

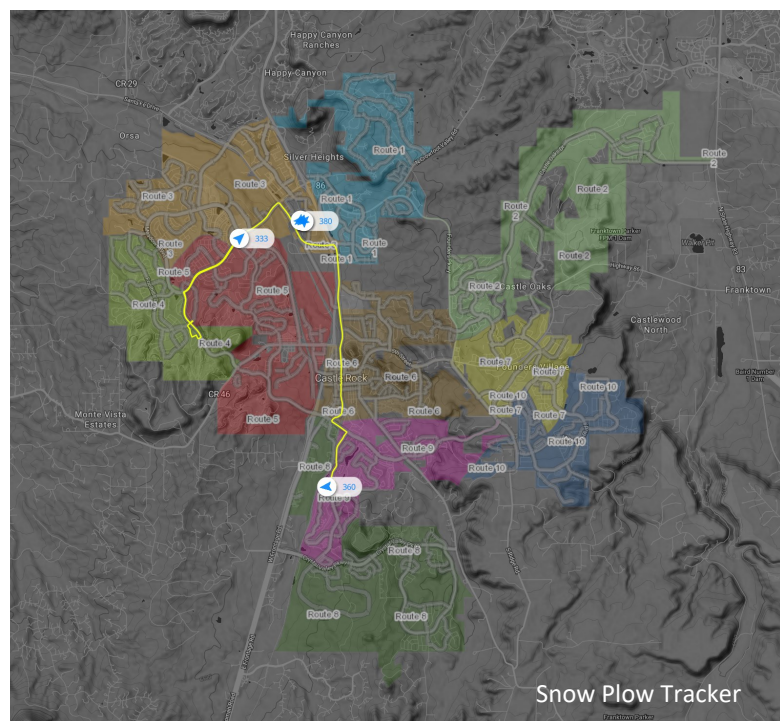


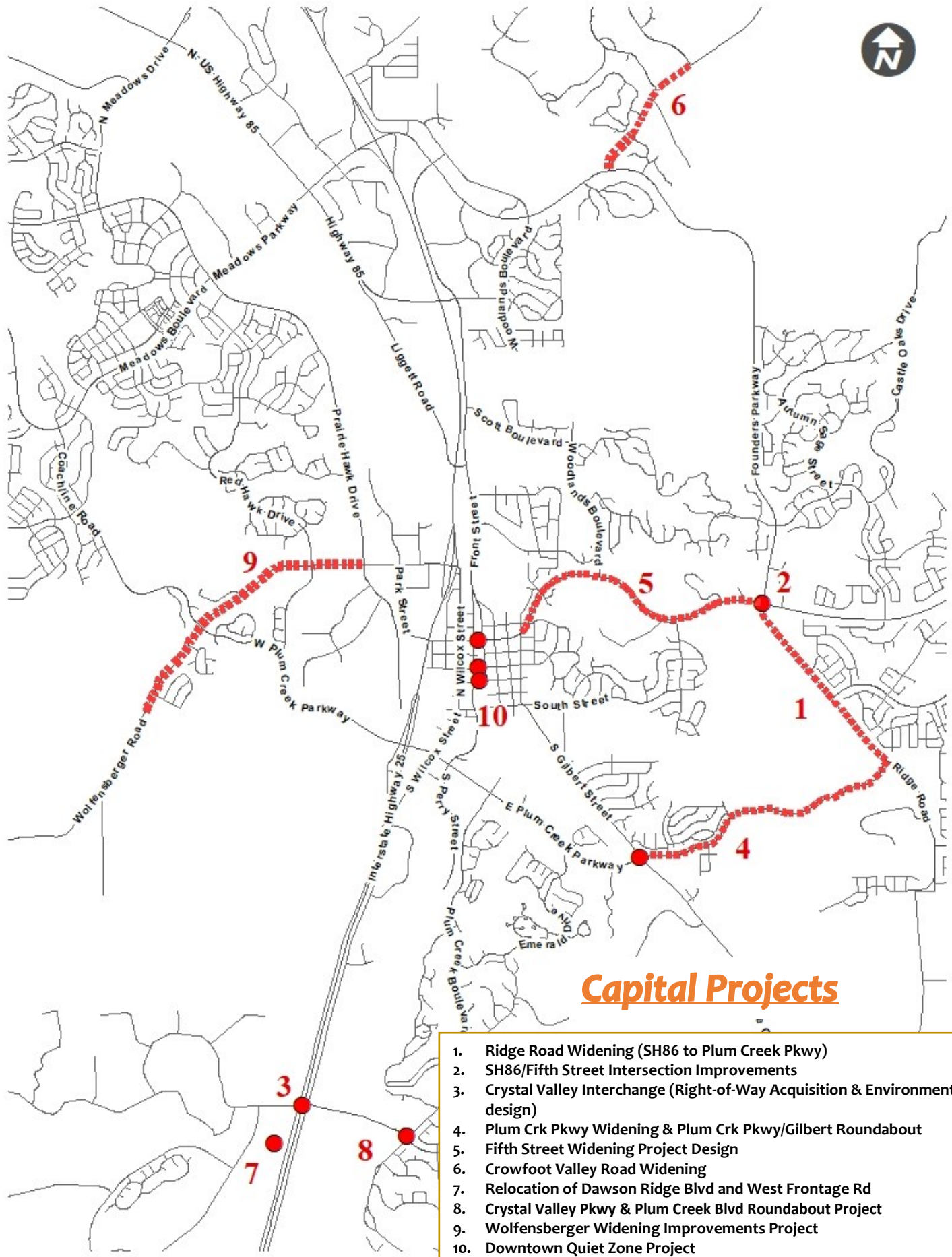
Monthly Report

November 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

 - Continued to maintain temporary erosion control measures
 - Continued the relocating of existing utilities
 - Continued earthwork on major cuts and fills
 - Continued curb and gutter concrete installation including crossings and bike ramps, all curb and gutter has been completed between Plum Creek Parkway to Enderud Blvd
 - Complete top mat of asphalt paving between Plum Creek Parkway to Enderud Blvd excluding turn lanes and asphalt patch back at curbs

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:

 - Final plan set revisions ongoing
 - Design team working on electrical/fiber plan sets
 - ROW acquisition is wrapping up, three properties have been closed, one remaining, waiting on release of lien for remaining property
 - 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
 - 100% plans package expected by December 8

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

Design Completion: Fall 2022

ROW Acquisition: Fall 2022

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
 - Multimodal design decisions being finalized
 - Design firm continues working on 90% design
 - Environmental – All tech memos have been done at this time plan to submit to CDOT/FHWA in December
 - Construction management services contract to be entered into in January/February
 - Maintenance agreement with CDOT draft submitted for Town review – still pending drainage/water quality items

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:

- Continued manufacturing of block wall
- Continued earthwork for new roadway and sidewalk construction
- Continued the maintenance of erosion control
- Continued major cuts and fills
- Completed the installation of storm drain pipe
- Continued the installation of headwall for storm drain
- Continued the relocation of utilities
- Started the placement of base course
- Continued Installation of conduit for street lighting
- Began installation of curb and gutter for new eastbound lanes from Eaton roundabout to halfway up to Ridge Road

Budget: \$7,530,000

Targeted Construction Completion: Summer 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

- Completed 90% design
- Completed all 30% design approvals
- Completed noise measurements related to grant
- Continued stakeholder engagement
- Completed CORE electric utility design
- Continued to develop project utility design

Budget: \$1,500,000

Design Completion: December 2022

Right-of-way acquisition: Winter 2022-2023

Targeted Construction Completion: Winter 2023-2024

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 developed conceptual designs based off of Douglas County and Town comments
- Town staff is compiling feedback from the open house, website feedback form and emails; Staff plans to present recommendation to Council in January

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 expected in mid-December for bid documents. Additional requests from Town Stormwater has delayed completion

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

- Opened bids for the project November 14, 2022

- Town received 6 bids ranging from 3.3M to 4.0M with Kraemer North America being the low bid
- Staff is finalizing Public Works Commission and Town Council memos for contract award
- Presenting to PWC on December 5, 2022 for recommendation to award contract
- Presenting to Town Council December 20, 2022 for contract award

Budget: \$400,000

Design Completion: Fall 2022

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 Castle Rock Water 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:

- Resubmit construction agreements with Public Utilities Commission (PUC)
- Stockpile railroad construction materials on-site
- Continue scheduling and coordination of construction with Union Pacific

Budget: \$1,800,000

Targeted Construction Completion: Winter 2022-2023

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 November, Kimley-Horn finalized all data connections from the Town and CDOT. The project is currently operating in a test phase to ensure accuracy. The signal system is anticipated to be in full deployment by the start of 2023.
- Phase II of the Town's Automated traffic signal performance measures (ATSPM) project includes software development and signal timing. Traffic data was collected in September for signal retiming in October. Kimley-Horn is currently checking the new software for bugs and will be updating the Town's software once the bugs are fixed. In addition, Kimley-Horn has been collecting vehicle volume data and will be providing Town staff with new signal timing by the week of December 12. ATSPM Dashboard will be implemented by January 2023.
- Town Staff purchased 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

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 are currently being purchased for five additional locations throughout the Town.

2022 Budget: \$58,000

Construction Completion: Summer 2022 and Fall 2022

Engineering Division

The following 2022 projects and program were completed as follows:

- Curb, Gutter & Sidewalk Replacement project completed in June
- Full Depth Reclamation project was completed in the month of November
- Asphalt Overlay Project was completed in September
- Slurry Seal Project was completed in August
- Concrete Remove & Replace Project was completed in November
- Town Facilities Parking Lot Improvements were completed in October

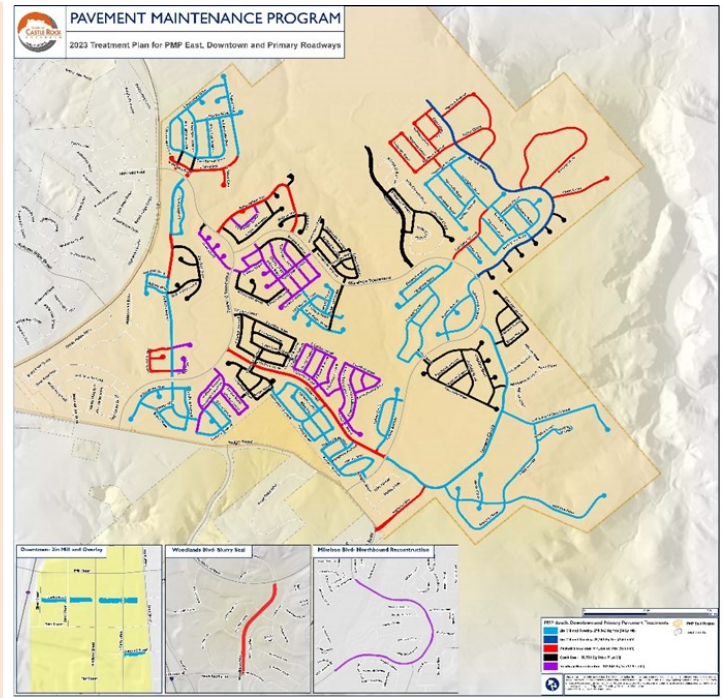
2022 Bridge Maintenance Program

ABCO was awarded the maintenance project for this year. The bridges identified for necessary repairs are the S. Wilcox over E. Plum Creek bridge and the Plum Creek Parkway over UPRR bridge. All planned work was completed in early November.

2023 PMP

The PMP team is working to completed the bid packages for the 2023 PMP projects. Five (5) bid packages will be sent 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 meetings 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 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.



Development Division

Review and Permitting

Development Review - All 50 reviews were completed. No late reviews this month.

Permitting & Inspection – 22 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

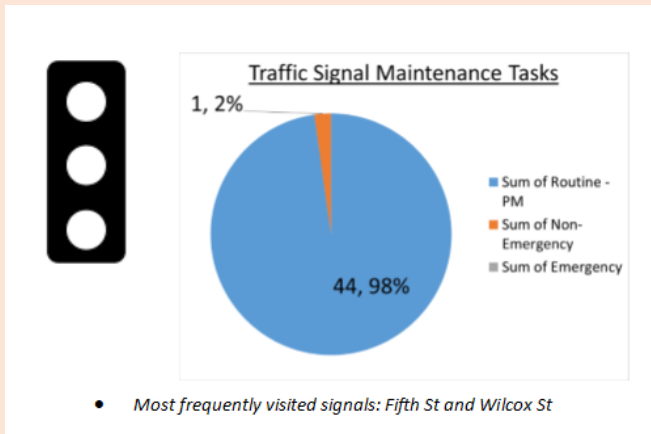
Taxi Voucher Program

For the month of November, the Taxi Voucher Program funded 101 rides; which is a 48% decrease to last year's October total of 195 and a 1% decrease 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 November, 18 individuals used the Taxi service. Of those individuals, 83% of the rides were for work, 15% for shopping trips, and 2% for medical appointments. Thirty-three rides were provided for people without access to a vehicle, 28 rides to seniors, and 40 rides to disabled riders.

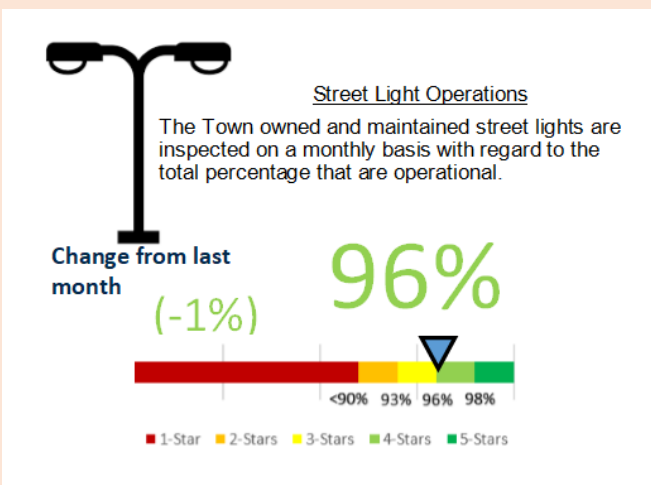
The Castle Rock Senior Center provided 806 rides in November.

Traffic Engineering and Operations

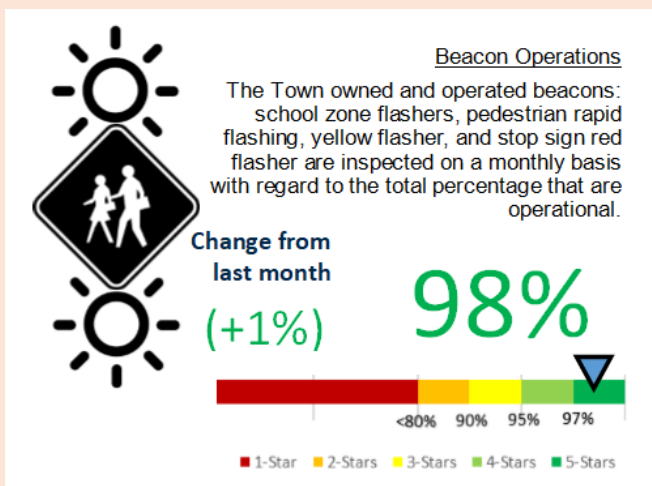
Traffic Signal Operations and Maintenance



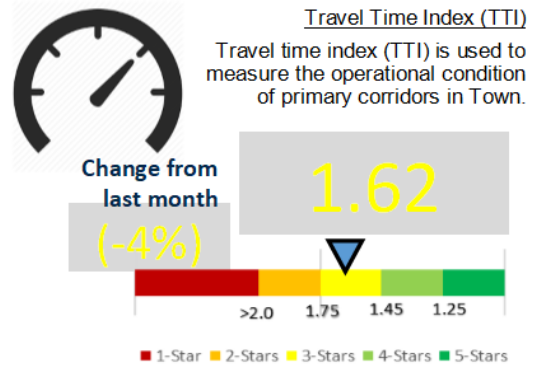
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

For the month of November, the team completed 1792 tasks. Of these tasks, 1500 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. We had 231 beacon related tasks, including windshield inspections, and repairs. We did one task related to marking symbol replacement. Other tasks included 32 small projects, 14 special events, seven traffic counts, three liquor license postings, one delineator task, and two locate tasks.

Pavement Maintenance Program East and Downtown Development Authority sign Inspections for 2023 repair work have begun.

Transportation Planning

Castle Rock Downtown Wayfinding Sign Plan:

AECOM is preparing the existing conditions report and the initial public survey, which will be distributed in December. The survey will seek input from the public and stakeholders on what is important to them for signage, including colors, materials, and important destinations. The survey will be distributed through our communications plan and conducted on the project web page.

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 November. Public Works staff is still collecting data for two locations on Valley Drive and N. Meadows.

DRCOG Transportation Improvement Program (TIP):

Regional grant applications for Call #3 we scored by DRCOG staff and shared with the technical panel. Their recommendations did not include the Crystal Valley Parkway Interchange. Currently the recommendations were confirmed with the DRCOG TAC and will be shared with the DRCOG Board for their approval. Call #4 for the sub-regional Douglas County funds was issued in November. Applications are due in January. The Town will be submitting the Crystal Valley Pkwy interchange project and likely some projects that were submitted in Call #2 but weren't selected.

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.

The Fleet Services Division continues to make sure that Town vehicles and equipment are ready for operation. This includes Police, Fire, Streets and Water and other divisions that rely on their vehicles to provide great service for our residents.

November was busy for the Fleet Division with scheduled and unscheduled maintenance, training, vehicle ordering, and inservicing. 138 work orders were opened with 199 repairs for 112 vehicles. Total production for the month was \$139,158.30 in parts, labor and other charges. A significant amount of these charges was related to Unit 181 Vac-Con truck for the replacement of the vacuum fan. The new vacuum part was more than \$40,000.



Technician productivity was 74.6% and Fleet availability was 95.66%, both meeting our benchmarks.

Town vehicles dispensed 10,281 of unleaded fuel and 3,341 gallons of diesel fuel in November from Douglas County Schools.

The Fleet technicians completed 4 training courses in November: Advanced Circuit & Electrical Training, Intermittent Electrical Diagnostics, Ford Drivability & Code Diagnostics, and EV & Hybrid Safety and Service. Technician Maxwell Walter successfully passed his first ASE certification, Auto Maintenance and Light Repair Certification (G1).

The new snow removal dump truck for the Streets Division was approved by council and will be delivered once the purchase order process is complete. This truck replaces unit 347. We anticipate this truck to be in service early December.

The Fleet staff is preparing for our year-end inventory of assets. The dates will be announced as we may have limited repair activities during this time.

John Arney was promoted to the new Fleet Manager.

The Vehicle Replacement Program continues to see manufacture delays and cancellations. The Fleet Division is working with departments to review vehicle use and replacement recommendations. The Departments should be reviewing their vehicle specifications in preparation for vehicle replacements in 2024. Currently there are 7 new police vehicles received and being upfitted at our vendor with lighting and equipment. Another 12 police units are ordered and scheduled for replacement in 2023.

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

Outcome: Fleet team completed 74% of the work orders opened in November 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. This benchmark number is just under our monthly objective.

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

Outcome: Town vehicles and equipment were available 95.66% 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 74.6%. This productivity number met our monthly objective.

Street Operations & Maintenance Division

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

- *Snow and Ice Mitigation
- *Street Sweeping
- *Road Shoulder Maintenance
- *Mastic Repair
- *Asphalt Repair

Snow and Ice Mitigation

November saw a few small snow storms and some days of bitter cold. The Streets Division maintained readiness for four events, two of which required deployment. The crews did an excellent job of mitigating the effect of these storms on the Town's transportation infrastructure.

Street Sweeping

During the month of November, Streets Crews spent 449.5 sweeping the roadways in Town for the Town wide fall sweeping program and post storm sweeping program to keep the Town roadways clear of debris. 186.75 cubic yards of material were removed from the roadways during these operations. With this, 213 tons of material were disposed of in a sanitary landfill.

Road Shoulder Maintenance

In November, the crews were able to carry out some road shoulder maintenance operations. .25 lane miles of road shoulder was repaired and trash removal operations saw the collection and disposal of 40 bags of garbage from Town maintained road shoulders.

Asphalt and Pothole Repair

The crews devoted 448 hours, 15.6 tons of hot mix asphalt, 1430 lbs. of cold mix asphalt to repair asphalt utility cuts, and potholes throughout Town. These operations work to preserve and repair the road surface that is a vital part of Town infrastructure.

Mastic Crack Repair

The Streets Division finalized the last 2.69 lane miles of the mastic crack repair operation for this year. This operation is employed to address large cracks and large area imperfections with a structurally enhanced rubberized asphalt product that is designed specifically for these road repairs.

Looking Ahead

The Streets crews will maintain readiness for snow and ice mitigation needs as well as working to maintain Town roadways. The Streets Division has filled all but two Maintenance Technician positions and is presently interviewing additional candidates. With the addition of numerous team members Streets will also ramp up training in order to facilitate the best experience for the team as well as the best outcome for stakeholders.