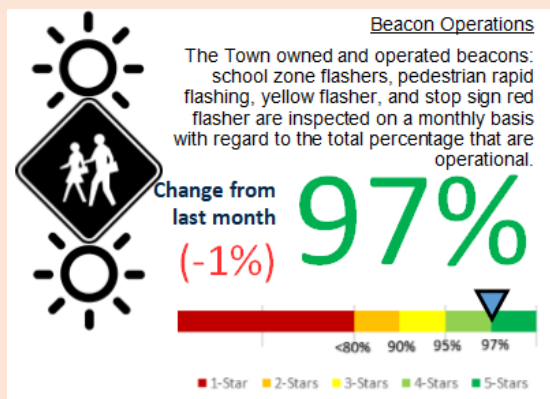
Traffic Signal Operations and Maintenance



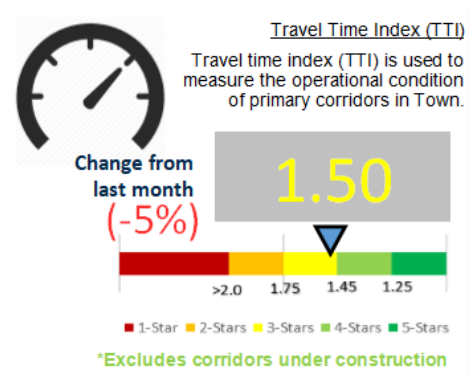
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

For the month of September, the crew accomplished 498 tasks. Of these tasks, 43 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. Eighty-one were related to signs and markings projects. We had 185 RRFB related tasks, including windshield inspections, new installations, repair tasks and investigations. We completed 170 marking tasks related to install, inspections, and replacements. Other tasks included work zone, special events, and underground locates and traffic count tasks.

Paint season is ending for the Town crew and on signalized intersection marking paintwork by contractor, Colorado Barricade. Long line contractor painting is being completed as paint and reflective beads are available.

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. One new inquiry for the NTCP was received in September. The street is Burgess Drive near South Ridge Elementary School. The new speed studies for Tree Top Drive, Black Canyon Drive, and Knob Cone did not show a speeding problem. All streets reported an 85th percentile speed of 25 mph or lower. The point of contact for each street were informed of the results and that the streets did not qualify for the program. Town staff is still awaiting a petition for Graganey Drive.

Castle Rock Downtown Alley Master Plan:

The project was discussed with the Public Works Commission and the Planning Commission in September. The second pop up event was held at the Oktoberfest celebration in Downtown. Presentations are planned for the DDA/DMA Board and the Chamber of Commerce in October. The public input period is expected to close at the end of month before the project team begins on design of the alleys. However, input can still be provided on the design and other elements throughout the project. Core Electric Company (formerly IREA) was contacted to gener-

ate a cost estimate for undergrounding the power lines from Festival Park to 3rd Street.

Downtown Castle Rock Grants:

Town staff received news from DRCOG that the pedestrian street light grant for Downtown was approved by the DRCOG Board. The funds are available in Fiscal Years 2022 and 2023. The project will install new acorn style streetlights along several Downtown streets. The grant award is for \$480,000 with a local match of \$120,000. In addition, CDOT has provided the Town with the draft Scope of Work for the Town's Revitalizing Main Streets grant for \$150,000 with a local match of \$15,000. This project will improve the visibility of several downtown crosswalks on Wilcox, add benches and trashcans, and construct four year round outdoor dining patios in Downtown. The funds will become available once a contract with CDOT has been executed.

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 busy and in the month of September completing 129 work orders and processing a total of 115 vehicles, which is almost one third of our fleet. Total output for the month was \$90,363 with \$36,000 of that being direct labor. Technician productivity was also very good for the month of September coming in at 83.3%. And Fleet availability came in at 97.1% all well above our benchmarks.

Our parts department continues to work through supply shortages which has slowed down some of our repair times. We are confident they will find alternate suppliers to provide us the parts and supplies we need to repair vehicles and reduce downtime.

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

Outcome: Fleet team completed 83.2% 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 just under our monthly objective.

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

Outcome: Town vehicles and equipment were available 97.1% of the time. This high fleet availability rate means that Town vehicles and equipment are ready when they are called upon to perform.

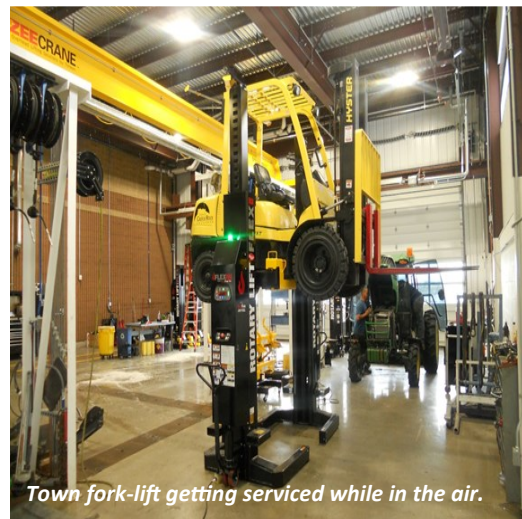
Objective/Benchmark:

Technician productivity percentage of 70% (APWA standard)

Outcome: Technician productivity was 83.3%. This productivity number was a very good increase considering the difficulty in getting some parts and some larger jobs that were completed.



Technician Chris Selheim receiving Safety award.



Town fork-lift getting serviced while in the air.

Street Operations & Maintenance Division

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

*Road Verge Maintenance
*Street Sweeping
*Gravel Road Maintenance

*Pothole Repair
*Crack Seal
*Special Operations

Road Verge Maintenance

Road verge maintenance consists of numerous small activities including trash pickup and removal, weed trimming / spraying, mowing, and road shoulder maintenance. In September, Streets Division personnel picked up and disposed of 50 trash bags worth of litter from the side of Town roadways. They also completed mowing, trimming, and weed control along 67.11 edge line miles of Town roadways.

Pothole Repair and Asphalt Patching

During the month of September, the Streets personnel dedicated 134 labor hours inspecting and repairing potholes throughout Town. Crews used 15.74 tons of hot mix asphalt to repair potholes found during inspections. During these inspections, Division Supervisors inspected, prioritized and planned repair for over 223 lane miles of Town roadways.

Crack Seal Operations

In September, Streets Division personnel completed the remaining 33.71 lane miles needed to support the upcoming 2022 Preventative Maintenance Program (PMP). Crews dedicated 901 labor hours applying 36,645 lbs. of sealant to fill in cracks and prevent water infiltration of the roadways.

Street Sweeping Operations

This month, street sweeping crews carried out sweeping operations over 131 lane miles of roadways. This was completed during the scheduled downtown sweeping operations as well as responding to various needs found upon Town roadways. In all 24.25 cubic yards of material were removed from the roadways.

Special Operations

The Streets Division undertook and completed the annual Snow Plow training event that serves to train personnel participating in the Town's Snow and Ice Control program. This course includes class room training on plow and truck operation, operational procedures and expectations, as well as a hands on portion that allows for the demonstration and practice of actual skills needed when the snow flies.

This training course involves personnel from Public Works, Water and Parks.

Gravel Road Maintenance

Gravel Road Maintenance was undertaken over 1.51 miles of the few remaining stretches of gravel road. These operations help to smooth out the surface and allows for a safer roadway for travel.

Looking Ahead

In October, the Division is looking to make the final preparations for the upcoming snow season. The roadways continue to be monitored for potholes and areas needing larger patches. Equipment maintenance is in full swing with the Division procuring needed supplies and parts in anticipation of possible material shortages. Fall sweep will likely begin toward the end of the month as the leaves fall.