



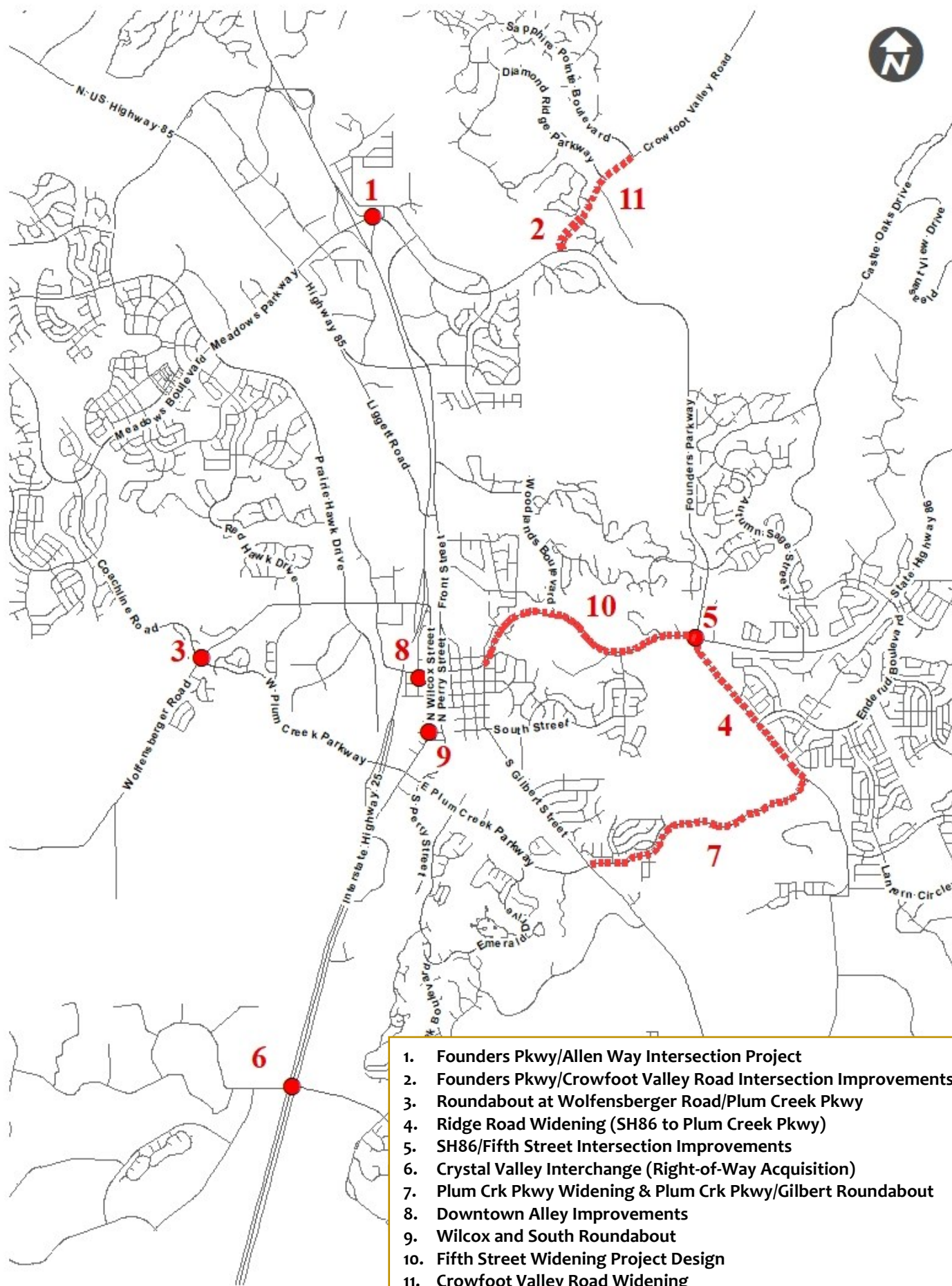
Monthly Report

May 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 – Closeout - Work continues on the close out phase with the preparation of the final contractor payment application and work on the completion of project documentation as required by CDOT. Work was performed to complete federal Buy America documentation required for CDOT to process the Town's reimbursements.

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 - Town staff, project consultant and the contractor continue 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: 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:

Tree removals completed in advance of irrigation repairs

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 by 1st Qtr. 2022. Staff has received initial cost estimate from IREA. Staff is coordinating with the consultant to provide easement descriptions for IREA facilities. Staff plans to review and coordinate with IREA on possible phasing of the relocations. Staff has requested the design consultant to provide cost estimates for phasing the construction of the improvements. This request is related to coordinating the northern portion of the widening with the Four Corners Intersection Improvement project.

Budget: \$400,000

ROW Acquisition: Spring 2021-Phase 1; Fall 2023- Phase 2

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:

- FIR meeting with CDOT is scheduled for June 11 to review 30% design plans
- The second public outreach meeting is scheduled for July 27
- The project team submitted the 30% preliminary plans for review

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

Design Completion: Winter 2022

ROW Acquisition: TBD during Preliminary Design stage

Targeted construction: 2022

6. Crystal Valley Interchange – Right-of-Way Acquisition – The purpose of this project is to achieve acquisition of re-

maining 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 the condemnation process for the Boone Family property. The remaining properties 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: Preconstruction Activities - Interchange Access Request and Environmental Assessment Reevaluation, and Design

- Town staff continues to meet with CDOT and FHWA to established priority activities for the interchange approval.
- The IGA for the Federal BUILD Grant has been executed. The BUILD grant agreement has been sent to the Office of the Secretary for review/approval, staff is anticipating to get approval for signatures by mid-June. 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.
- The advertisement for the design Request for Proposal (RFP) ended in mid-March. We received five proposals altogether from reputable firms (AECOM, Atkins, FHU, HDR and Jacobs). Staff worked with all stakeholders, including CDOT and interviewed the top two ranked firms. Staff has received concurrence from CDOT on recommended firm. Tentative schedule at this time will have staff approaching the Public Works Commission and Town Council in June for approval of the Preconstruction Services Consultant.
- Staff has completed the delivery method workshop. This workshop consisted of a panel of all stakeholders determining which method of delivering will be most beneficial to the project schedule and budget. The result of the workshop was the CM/GC delivery method would be the best to achieve the successful delivery of this project with the proposed schedule. Staff will be moving forward with evaluating and making recommendations as the process continues.

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

Completion: Spring 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 roundabout 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: Construction (100%) - The following is a summary of activities performed this month:

Staff compiling final contract documents to begin warranty period

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:

- Installed and maintained erosion controls throughout site
- Prepared for replacement of non-conforming curb & gutter throughout site
- Placed soil amendment (compost) on roadside areas to improve seeding establishment
- Prepared remaining median concrete areas for concrete
- Prepared roundabouts for splash block installation

Weather events during May 2021 had a significant impact on project progress as planned curb & gutter replacement as well as soil amendment and seeding activities were delayed to avoid adverse impacts on quality due to precipitation. However, as the month closes out, the project has completed placing soil amendment (compost) and shifts focus to completing roadway work. Over the next month crews will complete paving top lift of asphalt, final striping and seeding.

Budget: \$7,507,723

Construction Completion: July 2021

Phase 2: Design and ROW Acquisition (60% Complete) – The following is a summary of design activities performed this month:

- Completed 90% final design for the Phase 2 Roadway (Plum Creek between Eaton and Ridge Road)
- Submitted final design to all stakeholders for review
- Completed and submitted Phase III Drainage Report
- Commenced utility relocation and lighting design with IREA
- Completed and submitted draft GESC plans and report

Budget: \$794,375

Design Completion: Spring 2021

ROW Completion: 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

- Executed contract with Elite Surface Infrastructure (ESI) for construction of the project
- Completed multiple utility relocations ahead of construction (Century Link and IREA)
- Continue public stakeholder outreach/coordination efforts to minimize construction impacts to affected businesses.
- Reviewed and approved preliminary submittals from contractor ahead of construction
- Placed initial site erosion controls and received approval to begin construction 6/1

Budget: \$877,900

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: Construction

- Traffic detours have been setup and the Phelps/Perry connection constructed
- Phase 1 Construction was completed
- Phase 2 Utilities work and Subgrade preparation was completed

Budget: \$2,270,243

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:

- 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 advertisement of request for proposals (RFP) for project design
- Completed consultant selection procedures with project stakeholders
- Negotiated contract scope of work and fee with preferred consultant
- Drafted contract and resolution materials for a Town Council contract approval 6/15

Budget: \$1,500,000

Design Completion: December 2021

Right-of-way acquisition: 2022

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

11. 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 consultants has completed the utility locates and field survey. The consultant continues with data research, including drainage report review and typical section review. The consultant is working on the preliminary horizontal alignment design and conceptual intersection design.

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

ROW Acquisition: End of 2021

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. 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 an executed IGA from CDOT. Additionally, staff are creating bid documents for the vehicle detec-

tion procurement and installation which will be advertised in Summer 2021. 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. Currently staff is finalizing clearance documents and invitations for bid for Phase I.

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).

- Signals are operational and performing well.
- Staff will use ATSPM to fine tune the timing plans at both intersections.
- The intersection of Hwy 85 & Liggett Rd is awaiting street light luminaire arms which will be delivered and installed by June 2021.
- Town staff completed final punchlist.
- Citizen's showed concern over the new luminaires at Cherokee and Meadows. Town staff have ordered dimmable photocells and will rotate the luminaire of concern towards the middle of the intersection.

Budget: \$588,000

Construction Completion: Spring 2021

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

- A purchase order has been executed for 10 Carmanah RRFBs.
- Staff is working on design plans for the RRFB installations.
- Equipment will be procured and then installed by Signs and Markings team in summer 2021.

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).

Sidewalk, curb and gutter repairs kicked off April 19 and was completed May 25. Contractor is working to complete all clean-up, restoration and respond to any issue with residential sprinkler systems. Project was done within contract time and under budget.



Meadows Blvd/Castleton Court concrete restoration project began Monday, May 17. Crews continue work on the removal and replacement of curb, gutter & sidewalk, concrete panels, diamond grinding and joint sealing along Meadows Blvd., between Coachline Rd. and Prairie Hawk Dr.



Contractor will then move operations to Castleton Ct. to begin removals on June 15.

Asphalt Overlay Project began construction April 19. Crystal Valley Parkway was fully milled and a 2" top mat paved in full by Wednesday, May 26. Long lines were painted Friday, May 28, with symbols, bike lanes and other markings to be done June 1-3.

Asphalt milling on Front Street began May 24 and is expected to be completed in full June 2. Top mat paving is scheduled to start June 8 and be completed by June 14.



Full Depth Reclamation project began on April 19 at Castlegate Drive West and was completed on Tuesday, May 25. Top mat paving was done Friday, May 21 and pavement marking done Monday, May 24. Project was completed within contract time and under budget.

2021 Facilities Parking Lot Improvements Program

This year's maintenance program will see needed improvement made to fourteen (14) parking lots from various Town Departments. These parking lots will see various improvements such as; curb, gutter & sidewalk replacement, asphalt mill and overlay, asphalt patching, slurry seal and seal coat.

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 schedule to begin in early September and be completed by October 29.

2021 Bridge Maintenance Program (BMP)

Bids for the 2021 Bridge Rehabilitation for S. Wilcox Bridge over E. Plum Creek will be submitted for competitive bids upon Colorado Department of Transportation's completion of environmental studies and the consultant submitting 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 29 reviews were completed on or before the due date by the PW Development Services Team.

Permitting & Inspection – 24 right-of-way permits were issued.

Transportation Planning &

Traffic Engineering Division

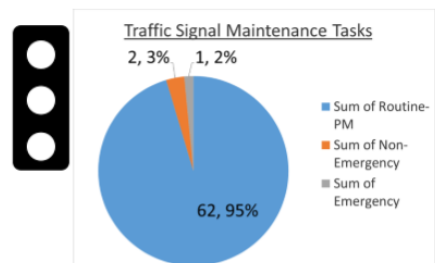
Taxi Voucher Program

For the month of May, the Taxi Voucher Program funded 169 rides; which is a 62% increase to last year's May total of 104 rides and a 10% increase from last month's total rides (153). 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 May, 19 individuals used the Taxi service. Of those individuals, 68% of the rides were for work, 21% for shopping trips, and 11% for medical appointments. Sixty-five rides were provided for people without access to a vehicle, 45 rides to seniors, and 59 rides to disabled riders.

The Castle Rock Senior Center provided a total of 604 rides in May.

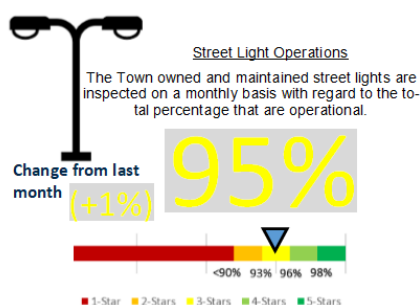
Traffic Engineering and Operations

Traffic Signal Operations and Maintenance

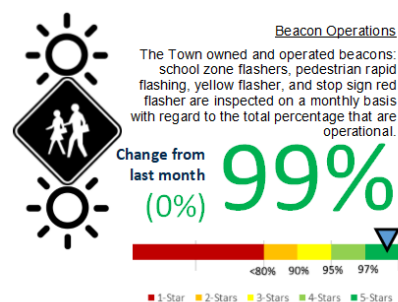


* Most frequently visited signals: Meadows Dr and Butterfield Crossing, Meadows Pkwy and Limelight Ave, Fifth St and Wilcox St, and Fifth St and Gilbert St.

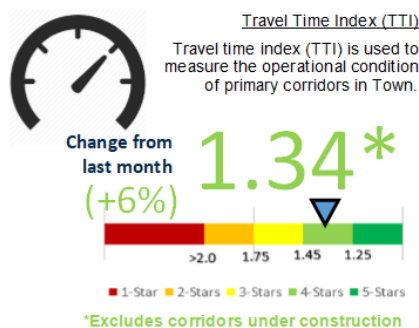
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

For the month of May, the crew accomplished 686 tasks. Of these tasks, 209 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. Sixty-two were related to signs and markings projects. We had 169 RRFB related tasks, including windshield inspections, repair tasks and investigations. We completed 138 marking tasks related to install, inspections, and replacements. Of the other tasks, 21 were locates, four work zone, and there were six traffic count tasks. In May, annual paint maintenance work started for Town crews. Contractor long line work began with the worst performing markings and half of them have been complete thus far. Signalized intersection markings work will begin in July.

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. Town staff will mail homeowners on Rising Moon Way voting material in June to decide if the neighborhood is in agreement with the proposed plan to convert the mini circle to a speed hump. If approved, the conversion is expected to occur late this summer. Staff also received NTCP inquiries for two new streets in Crystal Valley Ranch, Garganey Drive and Echo Park Drive. Both point of contacts have been sent the initial support petition and program policy document to review and complete. Speed studies for Black Canyon, Riverwood Way & Tree Top Drive were postponed due to weather. New speed studies are scheduled for early June.

Castle Rock Downtown Alley Master Plan:

The walking audit to capture existing conditions of the alleys took place in May. The consultant is preparing the existing conditions report that will help determine which alleys are good candidates for the shared alley concept. Town staff is also working with the consultant on the communications plan and scheduling the first public outreach event.

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.



Heavy duty side of shops.

The Fleet Division has started our annual auction of used vehicles and returns have been good. Auction of used vehicles brought in \$61,530 for the month of May.

May was another very busy and productive month. Revenue from repair & maintenance of Town vehicles was \$87,800 and technician productivity was very good at 78.3%. Those two outcomes were both higher than our objective.

Fleet staff also completed interviews for the open technician position and is hoping to have a new technician by the end of June. Fleet staff continues to work on ordering new vehicles and equipment for 2021, so far \$2.1M in new vehicles have been ordered.

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

Outcome: Fleet team completed 73.5% 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 96.9% of the time. This high fleet availability rate means that Town vehicles and equipment are ready when they are called upon to perform.

Objective/Benchmark: Technician productivity percentage of 70% (APWA standard)

Outcome: Technician productivity was 78.3%. 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 103 work orders and processed \$87,800 in parts and labor and another \$45,000 in fuel transactions.

Street Operations & Maintenance Division

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

- *Roadway Inspection
- *Sweeping
- *Equipment Maintenance
- *Pothole Repair
- *Crack Seal

Inspection for Potholes

In May, crews inspected 34 lane miles of roadway for issues. This is a proactive approach to identify problem areas prior to them becoming dangerous or potentially damaging.

Pothole repair Asphalt Patching

In May, crews spent 186 labor hours performing asphalt repairs.

Completing full depth patching in five areas of town and filling 74 potholes. In performing these operations, the team used 20 tons of hot mix



asphalt and 1100 lbs. of cold mix

Sweeping

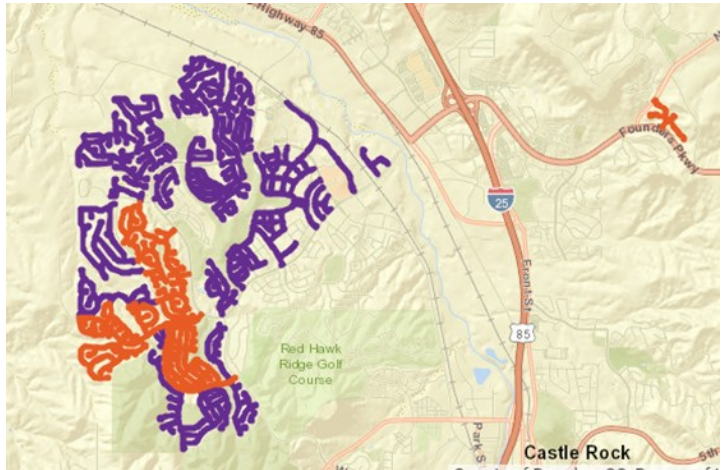
In May, crews worked diligently to sweep the roadways within Town. The crew swept a total 488 lane miles of Town roadways removing 150 cubic yards of material, completing the spring sweep of the entire Town. The Downtown and business areas were also swept twice during the month of May. All of these operations serve to keep the Town clean, attractive, and enhance the overall pleasant environment in Town.

Equipment Maintenance

During the times when weather was too wet for crack sealing and other operations, crews worked to replace the fence pickets in the lower yard as well as clean up the plow trucks post snow season.

Crack Seal

In May, the crews completed 29 lane miles of crack sealing using 25000 lbs. of sealant. This leaves 28 lane miles left of the 111 for maintenance this year. See Map: Orange = planned Purple = completed.



Looking Ahead

In June, crews should complete crack seal maintenance with a little cooperation from mother nature. The Streets team is also receiving salt in preparation for the next snow season. Crews will be working on mowing the road shoulders around town and picking up trash in verge areas.

