



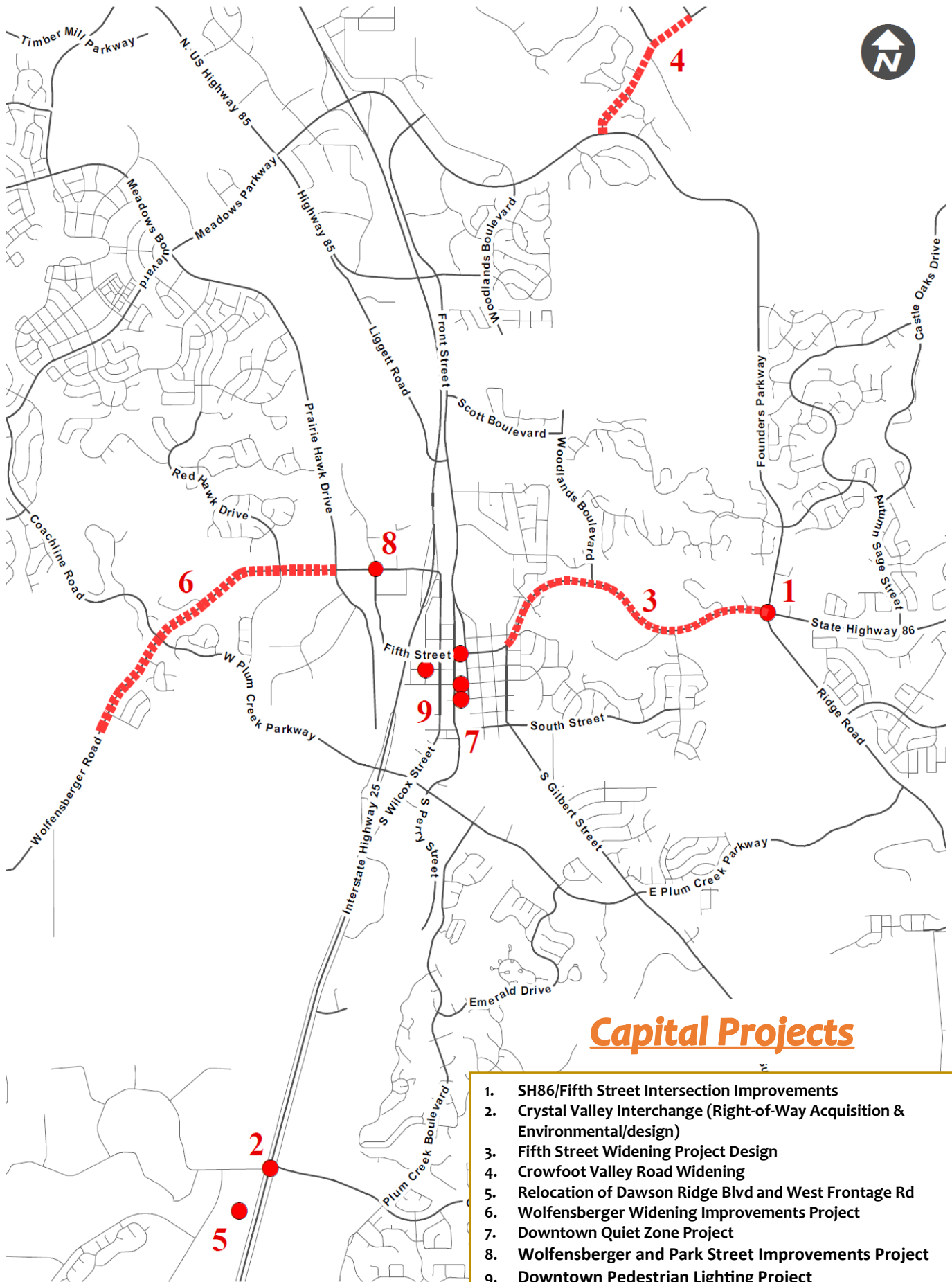
# Monthly Report

March 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 northwest and northeast quadrants with curb and gutter, subgrade prep and patching taking place
- Soil nail wall is in and preparations for cast in place fascia are underway
- Excavation for MSE wall on northside of Fifth Street. Leveling pad to be poured first week of March
- Aloha entrance has been reconstructed and reopened. Permanent paving will take place in May
- Storm crossing across Fifth Street scheduled for first week in April
- Median removals for traffic detour on HWY 86 have been completed. Median work to commence once design team provides updated modeling and profiles

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

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

### 2. Crystal Valley Interchange – Pre-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 was approved and the Notice to Proceed (NTP) was executed with construction start date of 3/1/2024
- Patching scheduled for first week of April for medians on Crystal Valley Parkway that were removed. Patching will allow for traffic bypass for first phases of project.
- Plum Creek Trail was closed and Parks has not received any comments thus far. Kraemer staff continues to fill the hand out boxes with detour maps at trail closure locations.
- Outreach for public regarding project will be released week of 4/1/24
- Change order No. 1 for extending project completion date is being processed.

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

### **Phase: Design—Package 2**

- Construction contractor and ICE contractor submitted initial Construction Agreed Price (CAP) on March 8 with a difference of 7.8%. The second CAP was submitted March 13 with a difference of 2.8%. After discussion and clarifications, a redrop of the second CAP was submitted to the Town on March 15 with a difference of 1.4%. This is within the acceptable variance for CAP submittal.
- Anticipating approaching Public Works Commission on the May 6 meeting, and Town Council during May 7 with a construction contract for Package 2.
- Maintenance IGA is being routed for approval by CDOT.
- BNSF construction and maintenance agreement is being finalized and scheduled to be presented to Town Council in May.

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

- Finalized offers for 3 property owners (appraisals complete)
- Completed 4 property appraisals related to property acquisitions
- Held meetings with a number of land owners along the project corridor to discuss property acquisitions
- Identified phasing solution, and completed developing design scope of work to break project into 2 phases

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

**Design Completion:** Spring 2024

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

**\*Targeted Construction Completion:** 2027

### 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 forecast-

ed 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**

- Progressed design from 60% to 90% completion
- Received portions of Sapphire Pointe intersection signal materials
- Identified project property interests (acquisition needs)
- Town Council approved second reading regarding general authorization for property acquisitions (eminent domain ordinance)
- 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
- Town is making final comments on the management agreement with Dawson Trails Metro District for the construction of Dawson Trails Blvd.
- Anticipate approaching the Public Works Commission on April 1 and Town Council on April 2 requesting approval of the management agreement.

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

**Design Completion:** Spring 2024

**\*Targeted Construction Completion:** Summer of 2025 in conjunction with Crystal Valley Interchange

**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**

- Right of Way acquisition will commence in 2024.
- Acquisition of permanent right of way only
- Easements will be acquired once project design is resumed
- Task order being processed for acquisition services with Western States
- Task order has been approved for survey services with Bohannon Huston Inc. Notice to proceed has been issued, staking in the right of way has started.
- Service agreement have been executed with Kilty and Company for land appraisal services. Notice to proceed will be issued following a precon.

**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:

- Constructed a portion of new gate systems for Second and Third Street crossings
- 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**

- Construction Contract with TechCON will be presented to Public Work Commission on March 4
- Resolution for construction contract with TechCON will be presented to Town Council on March 19
- Construction is anticipated to start in April/May timeframe

**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.

- Final plans, specifications, and cost estimate received from consultant and sent to CDOT. CDOT submitted comment to include survey tabulations, which will be addressed by consultant before sending to FHWA.

**Budget:** \$600,000

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

*\*These schedules are subject to change based on adjusted revenue fore-casts 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. CDOT has had staff turnover that has paused this project. The Kadence system is continuing to be monitored and inquiries are sent to CDOT for adjustments.
- Phase II of the Town's ATSPM project includes software development and signal timing. ATSPM Dashboard training was completed with the consultant and CDOT staff. Final draft of the Traffic Signal Management Plan has been accepted by the Town. Additionally, the final acceptance plan, ATSPM configuration plan, and Traction Metrics documentation has been reviewed and accepted by the Town. The tasks outlined in the final acceptance plan determine final project acceptance and project closeout. The Town is working through a punch-list of outstanding items with Kimley Horn before project closeout.
- 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. The Town is set to meet with CDOT to discuss and finalize the IGA requirements. The Town's project scope focuses on using connected vehicle technology to mes-

sage intersection safety and driver awareness at high crash locations. The current project timeline is April 1, 2024 to April 1, 2026.

**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.

- Quotes have been received for the Limelight ITS system. Once final design details are completed, a PO will be requested for the queue warning system construction

**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

**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. Once accepted by CDOT, the plans will be submitted for FHWA approval. Anticipated advertisement in May 2024 with summer construction. Project must be bid by July and completed by December.

**Budget:** \$600,000

**Targeted Construction Completion:** End of year 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 planned for April 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

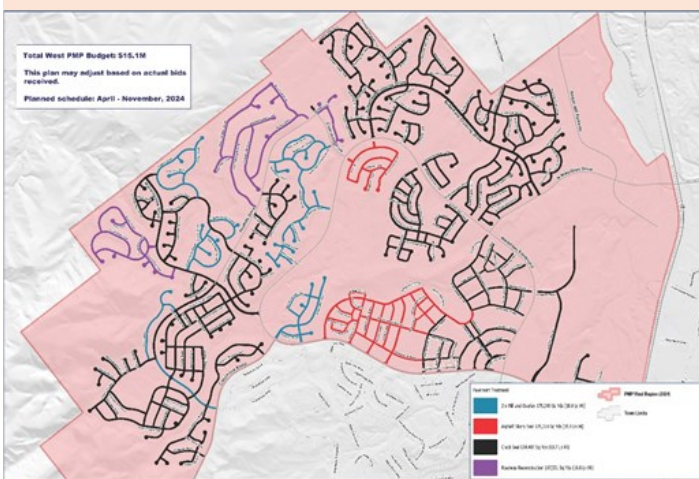
The 2024 PMP will focus its efforts in the West PMP area. All contracts were presented to the Public Works Commission on March 4, and Town Council on March 5.

The following 2024 PMP Contracts were approved:

- Asphalt Overlay
- Full Depth Reclamation
- Curb, Gutter and Sidewalk Replacement
- Slurry Seal

A Public Outreach Open House was held March 25, at the Sturm Collaboration Campus, 4500 Limelight Ave. A total of 15 residents attended. Staff conducted the open house to address each PMP project and answer any questions residents had.

The PMP map (shown below) indicates the proposed scheduled treatments for street within the West PMP area. This map may change based on budget, maintenance treatments and resources available.



## Condition Rating

Condition rating for the 2025 Central area was completed March 4. Staff completed all local streets as well as primary streets for the 2025 PMP maintenance season.

## 2024 Facilities Parking Lot Improvements Program

The 2024 Town Facilities Parking Lot Improvement Program will focus its efforts to 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.

Staff is working with a consultant to complete documents and plans needed for the project bid packet to be advertised in April 2024.

Location of this bridge is indicated in the map below:



# Development Division

## Review and Permitting

**Development Review** - All 38 reviews were completed. No late reviews this month.

**Permitting & Inspection** – 10 right-of-way permits were issued.

# Transportation Planning & Traffic Engineering Division

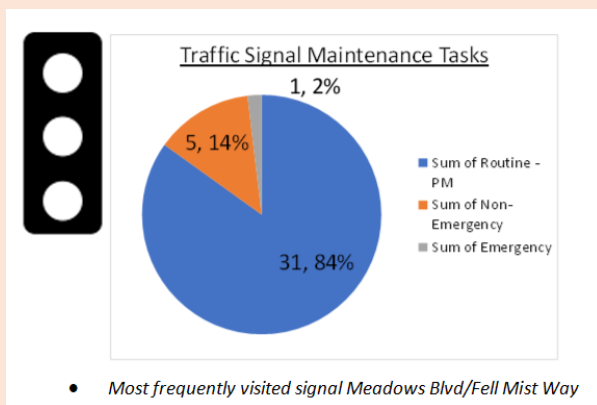
## Taxi Voucher Program

For the month of March, the Taxi Voucher Program funded 146 rides; which is an 8% decrease to last year's March total of 159, and a 7% decrease to last month's total rides (157). 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 March, 24 individuals used the Taxi service. Of those individuals, 85% of the rides were for work, 10% for shopping trips, and 5% for medical appointments. Sixty-nine rides were provided for people without access to a vehicle, 34 rides to seniors, and 43 rides to disabled riders.

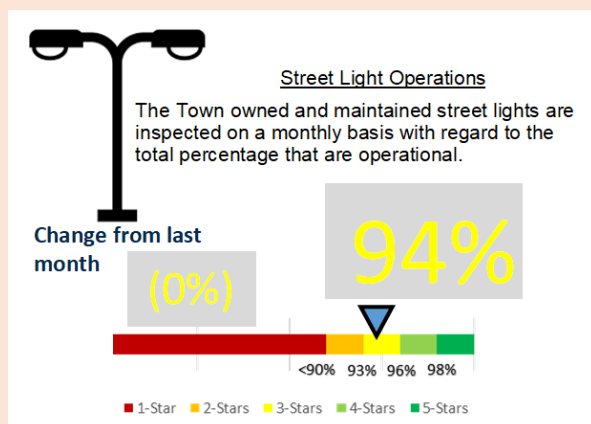
The Castle Rock Senior Center provided a total of 912 rides in March.

## Traffic Engineering and Operations

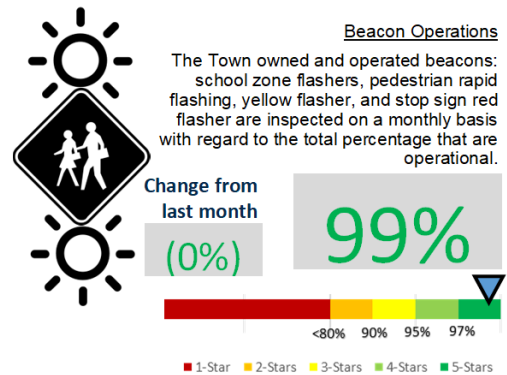
### Traffic Signal Operations and Maintenance



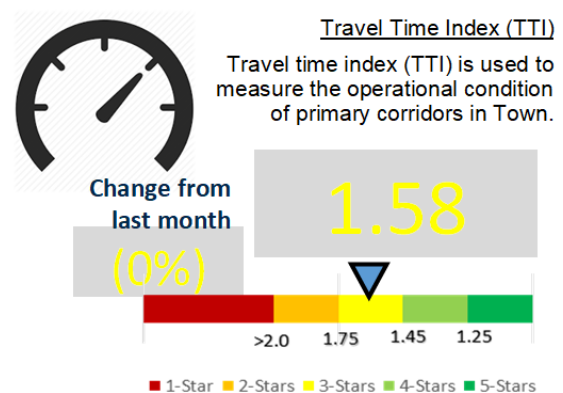
### Street Light Operations



### Beacon



### Operations



### Street Signs and Pavement Marking Maintenance

For the month of March, the team completed 650 tasks. Of these tasks, 266 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. We had 340 beacon related tasks, including windshield inspections, and repairs. Other tasks included 37 misc. projects, two traffic control, and five special event tasks. We also provided support to several snow storm events in March. Half of our staff also attended training sessions with IMSA and Colorado Contractors Association for Work Zone training for a full week.

### 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. No new inquiries were received in March. Town staff received new speed data for Villageview Lane. The 85<sup>th</sup> percentile speed was measured at 32.9 mph and the average daily volume was slightly above 1000 vehicles. Accordingly, the street qualifies for the NTCP. The resident will be notified and asked if they would like to proceed with the program. Town staff has a planned walk through scheduled in April to locate the speed cushions for N. Meadows Drive. The project is still scheduled to be constructed in May or June.



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

Felsburg, Holt, and Ullevig (FHU) has revised the DRCOG transportation model and post processing of the data. Town staff met with FHU to discuss the new data along with the initial intersection analysis. The next step in the project will be to address staff comments on the intersection analysis and develop recommendations for the street network.

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

Town staff met with Douglas County and Castle Pines to discuss being a direct recipient of the FTA UZA funds. A study to determine the impacts of being a direct recipient as well as the governance and structure of the UZA was discussed. All three agencies agreed that a study to examine these issues is the logical next step. The Town was also informed that roughly \$1.7 million dollars will be available for the UZA in Fiscal Year (FY) 2024. 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. Therefore, funding for FY 2024 expires in 2029.

## 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:** The Fleet team completed 64% of the work orders within 48-hours of opening repair requests or service requests. Winter storms and major mechanical repairs and parts delays have impacted our ability to meet this goal.

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

- **Outcome:** Technician productivity was 72%. The technicians have been working non stop to get repairs done.

### Productivity

March was a very busy month in Fleet. We completed 151 work orders that had 256 assigned jobs. We added 4 new vehicles to the fleet, including another patrol vehicle. The entire crew has done a great job of keeping our operations running. Work continued at a steady pace with no signs of work slowly down soon.

We will continue to work on repairing snow plows for the next storm and perform our preventative maintenance work on the fleet. We are looking to replace one of our heavy technicians and hope to get that done in April or May. We continue to make progress building new police vehicles. We put one patrol and one detective vehicle in service in April. Four more vehicles are scheduled to be in service by July. The 2024 new vehicles and replacements are going very well. We have eight additional patrol vehicles that could arrive sometime late April early May. One of these includes a new car for the Compass Academy SRO position that was approved by council in the agreement with the town in April. These are just a few of the vehicles that we anticipate receiving in 2024. The backorder of vehicles seems to be clearing out nicely with most of our vendors. Parks put a new trail sweeper in service and they received there new Chevrolet Colorado for there new position. Purchase agreements for several Streets vehicles are in place with anticipated arrivals by summer. More work is needed to complete other vehicle contracts and purchase orders.

## Street Operations & Maintenance Division

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

- |                        |                       |
|------------------------|-----------------------|
| *Snow and Ice Control  | *Street Sweeping      |
| *Equipment Maintenance | *Road Shoulder Repair |
| *Asphalt Repair        |                       |

### Snow and Ice Control

March brought three snow events to Castle Rock. The official total for all three is 30.7 inches. The large snow storm of March 13 was officially measured at 24.9 inches but some areas were close to 30 inches. The team responded to these storms with a total of 1213 hours of plowing covering 10482 miles driven. The crew used only 151.5 tons of Ice slicer for these storms as the



conditions were much less icy than earlier in the year. The highlight of these snowstorms was the impressive LOS completion time for the big storm. The crew completed operations in just 16.5 hours after the snow stopped. For comparison, the big storm of March 13, 2021 took 41.5 hours to open up the Town and complete operations.

### **Equipment Maintenance**

The Streets Division Crews dedicated 498.5 hours to equipment maintenance operations in March. Washing trucks, replacing bits, lubricating parts, removing corrosion, minor repairs, etc. are all part of keeping the equipment needed running and available for use. These efforts are frequently in concert with the Fleet Department's efforts and often close coordination and cooperation is required to see the tasks done.

### **Asphalt Repair**

Potholes are synonymous with winter and Colorado's freeze thaw cycle does not show mercy to the pavements in Castle Rock. The crews worked hard to repair potholes between snowstorms as efficiently as possible. The Division spent 270 hours, 900 pounds of concrete mix, 4410 pounds of cold mix asphalt, and 64 tons of recycled asphalt millings to repair the equivalent of 354 potholes.

### **Street Sweeping**

Post storm sweeping is a vital part of ensuring the air quality in Castle Rock. The Town sweeps the drive lanes of the roadways salted during snow storms to minimize the potential for cars to grind the aggregate into airborne pollutants. The team spent 120 hours sweeping up 228 lane miles of roadways throughout Town, sweeping up 36.75 cubic yards of material off the roads.

### **Road Shoulder Maintenance**

The Division also worked to clean up and conduct maintenance of various road shoulder areas in Town. This primarily consisted of preemptive weed control and trash pick up. Pre-emergent weed control was carried out under guidance from the Parks Department in certain areas where it has been deemed appropriate. In addition to this, the team spent 146.5 hours removing 81 bags of trash from the Town roadways.

### **Looking ahead**

In April, snow is still a high possibility and the crew will continue to keep a weather eye to respond when needed. Crack Seal operations are planned to begin in the southern side of Town. Asphalt repair and the installation of raised speed control is also being planned.