



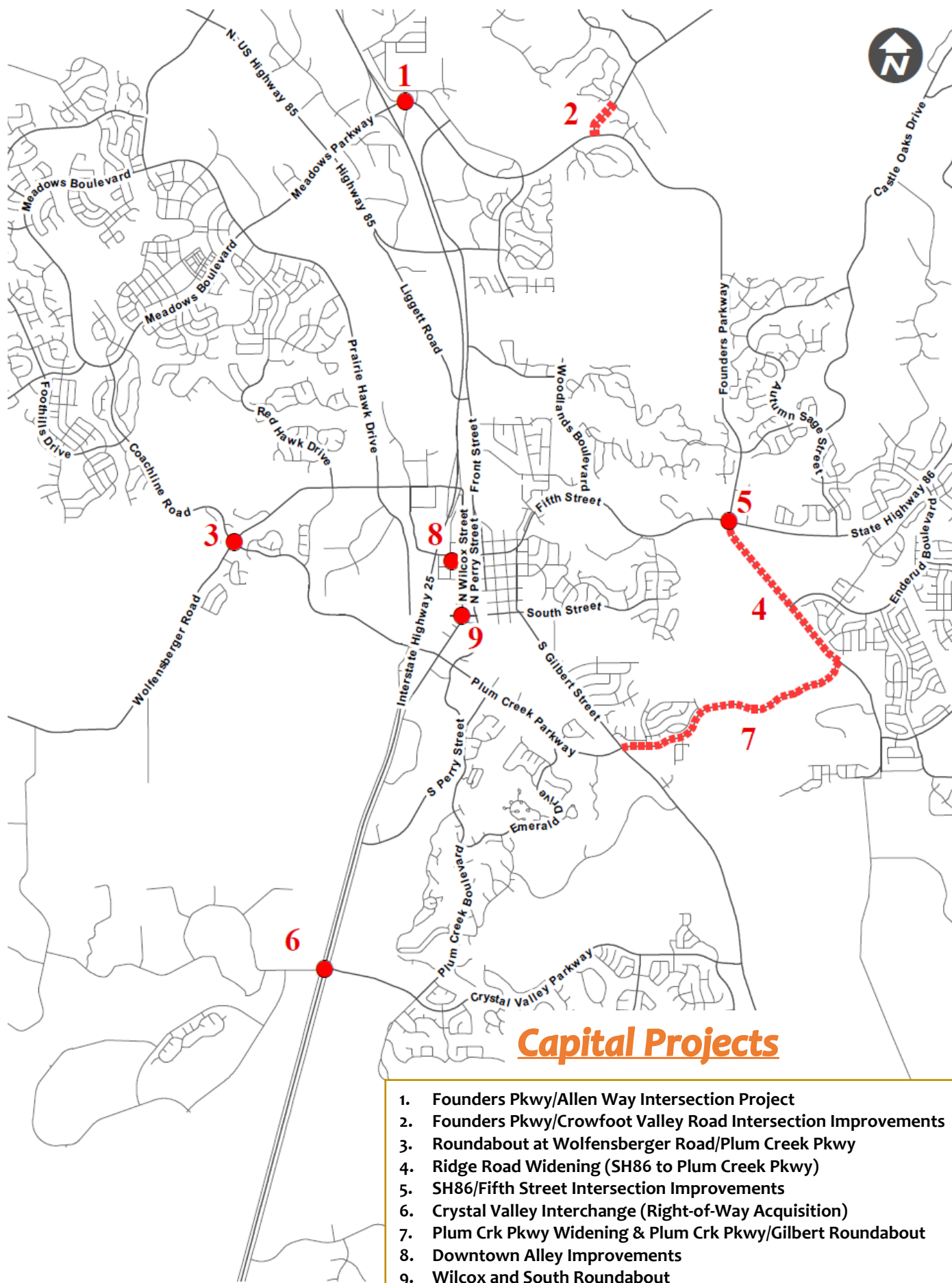
Monthly Report

August 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. The following is a summary of the construction activities that took place during this month:

- The remaining landscaping work was completed.
- Town staff and the contractor are working to complete required project documents.

Budget: \$2.64M

Construction Complete: Summer 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, Intersection Improvements: Close out phase. The following is a summary of the construction activities performed this month:

- Town staff and the contractor are working to complete required project documents.

Budget: \$3,550,000

Construction Completion: Summer 2020

3. Wolfersberger 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 project team has met with CRDC to negotiate the next phase of the landscaping repairs and expects to have a proposed agreement in the month of September.

Remaining Budget: \$120,000

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: ROW acquisition phase: 100% plans have been provided. The consultants continue to work on ROW acquisition. Staff submitted the project construction plans to IREA to initiate their design for relocation of facilities and providing power to the streetlights.

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.

Phase: Design

- The DRCOG grant was awarded to the Town.
- Project will be designed per Federal requirements/standards.
- Staff received five (5) proposal for design work, and is in the process of evaluating with staff from Douglas County and CDOT. A consultant should be selected by early September.
- Staff advertised the project management (extension of staff) Request of Proposal (RFP). The Town did not receive any proposals related to this RFP. Staff plans to advertise again after the consultant for design has been selected.

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

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 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 establish priority activities for the interchange approval.

Town staff has advertised the Request for Proposal (RFP) for the full design of the interchange. The RFP was set up to allow for the Town to select aspects of the accepted proposal that fits within the current budget or for the entire design.

Budget: \$4,600,000, and Development Escrow
Completion: Winter 2020 (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.

Phase: Design and Right of Way (ROW) Acquisition – The following is a summary of design activities performed this month:

- Town staff continued efforts to progress phase 2 design including:
 - ◊ Obtaining Town Council Approval for the additional services needed to complete additional design activities
 - ◊ Completed Right of Entry (ROE) agreements in order to perform survey activities along the project corridor
 - ◊ Outlined Value Engineering concepts to investigate during the 30% preliminary design, including the evaluation of ROW acquisition to save on retaining wall costs during construction.

Budget: \$794,375
Completion: Winter 2020

Phase 1A: Storm drain system construction - The following is a summary of activities performed this month:

- Town staff is inspecting punchlist work for final acceptance

Budget: \$1,158,300
Construction Completion: Complete

Phase 1B: Roadway package: Construction - The following is a summary of activities performed this month:

- Contractor performed approximately 50% of the removals for the project
- Half of the roundabout at the Gilbert intersection was constructed
- More than \$300,000 of utility relocations (not borne by the Town) were completed, eliminating the constraint on progress for the remaining new eastbound lanes
- Successfully switched into phase 2 of the project
- Completed retaining wall construction
- Completed IREA relocations for the remainder of the eastbound lanes and the 2 new roundabouts

Budget: \$7,507,723
Construction Completion: Winter 2020

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. The construction will be phased over two years. The four alleys currently under design are:

- 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

- The project team advertised the 2020 Downtown Alley Rehabilitation Project and obtained two bids
 - ◊ The advertisement of the 2020 alleys (Westerly Alleys) did not achieve the competitive/qualified bids that were anticipated.
- The project team has identified solutions to obtain qualified and more competitive bids, by advertising all alleys for a 2021 construction.
- Public outreach & Stakeholder involvement continues as the timeline for construction evolves.

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 30% plans submitted for review. Town Staff is continuing to work on ROW acquisition. Staff has met to negotiate with property owners and offer letters are pending.

Budget: \$1,850,000
Construction completion: Summer of 2021

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.

- Trafficast, the travel time device vendor, has gained access to the CDOT server and is working on data flow to the Town’s server. This connection will provide travel time information in Town on CDOT corridor’s Meadows

and Founders Parkway, and at the Wolfensberger interchange.

- Vehicle detection equipment replacements are complete at four of five intersections. The new detectors are reporting to the Town's signal performance metric system,
- A detection system trial is still in progress at Front and Black Feather.
- Town staff received a recommendation from the DRC-OG review panel for our grant application for technology projects in fiscal years 2021 and 2022. In August, staff began reviewing the equipment procurement and RFP process for this FHWA grant project, and began researching desirable automated traffic signal performance metric (ATSPM) dashboard functions. Official results of the award will be determined in September.

Budget: \$125,000

Construction Completion: Winter 2020

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

- IREA is still working on the design of the power meter installation at Hwy 85 and Liggett Rd.
- Signal poles have been ordered for both signals, delivery date is still to be determined. Other Town supplied materials have been quoted and their purchasing process begun.
- Construction bid documents have been reviewed, and Morton Electrics was the qualified low bidder. Public Works Commission and Town Council packets have been created for September 14 and 15 meetings, respectively.
- The Miscellaneous Concrete program contractor will be making the sidewalk and ADA ramp improvements at Hwy 85 and Liggett this fall

Budget: \$588,000

Construction Completion: End of 2020

Rectangular Rapid Flashing Beacon (RRFB) 2020 Project – This project addresses the requested pedestrian beacon crossing locations that staff received in 2019 at the 10 highest priority locations.

- In August, installation of beacon equipment, signs, and markings was completed.
- RRFB installations substantially complete as of August 25th including many of the punch list items. All beacons operating per staff observations.
- Remote access and cloud connectivity to each location is being configured. Contractor, staff, and the equipment vendor are working through the issue to determine next steps.

- A few punch list items remain at various locations that will be completed in September.
- Castle Oaks-Oasis location will be complete in fall of 2020 as a part of the Miscellaneous Concrete program. Town staff will be installing the RRFBs at this location only.
- Traffic section staff are working with Community Relations to provide a video of a new location fully operating.

Budget: \$170,000

Construction Completion: Fall 2020

Engineering Division

2020 Pavement Maintenance Program (PMP)

The 2020 PMP is focusing its efforts in the Central PMP area with additional work taking place on primary streets (Meadows Boulevard, Prairie Hawk Dr., Factory Shops Blvd., and Park Street). The PMP primary street work consisted of asphalt mill, overlay, and full depth reclamation and total reconstructs.

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.

The Slurry Seal Project began the week of August 24 with the removal of traffic calming devices on Loon Circle and Bittern Street. Contractor will work in a clockwise fashion beginning with Trailblazer Way and Broadleaf Loop. This is a 35-day contract. The contractor should complete all repairs in this timeframe.

The Crack Seal/Mastic Seal operation began the week of August 24, in the Central PMP area. This project will crack seal streets that are in a condition that did not require a surface treatment such as a slurry seal or overlay. This is a 25-day contract. The contractor should complete the work in this timeframe.

The 2020 Miscellaneous Concrete Replacement project's bid opening was August 19, 2020. The contract, once approved, is scheduled to begin August 31, 2020. This contract provides the Town the means to repair concrete infrastructure, such as sidewalk, curb and gutter and cross pans throughout the Town as

well as updating older pedestrian access ramps to ensure they meet Americans with Disabilities Act (ADA) compliance. Public notification planning and web site updates are continuing with assistance from the Community Relations team. This is a 35-day contract. The contractor should complete the work in this timeframe.

2020 Facilities Parking Lot Improvements Program

This contract will see needed improvements to four (4) parking lots, and paved entrances to CR Water Pump Station, Treatment Plant, Lift Station and Well site. The locations that are scheduled this year are:

- Milestone Pump Station (Founders Pkwy)
- Miller Treatment Plant (Plum Creek Blvd)
- Prairie Hawk Well Field (A7)
- Castle Oaks Lift Station

Work is scheduled to begin in early September and is expected to be complete in October. Contractor awarded the project is Straight Line Sawcutting Inc.

2020 Bridge Maintenance Program (BMP)

The Town is currently working with FHU to obtain the necessary required forms, special permits and an opinion of probable costs. The work entails necessary improvement to support columns, repair cracks in the abutments, address voids under approach slabs, repair scouring issues caused by running water and improvements to the asphalt surface for two bridges: 5th St. bridge over I-25 and the bridge spanning Plum Creek on South Wilcox south of the Wilcox/Plum Creek Pkwy intersection. Design is being done this year, with construction set for 2021.

2021 PMP

The PMP team will begin working on the field reconnaissance for the 2021 PMP in September. This consists of the North PMP area, and scheduled primary streets, which include; Promenade Pkwy, Meadows Boulevard between Prairie Hawk Dr. and Coachline Rd., Wolfensberger Rd., Crystal Valley Parkway and S. Wilcox St/ south of Plum Creek Parkway intersection, Front St. and Scott Blvd.

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, or asphalt pavement mill and overlay. Changes in the proposed streets may occur due to current evaluation taking place and/or actual bid pricing received that may require some modifications.

Development Review and Permitting

Development Review - All 23 reviews were completed on or before the due date by the PW Development Services Team.

Permitting & Inspection – 34 right-of-way permits were issued and over 200 inspections were conducted.

Transportation Planning & Traffic Engineering Division

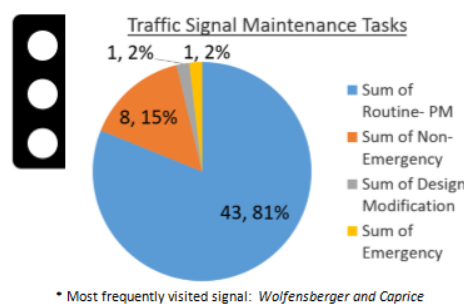
Taxi Voucher Program

For the month of August, the Taxi Voucher Program funded 121 rides; this was roughly a 15% decrease from last year's August total of 139 rides and a 2% 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 August, 17 individuals used the Town's Taxi service. Of those that used the service, 80% of the rides were for work, 8% were for shopping trips, and 12% for medical appointments.

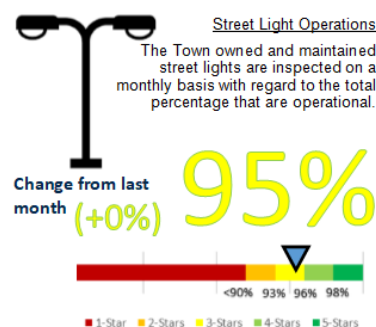
The Castle Rock Senior Center provided a total of 391 rides in August.

Traffic Engineering and Operations

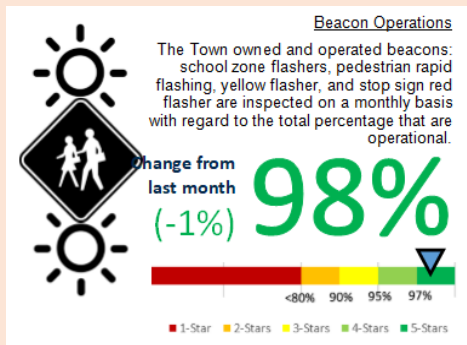
Traffic Signal Operations and Maintenance



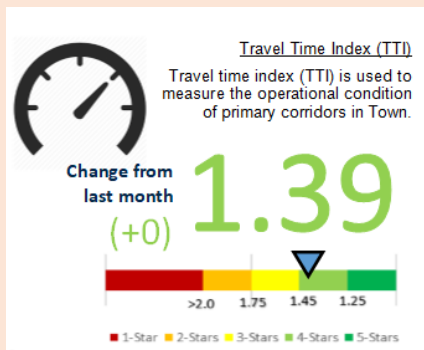
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

During the month of July the crew accomplished 2,967 tasks. Of these tasks 125 of them were sign work activities related to fabrication, install, repairs and replacements. 2,649 of these tasks were markings work activities related to investigations, inspections, replacements, original install, and retirements. 48 are for misc. projects. We also had 102 rectangular rapid flash beacon windshield inspections.

Finally, the long line contractor (double yellows and white skips) is essentially done with the first round of long line striping with just a few segments left. Signalized intersection symbols, stop bars and crosswalks are almost complete as well.

Transportation Planning

Neighborhood Traffic Calming Program (NTCP):

The NTCP exists to verify and address quality of life items associated with vehicular traffic on local neighborhood streets and certain collector roadways. There were no new traffic calming inquiries in August. Staff is still awaiting the initial support petitions from several previous inquiries and results from recent speed studies on several streets. The following provides updates for the two active projects;

- Diamond Ridge Pkwy: Voting ballots were mailed to homeowners fronting Diamond Ridge Parkway in August.

The Town has received most of the votes, but a few homeowners still have not voted. The 30-day voting period will end in early September, and Town staff will then count the votes in favor and against the proposed Working Group traffic calming plan. If the plan is approved staff will finalize the design and notify the study area of the results.

- Bittern Street / Loon Circle: Town staff is working to implement the neighborhood's approved plan that will replace the existing circles on each street with a speed cushion. The contractor began work at the end of August to remove the existing circles and Town staff will complete the installation of the new cushions and signs / markings in early September.

Castle Rock Transit Feasibility Study:

Town staff has been working with the consultant to finalize the recommendations and draft report. Once the draft report is ready it will be placed on the project web page for public review and comment. The public will have the month of September and first part of October to review the report. Commission(s) and stakeholder presentations will also be held in September. Presentations to the Planning Commission and Chamber of Commerce were conducted in August. Recommendations include a phased implementation plan that could start with the expansion of the current taxi voucher program to ultimately a plan that could include the entire Town being serviced by a private micro-transit company with regional service to the Ridegate RTD Station. Council adoption of the study is still planned for October.

Street Signs and Pavement Marking Maintenance

During the month of August, the crew accomplished 3,905 tasks. Of these tasks 516 of them were sign work activities related to fabrication, installation, repairs, replacements, inspections and investigations. A total of 722 of these tasks were markings work activities related to investigations, inspections, replacements, original installation, retirements and 68 tasks are for misc. projects. We had 98 rectangular rapid flashing beacon (RRFB) windshield inspections and 4 traffic counts. Contractor long line marking replacements accounted for 2,497 of the tasks which includes roadways improved with the pavement maintenance program, signalized intersection markings and the remaining long lines (i.e. double yellow lines) in Town.



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.



Fleet Services received and put into service one new F150 Special Service Vehicle for the Police Department, one new ambulance for the Fire department and one new ATV for Castle Rock Water. Fleet Staff completed a vehicle auction and brought in \$20,000 in proceeds.

The Fleet Division was very productive and that shows in our benchmark comparisons listed below. The Fleet Division billed out \$74,000 of parts and labor and completed 144 work orders which was about 20 more than normal. As well as meeting the following objectives and benchmarks:

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

Outcome: Fleet team completed 75% of the work orders within 24-hours of opening repair requests or service requests. This benchmark number shows how quickly vehicles and equipment get serviced and repaired and back on the job.

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

Outcome: Town vehicles and equipment were available 97.7% 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 64%. This productivity

number was a little below our benchmark mainly because of several technicians taking time off.

Overall we completed 144 work orders and processed \$74,000 in parts and labor and another \$24,000 in fuel transactions. Fleet technicians Chris Selheim, Eric Dena, Rod Claassen, and Caleb Wood all completed compressive diesel training from ATA

Overall we completed 101 work orders and processed \$75,000 in parts and labor and another \$21,000 in fuel transactions. Fleet technicians Chris Selheim, Eric Dena, Rod Claassen, and Caleb Wood all completed compressive diesel training from ATA

Street Operations & Maintenance Division

During the month of **August**, the Street Operations & Maintenance Division (O&MD) carried out operations in a number of core functionalities as well as preparing for the upcoming winter season. The Streets team performed work in the following maintenance operations

- *Asphalt Patching
- *Mowing and Weed Control
- *Gravel Road Maintenance
- *Sweeping
- *Pothole Repair
- *Special Operations

Asphalt Patching

Asphalt Patching operations were undertaken at numerous locations in Town. Ridge road received a large amount of patching work, as well as Prairie Hawk south of Wolfensberger. Streets crews also repaired 3 patches for work performed by Castle Rock Water.



Mowing and Weed Control

Mowing, Weed Control, and Trash removal are nearly constant operations that enhance the safety and aesthetics of the Town roadways. In August, these operations were undertaken and completed on nearly 8.5 edgeline miles of Town roadways.

Gravel Road Maintenance

During August the crews dedicated some time to maintain the few gravel roadways left in Town by grading and compacting the road surface. Approximately 6.73 lane miles of road was resurfaced and smoothed out. This provides a safer surface for vehicular traffic as well as a much better ride.

Sweeping

124 lane miles of roadways in the business areas of town were swept during August. This resulted in the removal of 30 cubic yards of material from the downtown and business areas. This enhances the overall appearance of the Town and helps to control air and water quality for stakeholders.

Pothole Repair

In August Streets Crews began an aggressive pothole and transverse crack repair operation. Crews used 7140 pounds of concrete and 49 tons of asphalt to carry out repairs on a large number of transverse cracks and potholes throughout Town.

Special Operations

August saw the completion of the stockpiling of the salt/sand mix used by the Town for the Snow and Ice Control program. Approximately 3000 tons of salt and aggregate were mixed and stockpiled. This mix is used throughout the Town to maintain the roadways during snowstorms.