



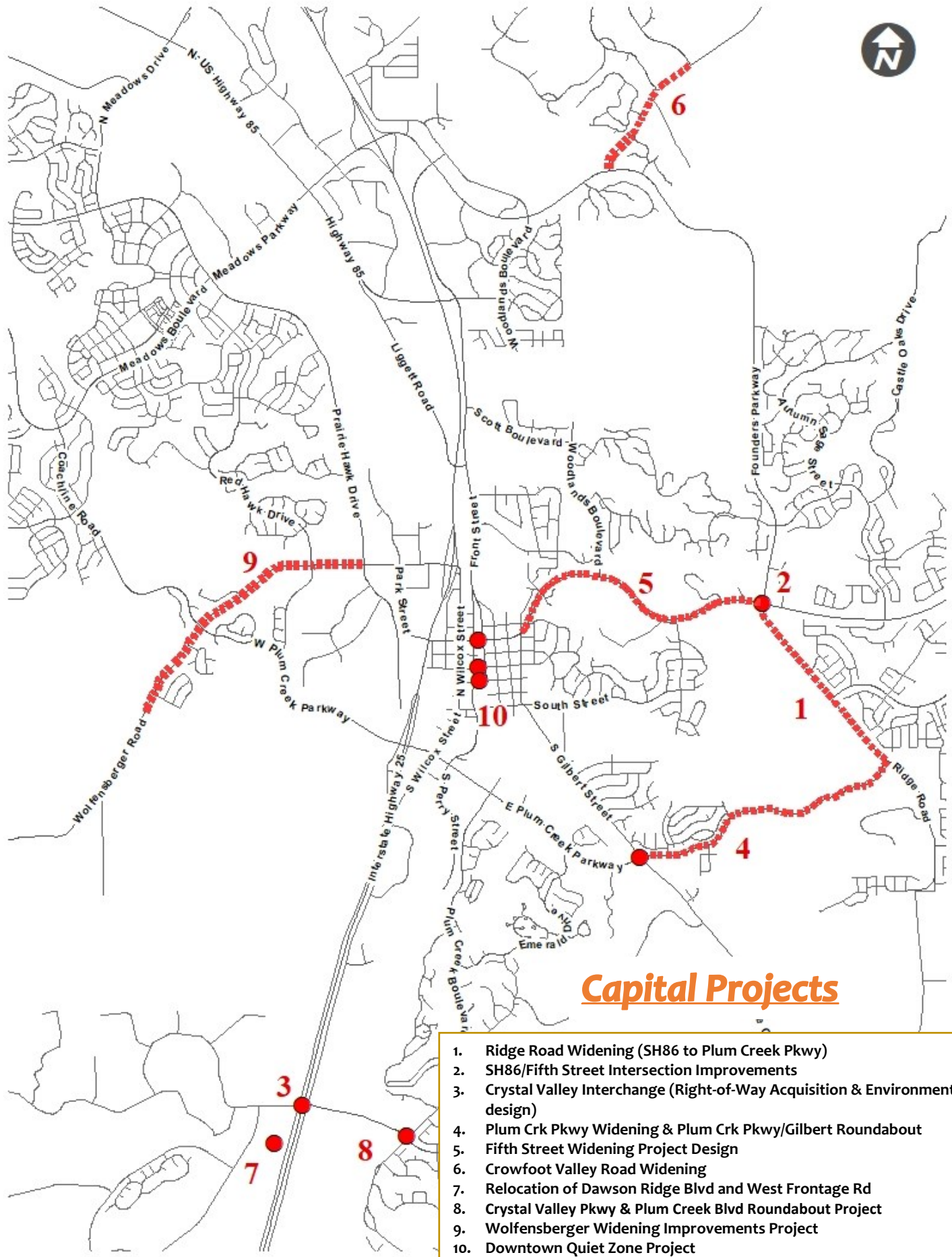
Monthly Report

December 2022

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

1. **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: Construction

- Continue to maintain temporary erosion control
- Continue the relocating of existing utilities
- Continued curb and gutter
- Asphalt patch back
- Project clean up
- Worked on placing project into winter shutdown

Budget: \$5,225,000

ROW Acquisition:

A valuation hearing for the Bertelsen property is scheduled for March 2023

Targeted Construction Completion: Spring 2023

2. **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:

- 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: Design— David Evans & Associates (DEA) is the design consultant for this project. The following is a summary of the activities performed this month:

- DEA working to provide updated electrical design
- DEA submitted final plans, specs, reports for in house review. Reviews will be completed by week of Dec 27; Final package to be delivered to CDOT week of Jan 9
- Awaiting lien release on Haddad property to complete ROW acquisitions
- All utility relocations have been completed, protect in place is all that remains for dry utilities
- Consultant for Construction Management Services was approved by Town Council, RockSol consulting will provide services
- Working on long lead item submittal for signal poles due to 9-month lead time

Budget: \$1,275,676, with DRCOG Grant Reimbursement

Targeted Construction Completion: Winter 2023-2024

3. **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: Right-of Way Acquisition

- West Side of I-25 – The Town will begin the Notice of Intent (NOI) process and make offer to the new owners of all remaining parcels to be acquired; Westside Investments has purchased all remaining parcels to be acquired from Douglas County Development Company and the MSP Corporation

- East Side of I-25 – NOI has been sent to the Hyperion Property owner; the Town has completed the full take appraisal of the Hyperion property; Hyperion property owner is electing to have an appraisal done; ownership of the Dawson Ridge Metro District parcel has been transferred to the Douglas County Development Company; Town is in the process of preparing a NOI and offer

Phase: Design— Interchange Access Request and Environmental Assessment Reevaluation, and Design

- Transportation demand managements letter to be sent to CDOT Director for signature/approval
- System Level Study was sent to CDOT for review
- Design firm continues working on 90% design
- Environmental/NEPA – EA Reevaluation was sent to CDOT for review along with all Tech memos
- Construction management services contract to be entered into in February
- Maintenance agreement with CDOT draft submitted for Town review – still pending drainage/water quality items. Town is developing comments.

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

Design Completion: Summer 2023

Targeted Construction Completion: Summer 2025

4. **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 1B: Plum Creek Pkwy Widening and Roundabouts Gilbert to Eaton):

Construction Budget: \$7,507,723

Completion: Complete

Plum Creek Parkway Widening Phase 2 – This project will implement the Transportation Master Plan’s identified improvements for this corridor. The addition of the remaining two lanes of the master planned four-lane roadway on Plum Creek Parkway between Eaton Street and Ridge Road. Not only will it include the addition of 2 lanes, but also bicycle

and pedestrian multi use lanes. It will also include roundabout modifications at Ridge Road.

Phase 2: Plum Creek Pkwy Widening (Eaton to Ridge): Construction – The following is a summary of design activities performed this month:

- Begin installation of the block retaining wall
- Continued earthwork for new roadway and sidewalk construction
- Continue the maintenance of erosion control
- Continued the installation of headwall for storm drain
- Completed the relocation of utilities
- Continued the placement of base course
- Continue Installation of conduit for street lighting
- Continued installation of curb and gutter for new east-bound lanes from Eaton roundabout to halfway up road
- Began asphalt placement
- Project clean up

Budget: \$7,530,000

Targeted Construction Completion: Fall 2023

5. **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 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

- Continue stakeholder engagement
- Completed CORE electric utility design
- Continue to develop project utility design
- Stakeholder and agency review of 90% deliverables started
- Portions of the environmental clearance obtained from CDOT
- Initiated ROW acquisition delineation

Budget: \$1,500,000

Design Completion: February 2023

Right-of-way acquisition: Winter 2022-2023

Targeted Construction Completion: Spring 2024-2025

6. **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—Town submitted IGA comments to Douglas County for review; Douglas County submitted conceptual design elements for the Town to review;

Town staff will approach Town Council on discussion and direction on design on 1/3/23

Budget: \$2,500,000 (Town contribution to construction funding; IGA to be executed with County)

ROW Acquisition: Summer 2023

Design Completion: Summer 2023

Targeted Construction Completion: Summer 2024

7. **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:

Final design plans, specs and estimate was received from CORE Consultants, Town is reviewing

Budget: \$299,000

Design Completion: Fall 2022

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

8. **Crystal Valley Pkwy & Plum Creek Blvd Roundabout Project** This intersection is a major arterial currently controlled by stop signs in two directions. As the traffic volumes increase and with ongoing residential development and future construction of the new Crystal Valley Interchange, this existing traffic control will not be the most efficient and could contribute toward increased accidents. This project will accomplish the design of a roundabout intersection in order to improve the traffic capacity of the intersection, help to manage speeds along Crystal Valley Parkway, and to accommodate the growth in traffic that is expected to increase once the Crystal Valley Interchange has been constructed. This project is scheduled to be designed by September mid-October 2022, bid in October 2022, and constructed by Summer 2023.

Phase: Design

- Staff presented to the Public Works Commission and Town Council for the award of contract
- Kraemer North America was awarded a construction contract on December 20, 2022 for the construction of the Crystal Valley Pkwy & Plum Creek Blvd Roundabout Project

Budget: \$3,500,000

Targeted Construction Completion: Summer 2023

9. 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 build 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
- Storm water drainage improvements
- Implementation of on street bike lanes West/East bound

Phase: Planning/Design

- Design survey complete and being compiled
- Ongoing design work with adjacent developers to accommodate and incorporate their ingress/egress into project design
- Design efforts/coordination is under way to possibly utilize developer stormwater infrastructure to avoid ROW acquisition
- Design efforts to utilize existing Town property for stormwater improvements underway
- Utility coordination meetings with CORE and CRW ongoing
- Subsurface Utility Engineering (SUE) investigation 99% complete, compiling into matrix and plan sheets
- 30% design submittal scheduled for end of February 2023

Budget: \$2,500,000

Design Completion: Fall 2023

Right of Way Acquisition: Fall 2023

Targeted Construction Completion: Fall 2024

10. 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:

Continued planning and coordination efforts with Union Pacific

Budget: \$1,800,000

Targeted Construction Completion: Spring 2023

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 project that will implement adaptive signal timing on Founders Parkway, and Meadows Parkway, and Factory Shops Boulevard. Eight abutting Town signals will be included in the system. In December, coordinated signal plans were activated and Kimley-Horn trouble-shot detection issues with CDOT. The system has been operating in a test phase and has shown to be functioning well. The signal system is anticipated to be activated after the holiday break in the start of 2023.
- Phase II of the Town's ATSPM project includes software development and signal timing. Traffic signal timing changes on regionally significant roadways were activated in mid-December. Kimley-Horn is currently checking the new software for bugs and will be updating the Town's software once the bugs are fixed. ATSPM Dashboard will be implemented by January 2023.
- Town Staff is awaiting delivery of three new traffic signal cabinets and four new detection systems as part of inventory and replacement maintenance.

Budget: \$868,700

Construction Completion: End of year 2023

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

- Preliminary planning for the locations and specific improvement projects was completed in December. Staff provided a summary memo of the proposed safety projects.
- An RFP to complete the concrete safety projects was posted on bid-net with pre-con and bid opening in January.
- Finalization of the proposed safety projects will be made in January. Public feedback, as well as bid award will follow shortly after.

Budget: \$500,000

Construction Completion: Winter 2023

2022 Safety Projects – This project includes installing Rectangular Rapid Flash Beacon (RRFB) at five locations, roadway improvements, and safety improvements on Gilbert Street.

The 2022 safety projects have finished walkthroughs and are all invoiced. Staff have identified 4 locations for RRFBs, curb extensions, raised crosswalks, and 3/4 medians for 2023.

2022 Budget: \$613,000

Construction Completion: Completed all of 2022

Illuminated Street Name Signs – Town staff are still working with CDOT to get Meadows Pkwy and Hwy 85 a power feed for two of the signs.

- 2022 illuminated street name signs have been purchased and staff are awaiting delivery for five locations across Town, including: Plum Creek Pkwy and Plum Creek Blvd, Plum Creek Pkwy and Perry St, Founders Pkwy and Front St, Wilcox St and I25 northbound, and Wolfensberger and I25 southbound.
- 2023 illuminated street name signs have begun the planning and purchase order process for four locations throughout the Town budget depending, including: Founders Pkwy and Copper Cloud, Founders Pkwy and Ridge Road (Four Corners), Wolfensberger and Park St, and Wolfensberger and Caprice.

2022 Budget: \$39,105

Construction Completion: Summer 2023

2023 Budget: \$60,000

Construction Completion: Winter 2023

Engineering Division

2022 Pavement Maintenance Program (PMP)

All scheduled 2022 PMP projects are complete and in the warranty period.

2022 Bridge Maintenance Program

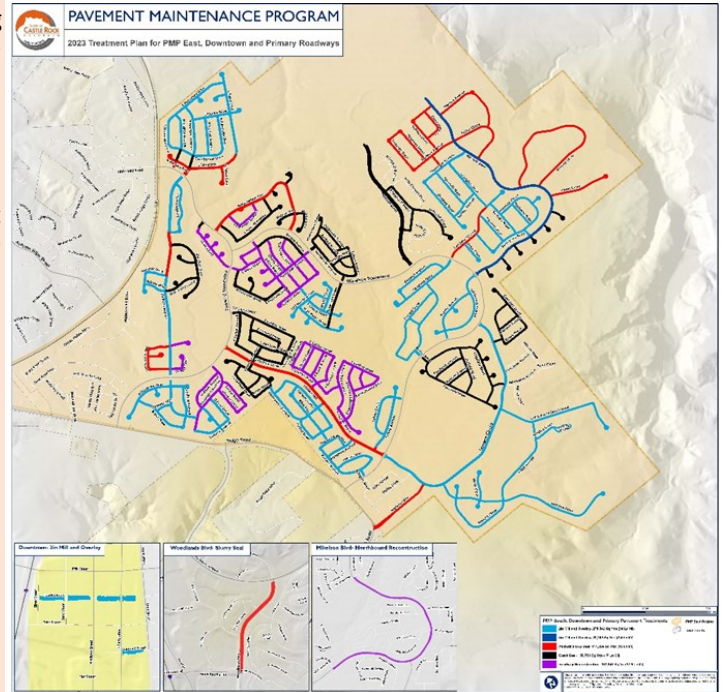
ABCO completed all planned repairs November 8. Contractor completed emergency repairs on S. Wilcox Bridge over Sellars Gulch December 20.



2023 PMP

The PMP team completed the bid packages for the 2023 PMP projects. Five (5) bid packages posted to Rocky Mountain E-Purchasing on December 16, 2022. The bid packages are for the Asphalt Overlay, Full Depth Reclamation, Curb, Gutter and Sidewalk Replacement, Slurry Seal, and Town Facilities Parking Lot Improvements. All five bid packages have pre-bid meeting set up for January 4 and 5, 2023 with the bid openings for all projects scheduled for January 18 and 19, 2023.

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



Police Department ADA Improvements

53 Corp performed additional scope of work to the existing parking lot by making extensive improvements to the Americans with Disabilities Act (ADA) ramps and parking stalls on the north side of the building. All improvements were completed on December 21.



2023 Bridge Maintenance Program (BMP)

Staff is working with a bridge consultant for 2023 Bridge Maintenance and support to the Engineering Division. The consultant will deliver a Bridge Program maintenance schedule for planning, design and maintenance activity recommendations for the Plum Creek Parkway over Sellars Gulch bridge (CAS PLMCKPW-.1). This project is expected to go out for competitive bids in the Spring, with construction beginning late Summer/early Fall.

Development Division

Review and Permitting

Development Review - All 44 reviews were completed. No late reviews this month.

Permitting & Inspection – 14 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

Taxi Voucher Program

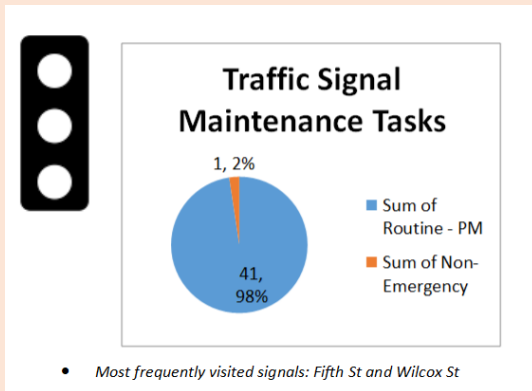
For the month of December, the Taxi Voucher Program funded 114 rides; which is a 40% decrease to last year's December total of 191 and a 13% increase from last month's total rides. Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do not have access to a vehicle. In December, 20 individuals used the Taxi service. Of those individuals, 77% of the rides were for work, 16% for shopping trips, and 7% for medical appointments. Thirty rides were provided for people without access to a vehicle, 36 rides to seniors, and 48 rides to disabled riders.

The Castle Rock Senior Center provided a total of 781 rides in December.

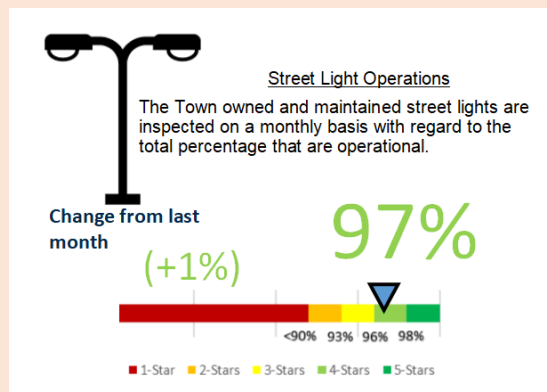
The Castle Rock Senior Center provided 806 rides in November.

Traffic Engineering and Operations

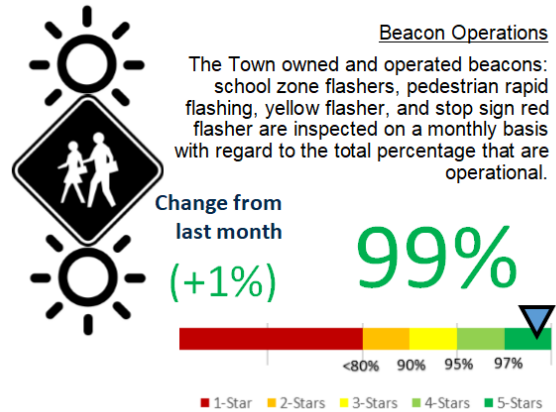
Traffic Signal Operations and Maintenance



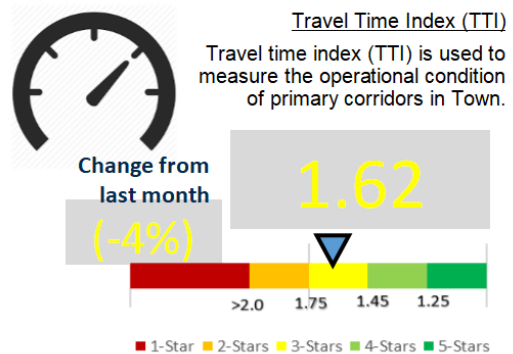
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

For the month of December, the team completed 2604 tasks. Of these tasks, 2147 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. We had 386 beacon related tasks, including windshield inspections, and repairs. We did 10 tasks related to marking symbol replacement. Other tasks included 54 small projects, 1 special events, 1 traffic count, 1 liquor license postings, one core drilling task, and three locate tasks.

Pavement Maintenance Program East and Downtown Development Authority sign Inspections are still on going for 2023 and the repair work identified is still continuing.

Transportation Planning

Castle Rock Downtown Wayfinding Sign Plan:

The initial public survey was distributed to stakeholders and the public in December through the project webpage. The survey was intended to be closed the last week of December, however, the survey period has been extended to January 6. The public and stakeholders are asked to provide feedback on the sign design details, including colors and materials. Input on important destinations and if people have experienced any difficulty moving about Downtown is also being asked for.

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 December. Public Works will be collecting data for Valley Drive, Black Pine Trail and N. Meadows as road conditions and weather permits.

DRCOG Transportation Improvement Program (TIP):

Regional grant applications for Call #4 was released by DRCOG. Applications are due by the end of January 2023. Town staff will be submitting the Crystal Valley Pkwy Interchange project for potential funding. Staff will also determine if other projects will be submitted in Call #4. The Town was informed by the USDOT that the CVI RURAL grant application was not selected for funding. Only 12 projects were selected in the entire country and none in Colorado. The 2023 RAISE call for projects was announced in December. Town staff plans to submit the CVI project for potential funding. Applications are due in February 2023.

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.

The Fleet Division continued to keep Castle Rock on the move in December. The overall Fleet Availability was 96%. We completed 122 work orders with more than 200 repairs. Our total cost were down significantly to \$60,580 from \$139,158.30 from November. Technician productivity was 71%. The Fleet consumed more than 11,000 gallons of fuel in December at a cost of \$2.50 per gallon of unleaded and \$4.16 a gallon for diesel. This cost is significantly lower than retail cost. The town continues to save on fuel cost with our IGA with Douglas County Schools.

Our technicians continued to perform great work throughout the month. Six plow trucks went down on Thursday before

Christmas and our awesome crew was able to get them all back in service the same day. The weather conditions this day was extremely cold making our equipment more prone to break down. Another three went down the following week. Two of the three were repaired and back in service same day. The third suffered a major failure of the dump body and requires welding. Thank you to our on-call technicians and Shop Supervisor that responded to support the snow removal operations during this holiday season. Their efforts are notable in providing snow removal assets for the Streets division and our citizens.

Fleet put four new vehicles in service for our departments in December. Three new police cars were received and we completed in service checks. One new snow plow was put in service for the Streets division. It's always a good feeling to add new equipment to the fleet to support our departments mission to provide customer service to our stakeholders.



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

Outcome: Fleet team completed 80.3% of the work orders within 48-hours of opening repair requests or service requests. This benchmark number shows how quickly vehicles and equipment get serviced and repaired and back on the job.

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

Outcome: Town vehicles and equipment were available 96% 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 71%. Productivity is the measure of available billable hours by our technicians. We met our objective for the month despite some challenging repairs and weather conditions. Our productivity for 2022 was excellent at 80%.

Street Operations & Maintenance Division

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

- *Snow and Ice Mitigation
- *Street Sweeping
- *Equipment Maintenance
- *Training
- *Asphalt Repair

Snow and Ice Mitigation

December brought three snowstorms and a total of 12.7 inches of snow. The Street crews responded to these storms with 516 hours of plowing operations and 266 tons of salt being applied to combat icing. The Town works diligently to mitigate the effect of snowstorms on public infrastructure and return the roadways to normal usage as quickly as possible.

Street Sweeping

In December, the Streets Division conducted streets sweeping operations throughout Town. 244 labor hours were dedicated to cleaning the Town roadways to finalize the Fall sweeping program as well as the Post storm sweeping program. In all 130.4 cubic yards of material were removed from the roadways as well as 56 bags of garbage.

Asphalt and Pothole Repair

The Streets Division worked 410 hours to repair numerous asphalt patches and potholes all over Town. In total, 30 tons of hot mix asphalt and 2500 lbs. of cold mix asphalt were used in executing these repairs. The crews attempted to complete as many as possible before the asphalt plants shut down for the winter season.

Equipment Maintenance

The crews devoted 387 hours to equipment maintenance during December. With winter storms bearing down on the Town, the need to maximize the availability of equipment such as snow plows, trucks, and heavy machinery cannot be overstated. The efforts of the crew and the Fleet Division works to ensure the tools needed to maintain Town infrastructure are available when needed.

Training

The Streets Division has managed to fill its ranks and has brought onboard a number of new team members. These personnel are being trained to familiarize them with Town operations. These newer personnel as well as seasoned team members dedicated more than 100 hours to training.

Looking Ahead

The Streets crews plan to maintain readiness to respond to snow storms, undertake Ice mitigation operations, and work to maintain road surfaces. In addition to this, the Division plans to continue training and developing training resources for division personnel.