



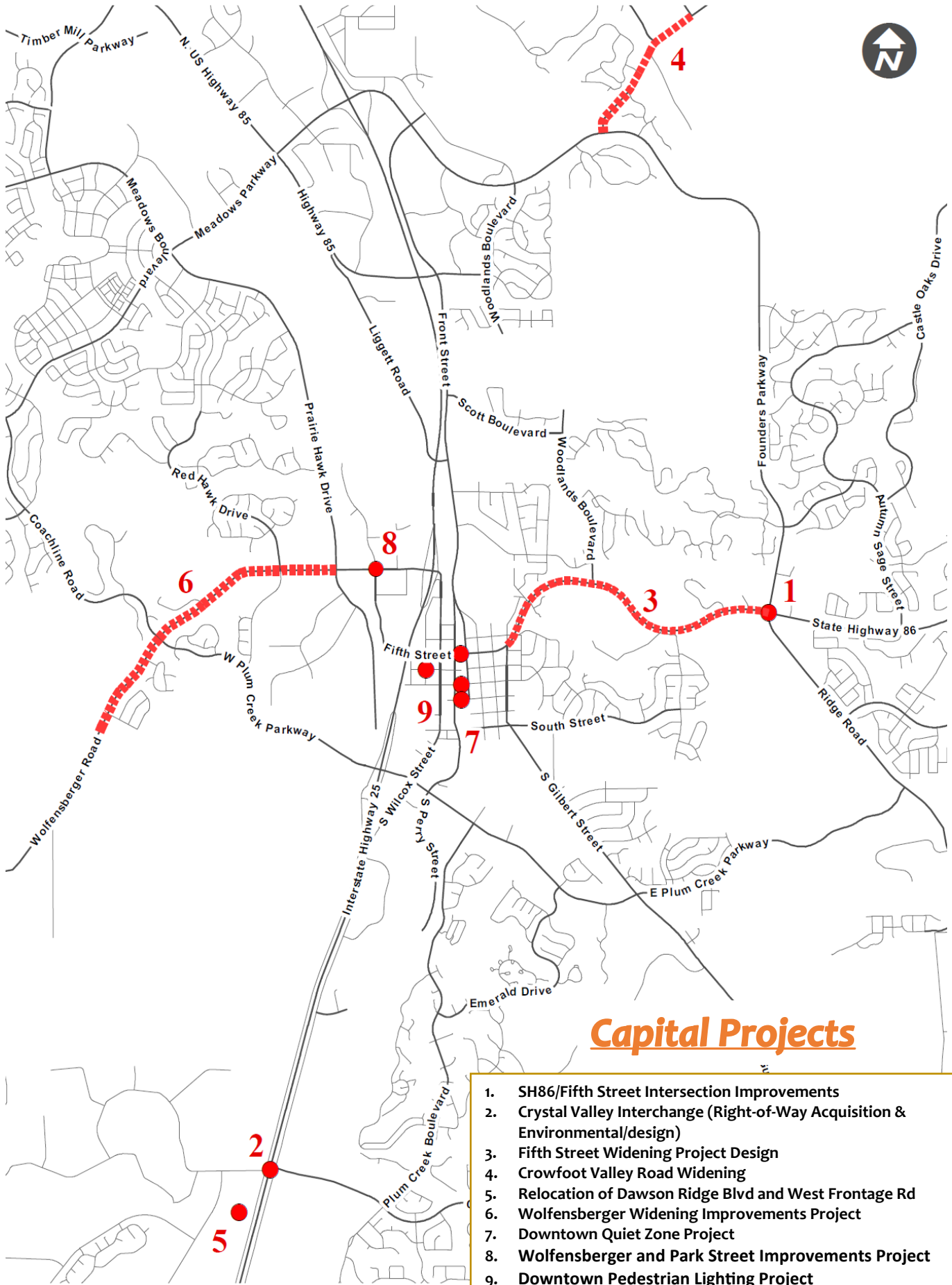
# Monthly Report

May 2024

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. SH86/Fifth Street Intersection Improvements
2. Crystal Valley Interchange (Right-of-Way Acquisition & Environmental/design)
3. Fifth Street Widening Project Design
4. Crowfoot Valley Road Widening
5. Relocation of Dawson Ridge Blvd and West Frontage Rd
6. Wolfensberger Widening Improvements Project
7. Downtown Quiet Zone Project
8. Wolfensberger and Park Street Improvements Project
9. Downtown Pedestrian Lighting Project

**1. Founders Parkway (SH86)/Fifth Street Intersection “Four Corners” Improvements**

– This project will enhance one of the primary intersections in Town. Founders Parkway, SH-86, Ridge Road and Fifth Street intersect at the project location. Each leg of the intersection is classified as a major arterial facility and the intersection is currently operating above its capacity. The improvements this project will implement include:

- Intersection will remain a full movement four-way intersection. Additional turn lanes and acceleration lanes will be added.
- Traffic signal improvements will be made to incorporate the larger intersection.
- Pedestrian and bicycle improvements will be constructed on all four sides of the project.
- Stormwater detention and water quality improvements will be constructed to capture the additional surface volume from the new intersection.

**Phase: Construction**

- Construction continues on all quadrants with work mainly focused in the NW and SW quadrants
- Soil nail fascia to be complete first week of June
- MSE wall is complete
- Signal installation underway
- Aloha entrance has been reconstructed and reopened.
- New right turn lane on SB Founders will start construction in May. Will require traffic shifts

**Budget:** \$12,400,000 total funding

**\*Targeted Construction Completion:** Winter 2024

**2. Crystal Valley Interchange – Construction Activities** – The purpose of this project is to build an interchange with I-25 in the southern end of Town which will reduce congestion at the Plum Creek interchange, on S. Wilcox and the E. Frontage Rd., and improve access to the highway for Crystal Valley Ranch, Montaine, and the future Dawson Trails developments.

**Phase: Construction—Package 1**

- Package 1 is under construction and progressing on schedule
- CBC for drainage is near completion
- Earthwork and fill for RAB are near completion, base placement will begin in June
- Ongoing communications with property owners and stakeholders
- Continuing Pond Excavations
- Change order No. 1 was executed for completion date extension

**Budget:** \$17,196,090.70

**Phase: Design/Construction—Package 2**

- BNSF construction and maintenance agreement, the permanent easements and the construction easements were signed by Town Council on May 7. The documents have been sent to the BNSF and are scheduled to be executed by June 4.
- The construction contract was executed by Town Council on May 21.

- The pre-construction meeting is scheduled for June 6.

**Budget:** \$7,580,000 total Design funding

\$78,400,000 total Construction funding

**Design Completion:** Spring of 2024

**Targeted Construction Completion:** Spring 2027

**3. Fifth Street Widening—Pre-construction** – 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 fully built-out transportation network from South Gilbert Street to Ridge Road as identified in the TMP. The improvements include:

- Widen to 4-lanes from Woodlands Boulevard to Ridge Road
- Add on-street bike lanes between Gilbert Street and Ridge Road
- Add sidewalks from Sixth Street to Ridge Road
- Roundabout and signal light construction at Woodlands Boulevard and Valley Drive respectively.

**Phase: Design & ROW**

- Prepared 3 offers for property acquisition
- Completed appraisals for 8 of the 21 property acquisitions

**Budget:** \$2,700,000 total funding

**Design Completion:** Summer 2024

**Right-of-way acquisition:** 2024

**\*Targeted Construction Completion:** 2030

**4. Crowfoot Valley Road Widening** – This project involves the widening of Crowfoot Valley Road from the intersection of Knobcone Drive to the Town boundary. The objective of this project is to reduce congestion due to current and forecasted traffic volumes, as well as safety improvements for both vehicles and pedestrians alike. The project will include:

- Roadway widening to four through lanes
- Right and left turn auxiliary lanes where warranted
- Signal at Sapphire Pointe intersection
- Complete sidewalks throughout the project corridor

**Phase: Design**

- Completed 90% design review with all project stakeholders
- Completed CORE electric designs; lighting and overhead electric relocations
- Continued relocation designs for Comcast, Black Hills, and Century Link
- Sapphire Pointe Signal poles being manufactured and prepared to ship

**Budget:** \$810,000 total funding

**ROW Acquisition:** 2024

**Design Completion:** 2024

**\*Targeted Construction Completion:** Fall 2025

**5. 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** – CORE Consultants is the design consultant for this project. The following is a summary of the activities performed this month:

- Plans and bid package are finalized
- Management agreement with Dawson Trails Metro District for Construction Management was approved by Public Works Commission and Town Council.
- Bid opening is scheduled for June 20 through the Dawson Trails Metro District.

**Budget:** \$299,000 total funding

**Design Completion:** Spring 2024

**\*Targeted Construction Completion:** Summer of 2025

**6. Wolfensberger Widening Improvements Project-**

Wolfensberger Road is a major arterial connection for local and regional travel between the westerly portions of Town and I-25. Roadway and pedestrian improvements for Wolfensberger 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 Wolfensberger Widening Improvements Project will complete all design elements for the implementation of the fully built out transportation network from the western Town limits to Prairie Hawk Drive.

- Widening roadway to a full 4-lane arterial section
- Addition of sidewalk along both sides of Wolfensberger
- Roundabout construction at Red Hawk/Auburn and Wolfensberger Intersection
- Removal of existing traffic signal
- Stormwater drainage improvements
- Implementation of on street bike lanes West/East bound

**Phase: Planning/Design**

- Appraisal and survey for property acquisitions are underway
- NOI's have been sent to all property owners
- ROW acquisition will continue throughout the summer of 2024
- Design start up has been pushed to 2029

**Budget:** \$2,500,000 total funding

**Design Completion:** TBD

**Right of Way Acquisition:** 2024

**\*Targeted Construction Completion:** TBD

**7. Downtown Quiet Zone Project -**

This project will implement a quiet zone through the downtown Castle Rock area. In order to implement the quiet zone, improvements must be constructed at three railway crossings: Second Street, Third

Street and Fifth Street. The scope of the improvements to be constructed with this project include: additional crossing gates, pedestrian crossing improvements, ADA improvements, sign and marking improvements, curb and gutter additions and general railroad (Union Pacific, i.e., UP) coordination. The benefits of this project will be improved safety for vehicles and pedestrians and improved quality of life for downtown businesses, residents and patrons.

**Phase: Construction** - The following is a summary of activities performed this month:

- Union Pacific mobilized to the Third Street crossing to complete remaining construction at that location.

**Budget:** \$1,800,000 total funding

**Targeted Construction Completion:** Summer 2024

**\*Targeted Implantation:** End of 2024

**8. Wolfensberger and Park Street Improvements Project-**

Wolfensberger Road is a major arterial connection for local and regional travel between the westerly portions of Town and I-25. Roadway and pedestrian improvements for Wolfensberger and Park Street have been identified to increase intersection operations and provide better pedestrian access to the Downtown area.

The Wolfensberger and Park Street Improvements Project will complete all design elements for the implementation of pedestrian and transportation improvements.

- Relocate traffic signal pole
- Increase sidewalk width
- Replace existing ADA ramps
- Construct additional turn lane on Park Street

**Phase– Construction**

- Construction of phase 2 began 5/13 removing sidewalk on east side of Park Street and south side of Wolfensberger. Sidewalk to be poured next week as well as paving the right turn lane on Park Street.
- Phase 1B scheduled to begin 6/11
- Outreach for project is being communicated through Community Relations

**Budget:** \$937,000

**\*Targeted Construction Completion:** Summer 2024

**9. Downtown Pedestrian Lighting Project –**

This is a project to install pedestrian lights within the Downtown area as budget allows. This project plans to improve public safety, visibility, mobility, and access to Downtown destinations by installing new pedestrian light fixtures to increase lighting levels.

- CDOT has provided concurrence and forwarded project to FHWA for approval. FHWA approval and concurrence precedes Town's ability to advertise for bids. Project must be bid by July and be completed by December.

**Budget:** \$600,000

**Targeted Construction Completion:** End of year 2024

*\*These schedules are subject to change based on adjusted revenue forecasts and results of bids received.*



**Traffic Signal System Upgrades** – This is a multi-year signal system upgrade project which is on-going as funds are available. The project has included proven technology advances at signalized intersections for safety and daily operations.

- Staff is part of the CDOT managed, adaptive signal system project that has implemented adaptive signal timing on Founders Parkway, Meadows Parkway, and Factory Shops Boulevard. Eight abutting Town signals are included in the system. There is no new update on this project.
- Phase II of the Town’s ATSPM project includes software development and signal timing. Project acceptance testing is scheduled and project closeout is anticipated by the end of June.
- The Town is awaiting a draft IGA from CDOT for Connected Vehicle hardware to proceed with project. Once executed this two-year project will kick off in earnest.

**Budget:** \$868,700

**Targeted Construction Completion:** April 2026

**2023 Safety Projects** – This project includes concrete safety devices in conjunction with the Pavement Maintenance Program, installation of pedestrian crossing beacons at six locations, Intelligent Transportation System (ITS) on Meadows Blvd to warn drivers of signal changes and queue awareness, intersection safety improvements, and missing sidewalk connections.

- Contract for Adiona Transportation Systems is being routed for approval of construction of advance warning on WB Meadows Blvd. for the signal at Limelight.

**Budget:** \$194,000

**Targeted Construction Completion:** Fall 2024

**Illuminated Street Name Signs** – All the 2022 and 2023 Illuminated Street Name Signs (ISNS) and hardware have been received by the Town; staff is coordinating installation. Sign locations include: Founders Pkwy and Rising Sun, Founders Pkwy and Ridge Road (Four Corners), Wolfensberger and Park St, and Wolfensberger and Caprice. The project will be paused in 2024 due to Town budget constraints. CIP project at Wolfensberger and Park St will install ISNS and necessary electrical components.

**Budget:** \$73,582

**Targeted Construction Completion:** Summer 2024

**Rectangular Rapid Flashing Beacons (RRFB)** – Locations have been identified for the 2024 project, including three existing roundabouts with pedestrian crossings. Staff are awaiting delivery of materials, and have finalized the detailed installation plans.

**Budget:** \$216,000

**Targeted Construction Completion:** Fall 2024

**Safe Streets for All (SS4A) Safety Action Plan** – The Town was awarded a SS4A grant to create a Local Road Safety Plan (LRSP). The plan aims to expand on the biennial Crash Facts Report to identify a High Injury Network (HIN) and High Risk Network (HRN) to focus on making improvements in areas with a high potential for crash reduction. Fehr & Peers (F&P) was selected as the consultant in Fall 2023.

- F&P is continuing the process of analyzing data as part of the total system analysis.
- Stakeholder meeting held in May to provide project update and seek feedback on direction of analysis and phase 2 of communication plan.
- The draft plan is scheduled for completion in June.

**Budget:** \$300,000

**Targeted Plan Completion:** Fall 2024

# Engineering Division

## 2024 PMP

The 2024 PMP will focus its efforts in the West PMP area. Maintenance will be done in several neighborhoods with various surface treatments such as slurry seal, mill and overlay, and reconstruction.

## Sidewalk, Curb and Gutter Improvements

Sidewalk, curb and gutter repairs continued through May with saw cutting and replacement operations. Residents within the West PMP area were notified via letters and by variable message boards that repair and maintenance work would begin.



Work began with the ADA improvements downtown on Third St. and Jerry St. The Town’s contractors are repairing damaged concrete in preparation for its scheduled surface treatment. Sidewalk, curb and gutter repairs are expected to run through May.

## Asphalt Overlay Project

Asphalt Overlay Project continued operations, with concrete and asphalt repairs in the various neighborhoods. The crews spent a couple of weeks in each before moving onto other areas in a counter clockwise fashion. Concrete repairs and asphalt patching will continue for several weeks, followed by asphalt milling and overlay operations.

## Full Depth Reclamation Project

Full Depth Reclamation concrete repair work continued in May. Contractor moved operations to Sunridge Terrace, Foothills Ct.,

Elk Run Dr., and Bear Paw Dr. Contractor removed and replaced damaged sections of sidewalk, curb and gutter. Concrete repairs are expected to continue the rest of this month. Reclaiming continues in residential areas.

**2024 Facilities Parking Lot Improvements Program**

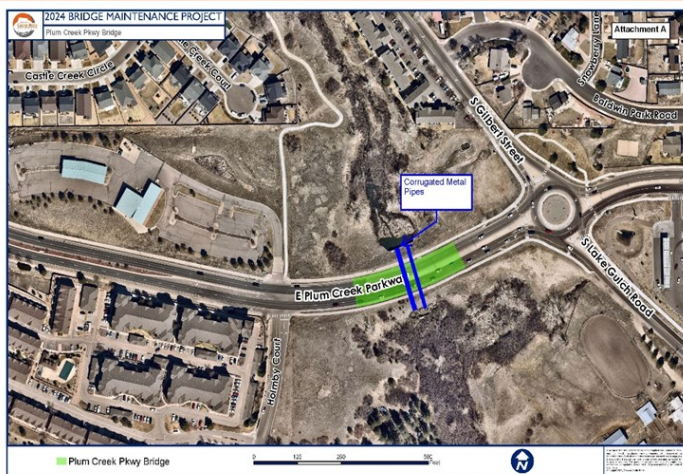
The 2024 Town Facilities Parking Lot Improvement Program will focus its efforts on seven (7) parking lots.

The following Town Facilities were approved:

- |  |                                   |
|--|-----------------------------------|
| Crystal Valley Fire Station #152                           | Bison Park Parking Lot            |
| 4 <sup>th</sup> & Perry Parking Lot                        | East Plum Creek Trail Parking Lot |
| Seventy Street Parking Lot (Flyover)                       | Wrangler Park Parking Lot         |
| Castle Rock Water Headquarters (Front Lot & Yard Pavement) |                                   |

**2024 BMP**

Bridge maintenance for Plum Creek Parkway over Sellar’s Gulch was approved by Public Works Commission on May 6 and by Town Council May 21. Staff will award the project to Critical Pipeline Repair. Project consists of lining culvert pipes, and is expected to begin in September. Location of this bridge is indicated in the map below:



# Transportation Planning & Traffic Engineering Division

**Taxi Voucher Program**

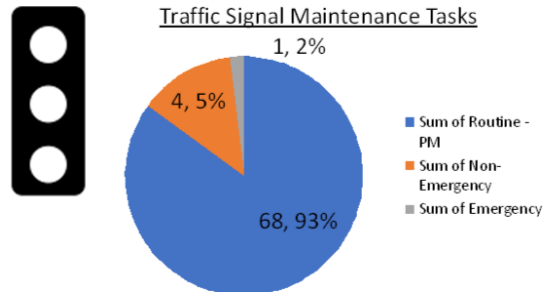
For the month of May, the Taxi Voucher Program funded 141 rides; which is a 1% decrease from last year’s May total of 142, and a 5% decrease from last month’s total rides (151). Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do

not have access to a vehicle. In May, 23 individuals used the Taxi service. For this month, 79% of the rides were for work, 6% for shopping trips, and 15% for medical appointments. Sixty-nine rides were provided for people without access to a vehicle, 43 rides to seniors, and 29 rides to disabled riders.

The Castle Rock Senior Center provided a total of 1098 rides in May.

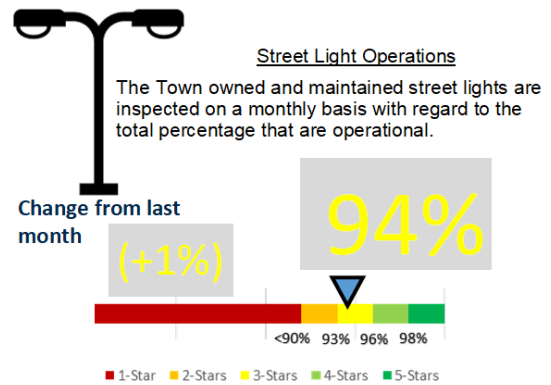
**Traffic Engineering and Operations**

**Traffic Signal Operations and Maintenance**

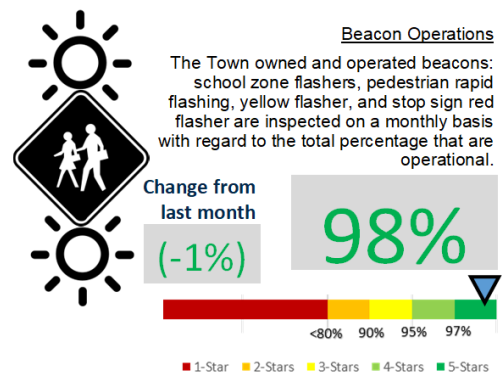


- Most frequently visited signal Meadows Pkwy/Coachline Rd

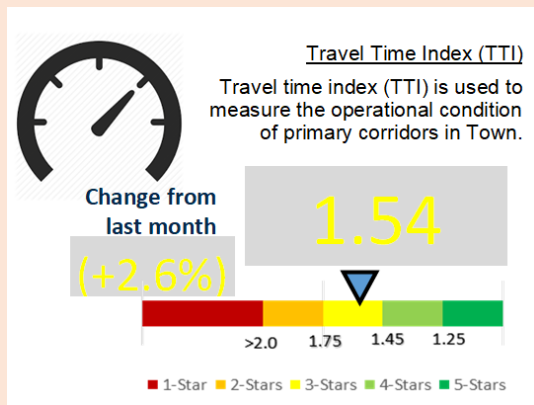
**Street Light Operations**



**Beacon**



## Operations



## Street Signs, Beacons and Pavement Marking Maintenance

For the month of May, the team completed 434 tasks. Of these tasks, 184 of them were sign work activities related to fabrication, installation, repair, replacement, inspection and investigation. One-hundred eighty-nine were marking work tasks related to fabrication, installation, repair, replacement, inspection and investigation. We had four beacon related tasks, including windshield inspections, and repairs. Other tasks included 46 small projects, two Locates, four liquor license postings, and the team supported five special events. The Town's long-line contractor began their annual maintenance tasks, and 8% of white long lines, and 15% of yellow long lines are complete.

## 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 residential collector roadways. Two new inquiries were received in May – Cantril Street and Silverlace Drive. Residents for both streets were sent the policy document and the support petition. Town staff is currently waiting for the residents to return the petitions before the next step can occur. The point of contact for Morningbird Lane is trying to acquire one more signature before the speed study can be ordered. Installation of the traffic calming plan on N. Meadows Drive has been completed.

### DRCOG Transportation Improvement Program (TIP) & Federal Grant Applications:

Staff is working on a new federal grant application to acquire funds to conduct an update to the Town's Active Transportation Plan. The Town will be required to provide a \$50,000 (20%) local match. Applications are due June 17.

### Transportation Master Plan (TMP) Traffic Projection Update:

Felsburg, Holt, and Ullevig (FHU) has shared the revised street volume and capacity analysis. The analysis is showing few differ-

ences from the existing street analysis in the Transportation Master Plan (TMP). The differences shown at this point are: higher traffic volumes on Crowfoot Valley Road and Blackfeather Trail, and lower volumes on Wolfensberger Road. There are also small sections of streets that need to be widened beyond the current TMP, such as Plum Creek Parkway at the I-25 interchange. The intersection analysis shows that all eight intersections in the study will need improvements to achieve acceptable LOS when the Town is fully built out.

### Federal Transit Administration (FTA) – Small Urbanized Area (UZA) Designation:

Town staff received the go ahead from Town Council to conduct the UZA direct recipient study. Both the County and Castle Pines staff have agreed to partner on the study and use the Town's on call consultant list. Town staff will draft the request for proposal and the County will draft the IGAs. The study is expected to take between 8-10 months to complete.

### Front Range Passenger Rail (FRPR):

Town staff has been attending several meetings with the FRPR team present. Currently, the Castle Rock area is identified for a station. Additional discussion is required with the FRPR staff and the community to determine if a station is supported. If the Town supports a station, further coordination and planning will be required to determine the future location.

### Castle Rock Mobility Hub:

CDOT has selected the RS&H consulting firm to conduct the station evaluation and design of the mobility hub. Town staff has invited CDOT and their consultant to attend a Council meeting to discuss the mobility hub for Castle Rock. CDOT informed the Town they will contact us once they have the contract signed with RS&H.

# Fleet Services

As you drive around Castle Rock and see the different departments providing first-class service throughout the community, you will notice how they rely on their Town vehicles. The Fleet Division takes pride in knowing that those vehicles are reliable and safe to operate and that they are providing a service for our community and our residents. Our services support the Police and Fire Departments, Public Works, Parks and Recreation and Castle Rock Water. We also support the important functions of Development Services, Engineering, Traffic, Signs and Markings, the Recreation and Activity Center and Town Hall. Below is a snap shot of the Fleet Division activities this past month.

The Fleet Division work order activity remained steady and consistent for May with our technicians completing 90 work orders. Our repairs remain mixed between scheduled and unscheduled



with most repairs being made during preventative maintenance services. Our heavy technician has been working to repair plow trucks and dumps from the winter months. We are hoping to hire our other vacant heavy technician soon to get some help with this asset class. The light duty and automobile side has been very busy performing routine maintenance for all divisions in the town. There has been some need to have our partner vendors perform some warranty repairs. Our fleet availability was 99% in May. Thank you to the Fleet staff that have performed outstanding work this month.

Our in-house upfitting program to build police vehicles and work trucks for other departments continues to grow and has been very successful. Two new police cars were completed and placed in service during May. The Town is in a unique situation to have skilled staff that can perform this type of work and put new vehicles in service for public safety. Other municipalities all throughout Colorado are experiencing long scheduling delays to build their police vehicles and our long-term partner vendor in Golden is booked solid through August of 2025. Contracts to purchase emergency vehicle equipment are mostly complete with most equipment scheduled to arrive sometime in July. The procurement staff and Installer has done a tremendous job making this program successful.

Seven new police cars and three new work trucks arrived this month and are being prepared to be put in service. Our focus will be placed on building four new police vehicles for the various School Resource Officer positions that are starting soon. Various other types of vehicles and equipment are scheduled to arrive in June and July. Sourcing and contract preparations are underway to replace several large pieces of equipment in August or September. The Fleet Manager is also preparing to auction replaced assets in the next month or two.

## Street Operations & Maintenance Division

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

- \*Street Sweeping
- \*Mastic Repair
- \*Training
- \*Asphalt Maintenance
- \*Crack Seal

### Street Sweeping

The Streets Division spent 490 hours sweeping Town roadways in support of two programs: the Town wide Spring Sweep and the bi-monthly Downtown Business Sweep. The crews cleaned just over 436 lane miles of roadway and picked up 182.4 cubic yards of material off of the streets.

### Asphalt Maintenance

The Streets Division undertook numerous asphalt repair operations ranging from pothole repair to emergency sinkhole mitigation. In all, the team used 51 tons of hot mix asphalt, and 1,620 lbs. of cold mix asphalt over the course of 660 work hours.

### Mastic Repair

The team worked to mitigate severe cracks along Loop Road utilizing mastic. This material is a structural repair consisting of rubberized asphalt product reinforced with aggregate, and is able to fill and smooth relatively large roadway imperfections for a variety of causes. On Loop Road, 32 cracks were addressed to improve ride quality and maintain the integrity of the road until the PMP program can move in to carry out more extensive repairs. In addition to Loop Road, an opportunity to address the same issue on South Ridge Rd. presented itself and the team took full advantage of the time. The team spent a total of 260 hours significantly improving the ride quality of these areas.

### Crack Seal Maintenance

The Crack Seal crew continues to make strides in the south PMP region, applying crack seal to the roadways over 26.89 lane miles. This operation seeks to prevent water infiltration and erosion of the subgrade by sealing the edges and bottom of the crack with a rubberized asphalt.

### Training

The team dedicated 215 hours during the month to various LTAP courses designed to enhance the knowledge base and practical skill set of the maintenance team. Continuous investment in personnel is seen as a great tool to enhance the capabilities, morale, and retention of employees.

### Looking ahead

June will kick off with the construction of a raised crosswalk in front of the Mesa Middle School in Founders. This will be the permanent fixture needed to address a safety concern in the area. The Division also has planned road verge maintenance operations such as mowing and trash pickup. The Crack Seal operations and Asphalt repairs are planned to continue, in addition to the Downtown and Business sweeps. The Town wide Spring Sweep is expected to conclude in early June.