



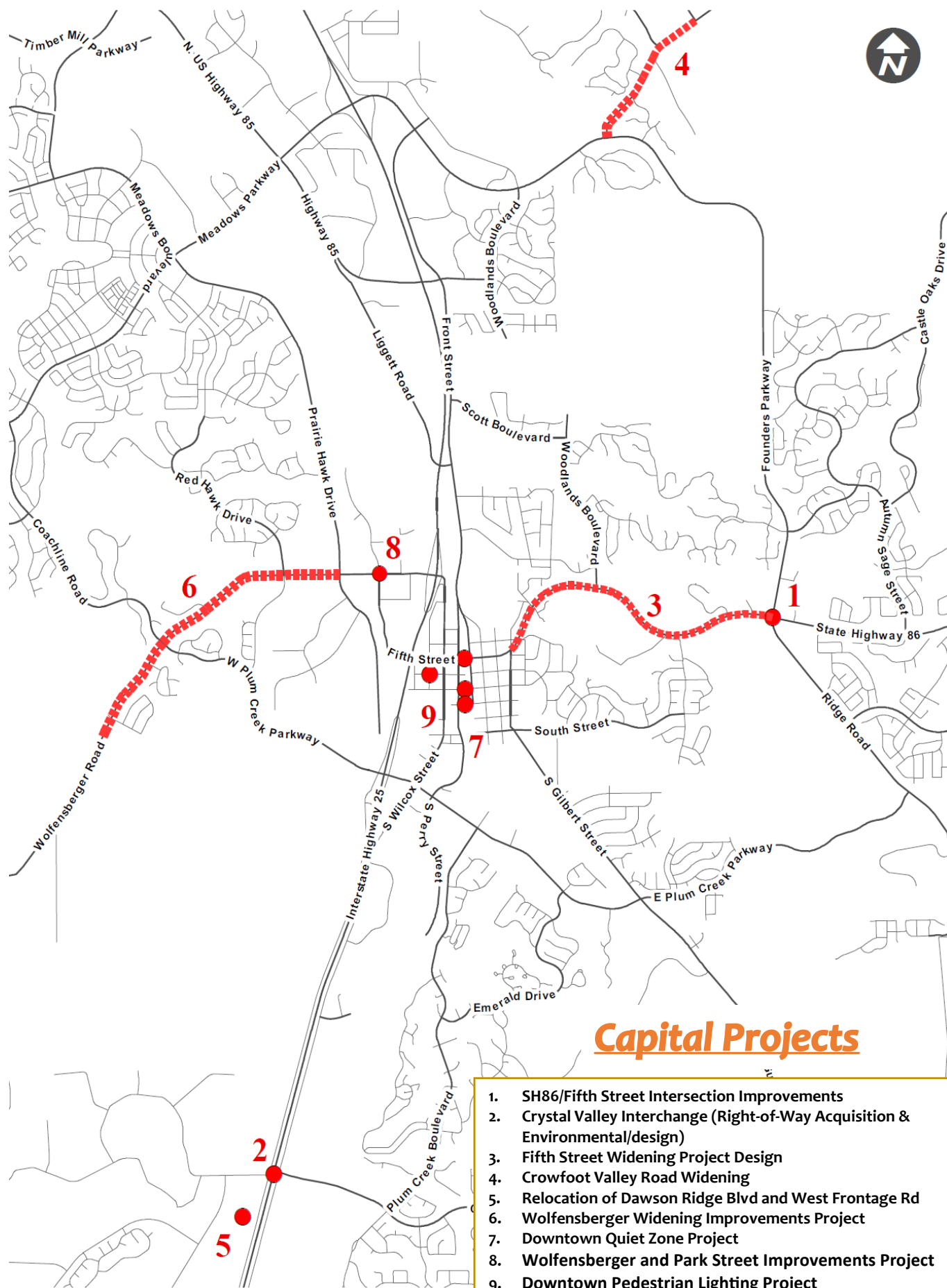
# Monthly Report

April 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 wall is installed and fascia will be placed in the month of May
- MSE wall is under construction and will be completed by end of May
- Aloha entrance has been reconstructed and reopened. Permanent paving will take place in May
- 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 achieve acquisition of remaining right-of-way, complete design, and set aside future project funding allowing potential funding partnerships to assist with advancing construction.

**Phase: Construction—Package 1**

- Package 1 is under construction and progressing on schedule
- Traffic shift on Crystal Valley Parkway has been in place for a few weeks with the WB lanes being converted to two way traffic and closing the EB lanes
- Ongoing communications with property owners and stakeholders
- Structures are being installed on North side of Crystal Valley Parkway
- Change order No. 1 was executed for completion date extension

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

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

- The second CAP submittal was accepted at a 1.4% variorus. Construction contract has been drafted and scheduled to be presented to the Public Works Commission on May 6, and Town Council on May 21.
- Maintenance IGA has been executed.
- BNSF construction and maintenance was finalized and scheduled to be presented to Public Works Commission

on May 6 and Town Council on May 7.

**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 full build-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**

- Two offers for property accepted
- Completed three property appraisals related to property acquisitions
- Held meetings with a number of land owners along the project corridor to discuss property acquisitions

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

**Design Completion:** Spring 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**

- Submitted 90% design for stakeholder review/approval
- Received portions of Sapphire Pointe intersection signal materials
- Coordinated with major utility companies regarding relocations
- Continued development of CORE Electric designs

**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 being finalized
- Management agreement with Dawson Trails Metro District for Construction Management was presented to Public Works Commission on April 1, and is scheduled for Town Council on May 21.
- Anticipate the project will be bid through the Dawson Trails Metro District in early June.

**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 full buildout 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 is to 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 or 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:

- Planning and coordination with Union Pacific for spring final mobilization in June to complete remaining construction work

**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**

- Pre-Construction meeting was held on 4/29
- TechCon to start construction on 5/13
- Submittals are being reviewed and approved as they come in
- NTP form will be sent to TechCon for execution
- Outreach for project is being communicated through Community Relations

**Budget:** \$972,000

**\*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 destinations Downtown by installing new pedestrian light fixtures to increase lighting levels.

- Consultant (Olsson) has updated and sent final plans per CDOT's comments. CDOT sent 1180 packet to state Resident Engineer for project approval; once approved, project will be submitted to FHWA for approval. FHWA approval and concurrence precedes Town's ability to advertise for bids. Project must be bid by July and 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 a part of the CDOT managed, adaptive signal system project that has implemented adaptive signal timing on Founders Parkway, and 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. The Town is working through a punch list of outstanding items with Kimley Horn before completion – the lone outstanding item is troubleshooting ATSPM data collection at one intersection. Coordination with the vendor of the controller is on-going.
- The Town is awaiting a draft IGA from CDOT for Connected Vehicle hardware to proceed with project. Once executed this two-year project will kickoff 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 will be routed for approval for construction of ITS project on Meadows Blvd.

**Budget:** \$194,000

**Targeted Construction Completion:** Fall 2024

**Illuminated Street Name Signs** – All the 2022 and 2023 illuminated street name signs and hardware have been received by the Town. Staff is coordinating installation in partnership with on-call contractor. 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

**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. The hardware procurement agreement is being routed for approval.

**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 continuing the process of analyzing data as part of the total system analysis. Subconsultant completed Phase 1 of the communication plan.
- Stakeholder meeting held in early 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 some areas will see reconstruction this year.

### Sidewalk, Curb and Gutter Improvements

Sidewalk, curb and gutter repairs kicked off April 8 with saw cutting operations. Residents within the West PMP area were notified via letters as well as the use of variable message boards, that repair and maintenance work was to begin. Local businesses on Third St. and Jerry St. were also notified and will see improvements.

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 began construction April 8, with concrete and asphalt repairs in the Vista Heights neighborhood. The crews spent a couple of weeks here

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 operation beginning in May.



### Full Depth Reclamation Project

Asphalt Overlay Project began construction April 8, with concrete and asphalt repairs in the Vista Heights neighborhood. The crews spent a couple of weeks here 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 operation beginning in May.

### 2024 Facilities Parking Lot Improvements Program

The 2024 Town Facilities Parking Lot Improvement Program will focus its efforts on seven (7) parking lots. The contract was presented to the Public Works Commission on March 4, and Town Council on March 5.

The following Town Facilities that 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

The structure identified for necessary repairs in 2024, are the culverts for Plum Creek Parkway over Sellar's Gulch. Bids were opened April 24, and received three (3) competitive bids from contractors. Staff is working to verify bids and award the project. Project is expected to begin in September.

Location of this bridge is indicated in the map below:



# Development Division

## Review and Permitting

**Development Review** - All 34 reviews were completed. No late reviews this month.

**Permitting & Inspection** – 12 right-of-way permits were issued.

# Transportation Planning & Traffic Engineering Division

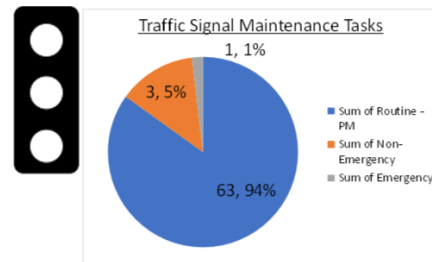
## Taxi Voucher Program

For the month of April, the Taxi Voucher Program funded 151 rides; which is a 3% increase from last year's April total of 145, and a 3% decrease to last month's total rides (146). 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 April, 23 individuals used the Taxi service. Of those individuals, 89% of the rides were for work, 8% for shopping trips, and 3% for medical appointments. Seventy-three rides were provided for people without access to a vehicle, 31 rides to seniors, and 47 rides to disabled riders.

The Castle Rock Senior Center provided a total of 1071 rides in April.

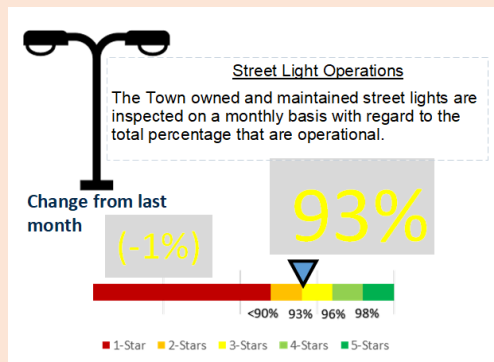
## Traffic Engineering and Operations

### Traffic Signal Operations and Maintenance

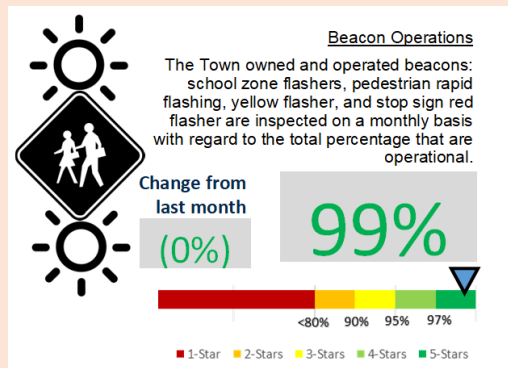


- Most frequently visited signal Meadows Blvd/Fell Mist Way

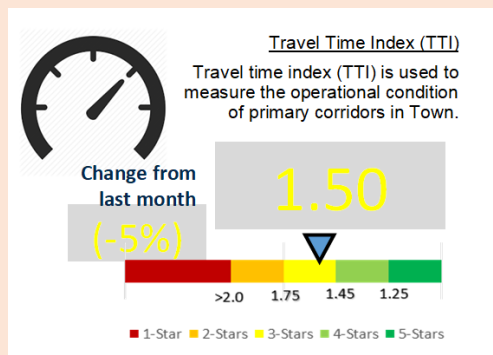
## Street Light Operations



## Beacon



## Operations



## Street Signs, Beacons and Pavement Marking Maintenance

For the month of April, the team completed 578 tasks. Of these tasks, 245 of them were sign work activities related to fabrication, installation, repair, replacement, inspection and investigation. We had 333 beacon related tasks, including windshield inspections, and repairs. Work continues on durable marking replacement and 2024 PMP west sign repairs are complete. The Town's long-line contractor is preparing to begin annual maintenance tasks next month.

## 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 April, Treetop/Rising Moon and Morningbird Lane. Both streets are located in the Meadows neighborhood. Treetop/Rising Moon is requesting to modify the current mini circles in the streets, while Morningbird Lane is requesting to follow the traditional NTCP process. The Point of Contact (POC) has been notified for Morningbird Lane and is currently gathering signatures for the support petition. The POC(s) for Treetop/Rising Moon will be informed of the process in May. The N. Meadows Drive traffic calming plan began installation on April 29. Construction should be completed in early May. The POC for a previous inquiry for Villageview Lane will also be informed that the street qualifies for the NTCP and will be asked if they want to proceed with the program.

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

Felsburg, Holt, and Ullevig (FHU) has shared the revised intersection analysis for eight intersections in Town. The intersections currently operate within the Town's standard Level of Service (LOS), except for the Blackfeather Trail / Front Street intersection which operates at a LOS F in the afternoon. However, in 2050 with full buildout of the Town, all intersections will need improvements. Some intersections can be improved by signal timing and roadway striping changes, but other intersections will need significant construction to achieve acceptable LOS. This is especially true for both of the I-25/Plum Creek Parkway ramp intersections. The next step in the project will be to fine tune the intersection analysis and the recommended roadway improvements.

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

Town staff will be discussing this issue with Town Council on May 7. Staff is seeking direction from Council on conducting a joint study with Douglas County and Castle Pines to identify impacts to becoming a direct recipient of FTA funds. If Council is supportive, Town staff will work with the County and Castle Pines to issue the RFP to several on-call transit consultants. The Castle Rock small UZA final allocation has been determined by FTA. The amount for FY24 is approximately \$1.8 million. Funds can be spent on capital transit projects, such as buying vehicles, funding transit service, or conducting transit studies. Funding for each FY will be available for 5 years. Funding for FY 2024 expires in 2029.

### Front Range Passenger Rail (FRPR):

Town staff has been attending several meeting 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 is currently reviewing consultant proposals to conduct the new study and design the preferred location. Consultant interviews will occur in May and CDOT will select a team shortly after. The Town and County will be key stakeholders in the new project.

# 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.

**KPI's**

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

- **Outcome:** Fleet availability was 97%. Our technicians are doing a great job keeping our fleet available for our customers.

**Objective/Benchmark:** Complete at least 75% of our work orders within 48-hours of coming to shop.

- **Outcome:** Fleet team completed 63% of the work orders within 48-hours of opening a repair requests.

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

- **Outcome:** Technician productivity was 65%.

**Productivity**

April was a busy month for the Fleet Division. We completed 135 work orders. There were 234 repair jobs on those work orders of which 55 were a combination of vendor warranty repairs, vendor repairs, accident claims and capitalization work. Fleet completed 67 scheduled preventative maintenance jobs and 37 additional jobs for faults found during the scheduled maintenance.

Identifying these faults early is key to maintaining fleet availability for the departments. Productivity suffered somewhat this month due to time off and training requirements for the division. As we move into the spring time, we could see a slower trend for maintenance needs. We will utilize this time wisely to catch up on other areas such as emissions and opacity testing and vehicle upfitting.

New assets are arriving much quicker this year. New vehicle orders are being filled and delivered by the manufactures already. Most orders were not anticipated to arrive until November. We are working very hard to order capital equipment for the new police vehicles so we can schedule them to be built by summer. Fleet has completed nine new police vehicle upfittings since December 2023, with four more to complete. Fleet has another 16 new police vehicles which are scheduled to arrive this year and work has begun to purchase capital equipment for those various upfits. Fleet completed opacity /emissions training and DOT inspector training for the staff in accordance with the Federal Motor Carrier Safety Regulations. This training is vital in inspecting our vehicles weighing more than 10,000 pounds to ensure they are safe to travel the roads. Acquisition planning and budgeting has begun for new vehicle purchases/replacement in 2025.

# Street Operations & Maintenance Division

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

- |                  |                        |
|------------------|------------------------|
| *Crack Seal      | *Equipment Maintenance |
| *Asphalt Repair  | *Road Shoulder Repair  |
| *Street Sweeping |                        |

**Crack Seal Maintenance**

Streets Division crews spent 544 hours on crack seal maintenance operations in April utilizing 14,175 pounds of crack seal material. The crews were able to complete operations on just over 19 miles of the South PMP (Pavement Maintenance Program) area. These operations are intended to seal cracks from the penetration of water into the subgrade.

**Asphalt repair**

Streets Division personnel dedicated 1634 hours to various asphalt patch repair and pot hole repair task in Town utilizing 93.62 tons of hot mix asphalt and 2,250 pounds of cold mix asphalt to execute these repairs. This included the construction of three speed cushions on North Meadows Drive.



### **Street Sweeping**

The crews spent 322 hours cleaning up Town roadways covering just over 200 lane miles towards the town wide Spring Sweep Program, and removing 411.6 cubic yards of material from Town roadways with 35 tons of material taken to the landfill during these operations.

### **Equipment Maintenance**

The crews committed 190 hours to the enduring task of maintaining equipment. This time of year, more emphasis is placed on maintaining sweepers, preparing mowers and small tools for road shoulder maintenance as well as ensuring the crack seal machine is ready and running for the maintenance operations this time of year.

### **Road Shoulder Maintenance**

Road shoulder maintenance operations also continued during April. These primarily took the form of trash pickup, graffiti removal, and repair of the shoulder itself. The crews removed 12 bags of trash, 9 cubic yards of tree limbs, and used 6.5 tons of road base to repair washouts and other damage to the road shoulder.

### **Looking ahead**

May begins the sweeping and mowing season. Asphalt repair and pothole repair operations continue as well. Special operations such as assisting Parks with an auxiliary parking area to support concerts and other activities are also planned.