



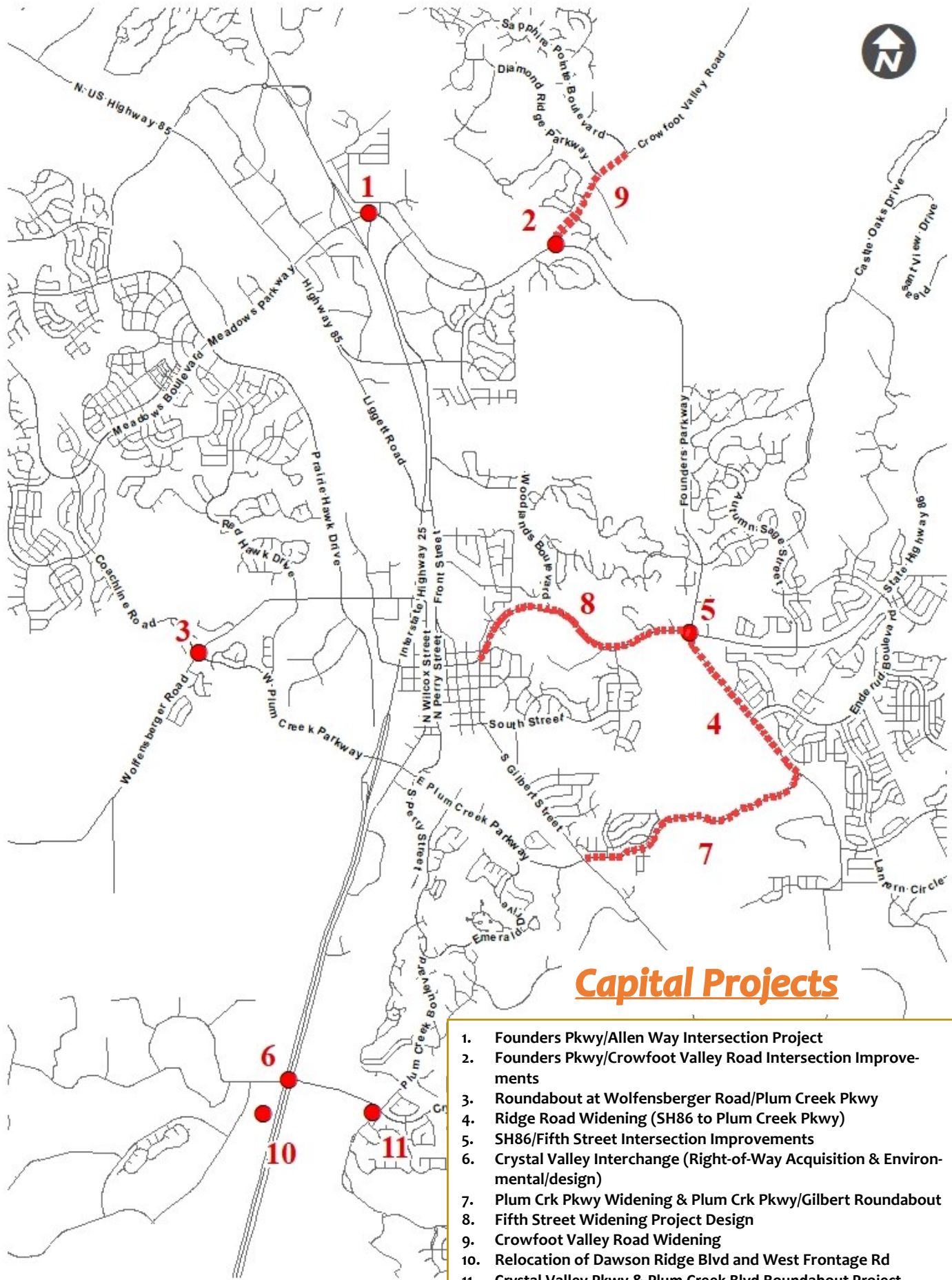
Monthly Report

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

1. Founders Pkwy/Allen Way Intersection Improvement Project – This project will address the need for the following improvements:

- An additional eastbound left turn lane from Founders Parkway to Allen Way
- A dedicated right turn lane from Founders Parkway to Allen Way
- An additional southbound right turn lane from Allen Way to westbound Founders Parkway
- An additional I-25 northbound on-ramp lane
- A second through lane at Allen Way and Allen Street

Phase: Construction – Closeout: Work continues on the closeout phase with CDOT. All final paperwork was submitted to CDOT at the end of November 2021, and this project is awaiting CDOT acceptance.

Budget: \$2.64M

Close Out: Complete

2. Founders Pkwy (SH86)/Crowfoot Valley Road Intersection Improvement Project and Crowfoot Valley Road Widening Project – This project will address the need for the following improvements:

- An additional eastbound left turn lane from Founders Parkway to Crowfoot Valley Road
- An additional northbound lane on Crowfoot Valley Road between Founders Parkway and Knobcone Drive
- A southbound free right turn lane from Crowfoot Valley Road to westbound Founders Parkway
- Widen Founders Parkway both eastbound and westbound between the Crowfoot Valley Road and Woodlands Boulevard
- Widen Crowfoot Valley Road from Founders Parkway to Knobcone Drive

Phase: Construction: Closeout: No Change - Waiting on CDOT formal close out of project. The Grading, Erosion, and Sediment Control permit remains open to monitor vegetation coverage and growth. Inspections will be performed until the requirements of the permit are achieved.

Budget: \$3,550,000

Close Out: Complete

3. Wolfensberger Road/Plum Creek Parkway Roundabout Project - This project will accomplish the design and construction of a roundabout at this intersection to improve operations and minimize accident potential.

Phase: Substantial completion was issued in Spring 2019. Punch list items are complete. The Town was working with the adjacent property owners to complete the final landscape tie-ins and adjustments. The work completed this month in progression to project closeout is as follows:

Completed irrigation and landscaping work on adjacent property

Remaining Budget: \$137,000

Final Completion: Complete

4. 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: Design: Stanley Consultants is the design firm for the project. The following is a summary of the activities performed this month:

- Pre-Bid Conference was held on February 25
- Bid package was posted on February 28
- Bid opening is scheduled for March 8
- Town Legal Counsel is moving forward with condemnation proceedings

Phase - Construction:

- Construction is anticipated to begin in late April to early May and be completed by end of October, 2022

Budget: \$5,225,000

ROW Acquisition: Late Spring 2022

Targeted Construction Completion: Fall 2022

5. 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:

- Southbound traffic – add left turn lane, add a free right turn lane, convert right turn lane to through/right
- Eastbound traffic – convert right turn lane to through right, add free right turn lane
- Northbound traffic – add left turn lane, add second through lane, add a free right lane
- Westbound traffic – add through lane, add a free right turn lane

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

- Continue working on meeting water quality standards, structure selection report for retaining wall design, right-of-way, and 90% plans
- IGA with Douglas County scheduled to be presented to Town Council has moved from February to April 2022 for approval. This IGA is for a contribution to the project of 1 million dollars from Douglas County
- Subsurface utility engineering (SUE) work to resolve conflicts with utilities
- Coordination with the Fifth St. and Ridge Rd. project
- Working on finalizing the pavement design typical section

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

Design Completion: 3rd quarter 2022

ROW Acquisition: 2nd quarter 2022

Targeted Construction Completion: Winter 2023

6. **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

- Acquisition Services
 - East side of I-25 – Town Staff is moving forward with the condemnation process for the Boone Family property. The remaining properties are in various states of negotiation
 - West side of I-25 – The remaining property is in negotiation

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

- Traffic modeling methods and assumption final report was submitted
- Traffic forecasting report was submitted for review
- Environmental/NEPA – Team continues to work on developing impacts and mitigations section of the technical memorandum, continues to work on developing the noise verification and air quality memorandum
- Interviews were conducted with three of the six firms that submitted proposals for the CM/GC; The evaluation panel, which includes stakeholders from CDOT, Douglas County and the Town scored the top ranked firms utilizing the approved scoring forms and will be making their recommendation for CM/GC firm at the March 15 council meeting

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

Completion: Summer 2023

Targeted Construction Completion: Summer 2025

7. **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 Roundabout: Construction - The following is a summary of activities performed this month:

- Completed draft contract for Baldwin Park for review and execution
- Continued contract closeout activities to complete final change orders and final payment to the roadway widen-

ing construction contract

Roadway and roadside improvements are complete. The project continues procurement activities to restore Baldwin Park. Remaining work includes: Baldwin Park irrigation and landscaping restoration work.

Budget: \$7,507,723

Construction Completion: Complete

Phase 2: Design and ROW Acquisition – The following is a summary of design activities performed this month:

- Completed appraisal reports for property offers
- Drafted offer letters for property interests
- Completed CORE Electric design(s)
- Continued coordination efforts with stakeholders related to future utilities
- Submitted construction contract bid documents for review

Budget: \$794,375

ROW Completion: 2nd qtr 2022

Targeted Construction Completion: Winter 2022-2023

8. **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:

- Widening to accommodate future traffic demand
- Intersection improvements at Valley Drive and Woodlands Boulevard
- Implementation of on-street bike lane/shoulder from South Gilbert Street to Ridge Road
- Addition of sidewalk from Woodlands Blvd. to Ridge Road along South side of Fifth Street

Phase – Design (15% Complete)

- Completed geotechnical borings for retaining wall and pavement design
- Submitted design recommendation for Town Council discussion/direction
- Continued design coordination with Four-Corners Intersection Project in terms of water quality, and project transitions
- Continued research for environmental and historical impacts for NEPA (National Environmental Policy Act) clearances
- Various department coordination to confer design decisions

Budget: \$1,500,000

Design Completion: December 2022

Right-of-way acquisition: Winter 2022-2023

Targeted Construction Completion: Winter 2023-2024

10. **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: Town submitted IGA comments to Douglas County for review. Douglas County submitted conceptual design elements for the Town to review. Town staff is in the process of reviewing the concepts.

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

ROW Acquisition: Spring 2022

Design Completion: Summer 2022

Targeted Construction Completion: Spring 2023

11. **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:

- The project moved into preliminary design
- Geotech work continues on the boring and development of pavement design

Budget: \$299,000

Design Completion: December 2022

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

12. **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 June, 2022, bid in June, 2022, and constructed by Summer 2023.

Phase: Design -

- Project charter meeting with S.E.H., Town staff and utility providers was conducted
- S.E.H. sent preliminary traffic analysis finding no need for right turn lanes and LOS recommends considering

two lanes northbound to westbound

- Town direction for S.E.H. to evaluate right-of-way impact of two scenarios: **Option 1:** 2 lanes eastbound-westbound, 1 lane northbound-southbound or **Option 2:** 2 lanes eastbound-westbound, 1 lane northbound-southbound, 2 lanes northbound-westbound
- Town sent S.E.H. crash data
- Completed ROW, road and stormwater initial survey
- Town received the preliminary roundabout layout geometrics for Options 1 & 2
- Completed the field topographic and utility survey
- Town provided S.E.H. direction to go with 30% design of roundabout with 2-2 lanes eastbound-westbound, 1 lane northbound-southbound, 2 lanes northbound-westbound

Budget: \$400,000

Design Completion: June 2022

Targeted Construction Completion: Summer 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 and Meadows Parkway, as well as six abutting Town signals. The adaptive system should be operational by April 2022.
- The Town’s ATSPM project is broken into two phases. Phase I includes detection purchase and installation at 15 intersections. Adiona Transportation Solutions is currently installing detection at 15 intersections Townwide and will be done by the end of March. Phase II includes software development and signal timing. In February, a resolution to contract with Kimley-Horn was approved by Town Council. A kick-off meeting will be held in March.
- The Town has purchased replacement advance detection units for four intersections. Staff will replace the detection at Factory Shops Blvd and Promenade Pkwy, Factory Shops Blvd and outlet access, Front and Ligget, and Front and Sam Walton. More detection systems are planned to be ordered for 2022 upgrades later this year. Detection will be installed by our on-call signal maintenance contractor in March.

Budget: \$868,700

Targeted Construction Completion: End of year 2023

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

- RRFBs will be installed at South St and Wilcox St, Black Feather Tr. and Trail Boss Ln, Meadows Blvd and Shane Valley Tr., South St and Burgess Dr, and at Gilbert St and First St.

- Roadway improvements include pedestrian refuges at Black Feather Tr. and Trail Boss Ln and South St and Burgess Dr to support RRFBs, and median enhancements at Front St. and Milestone Ln. identified in the recent Crash Facts Report, and sidewalk extensions on Mickelson Blvd. and Turnstone Ave., and Mickelson Blvd. and Bonner St. to support Safe Routes to School.
- As part of the Gilbert Street PMP Full Depth Replacement Project, speed management improvements including speed cushions, a raised crosswalk, and pedestrian refuges are planned to increase safety and reduce speeds. These options were presented and were well received by the public at the open house on January 20.
- A 1st quarter budget amendment is recommended by staff to complete these safety projects and will go to Town Council in April. The approved budget of \$100,000 is enough to complete the RRFB installations.

2022 Budget: \$100,000, requesting additional funds in budget amendment

Construction Completion: Fall 2022

Illuminated Street Name Signs – Illuminated street name signs have been delivered for Meadows Blvd and Prairie Hawk Dr, Wolfensberger Rd and Prairie Hawk Dr, Meadows Pkwy and Hwy 85, and Meadows Pkwy and Factory Shops Blvd. Scheduling the install is underway and will be completed by our traffic signal maintenance on-call contractor.

- 2022 illuminated street name signs are currently in the planning phase and are proposed at four locations throughout the Town.

2022 Budget: \$58,000

Construction Completion: Fall 2022

Engineering Division

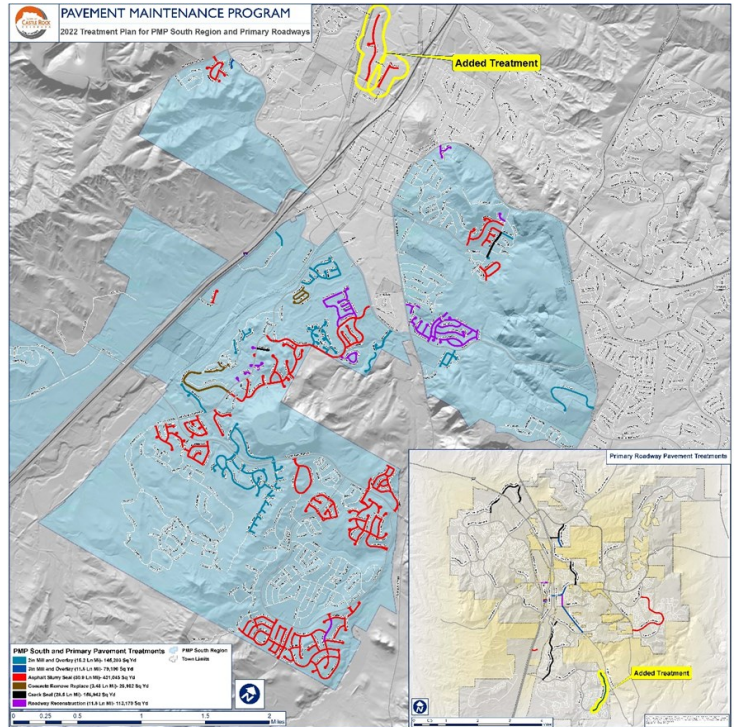
2022 Pavement Maintenance Program (PMP)

Six (6) project bid packages were prepared and are to be submitted via Granicus for Legal to develop resolutions and contracts. Staff will then send the contracts to the contractors for the appropriate signatures

2022 PMP contracts under consideration are:

- Asphalt Overlay
- Full Depth Reclamation
- Curb, Gutter and Sidewalk Replacement
- Slurry Seal
- Concrete Remove & Replace Reconstruction
- Town Facilities Parking Lot Improvements

The PMP map indicates the proposed scheduled treatments for street within the South PMP area and primary streets. This map may change based on maintenance treatments and resources available.



2022 Facilities Parking Lot Improvements Program

The bid opening for this program is complete, with the low bid coming in under budget. Staff will present the contract to the Public Works Commission March 7 and Town Council March 15 with recommendation to award.

This program will see needed improvements to nine (9) Town facilities and parking lots as follows:

Perry St. Fire Station #151	Meadows Treatment Plant
Police Department	Diamond Ridge Pump Station
Centennial Park (Burgess Pool)	Matney Park
Butterfield Park Parking Lot	Coachline Parking Lot
PCWPF Treatment Plant	

2022 Bridge Maintenance Program

Staff is currently working with the Legal Division to secure a service agreement and contract with BASIS Partners. Staff will work with the consultant to identify bridge(s) that require maintenance in 2022. Once that is determined, staff will work with the bridge consultant to present a maintenance packet for competitive bids.

BASIS Partners is being retained for bridge maintenance support and support to the Engineering Division. They will deliver a Bridge Program to include: bridge program management and administration; expertise in the Town's current asset manage-

ment system Cartegraph; and, a staff of bridge experts that are fully experienced in providing bridge construction, planning, assessments, prioritization, and maintenance activity recommendations.

Development Division

Review and Permitting

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

Permitting & Inspection – 37 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

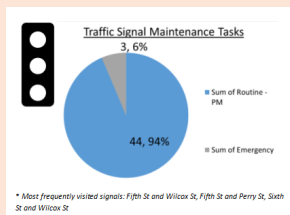
Taxi Voucher Program

For the month of February, the Taxi Voucher Program funded 122 rides; which is a 10% decrease to last year's February total of 135 rides, and a 14% 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 February, 24 individuals used the Taxi service. Of those individuals, 65% of the rides were for work, 28% for shopping trips, and 7% for medical appointments. Twenty-eight rides were provided for people without access to a vehicle, 31 rides to seniors, and 63 rides to disabled riders.

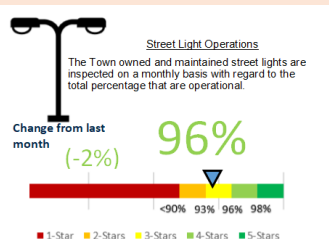
The Castle Rock Senior Center provided a total of 682 rides in February.

Traffic Engineering and Operations

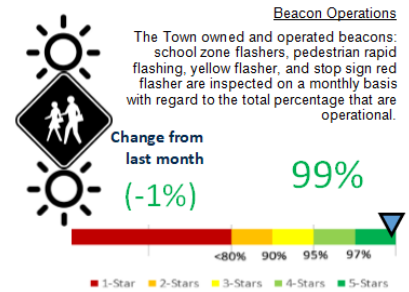
Traffic Signal Operations and Maintenance



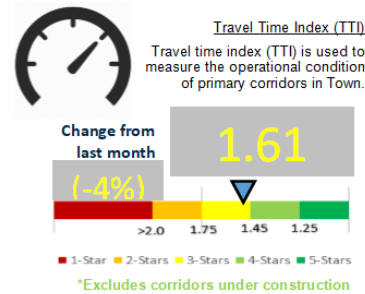
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

For the month of February, the crew accomplished 416 tasks. Of these tasks, 140 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. We had 198 RRFB related tasks, including windshield inspections, and new installations. Other tasks included 76 small projects, two traffic count tasks, as well as providing CDL drivers for several snowstorm events.

Transportation Planning

Castle Rock Downtown Alley Master Plan:

The project team continues to work on the design phase of the project. Conceptual ideas and designs have been shared with various Town staff and businesses along the alleys, including different pavement options with Public Works divisions. A public pop up event took place at the Downtown ice rink on February 12. The project was well received and supported. Good public input was provided and received regarding several different pavement designs. Based on feedback the pavement designs will be modified and shared before the recommended design is incorporated into the plan. This also includes other alleys elements such as lighting, seating, and entry features for the three alley segments being designed. The three alley segments are:

- Alley 1 – between Wilcox and Perry St. from Festival Park to 4th Street
- Alley 2 – along the west side of the UP railroad line
- Alley 3 – from 6th Street to just south of the Chamber of Commerce

The project is still on schedule to be completed this April.

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. One inquiry was received in February for Pueblo Alta in the Cobblestone neighborhood. The Town has sent the initial support petitions to the point of contact. The petition for Switch Grass Drive has been received and a speed study has been ordered. The point of contact will be notified of the results once the study has been completed. If it meets the program criteria the neighborhood will be asked if they would like to proceed with the next step of the traffic calming program. Town staff is still awaiting the petition for South Street.

Downtown Castle Rock Grants:

The CDOT Revitalizing Main Streets grant for \$150,000 with a local match of \$15,000 is still on-going. The schedule for the high visibility crosswalks is still scheduled for the April and May timeframe as long as the material is available. Town staff is proceeding with the purchase and installation of the benches and trashcans. Town staff has gotten direction to pursue constructing the curb extensions in front of B&B Café and Castle Café in concrete. Also, staff will be evaluating the outdoor dining area in front of Zabracci's in concrete. If feasible all three dining areas will be reconstructed in concrete as part of the grant with any additional local match coming from the Downtown Development Alliance (DDA).

DRCOG Transportation Improvement Program (TIP):

DRCOG has kicked off the next TIP cycle (2022-2027). They have recently released a call for regional projects that are bike, pedestrian, or transit focused. A total of three projects can be submitted from Douglas County (DC). The DC Sub-regional Forum made up of all DC jurisdictions met in February and decided to submit the following three projects for regional funding.

- Lone Tree Mobility Hub
- Havana Street bike/ped trail project
- I-25 bike and ped overpass north of I-25 and Happy Canyon interchange

The sub-regional bike, pedestrian and transit call for projects is expected to be released in May. Two additional call for projects will follow later this year and will track the more traditional TIP cycle and fund all modes of transportation, including capacity projects such as the Crystal Valley Interchange.

Fleet Services

Keeping Castle Rock on the Move

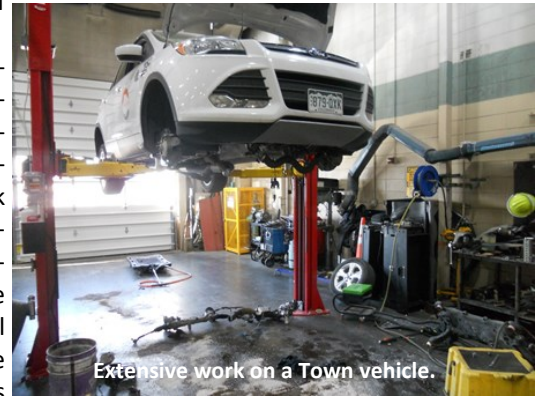


As you drive around Castle Rock and see many different departments providing first-class service, you will notice how they rely on their Town-issued vehicles. The Fleet Division takes great pride in knowing that those vehicles are reliable and safe to operate.

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 was very busy in the month of February with several storms that came in and plow trucks needing work. Also

plenty of maintenance work and preparing new vehicles for service. We completed 139 work orders and processed 136 vehicles for the month. Total output for the month was



\$96,800 parts and labor billed out this was one of our best months ever. Technician productivity was also very good for the month of February coming in at 79.4%. And Fleet availability came in at 96.2% which is back to pre-pandemic levels and well above our benchmarks.

All four of our technicians completed diagnostic training which was focused on electrical circuits. Fleet also put into service a new patrol interceptor for the Police Department and we are putting finishing touches on a F350 truck for the Water Department.

Objective/Benchmark: Complete at least 75% of our work orders within 24-hours of coming to shop.

Outcome: Fleet team completed 87% 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. 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 96.2% 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 79.4%. This productivity number was a very good increase considering the difficulty in getting some parts and some larger jobs that were completed.

Street Operations & Maintenance Division

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

- *Equipment Maintenance
- *Snow and Ice Control
- * Roadway Ice Breaking
- *Sweeping

Equipment Maintenance

The Streets Operators worked 181 hours in an effort to keep the plows up and running. Performing repairs, maintenance, cleaning and replacing wear parts such as snow plow cutting edges.

Roadway Icebreaking

Icebreaking was second in labor hours only to snow plowing in the month of February. The Streets team has worked 635 hours clearing 27,000 linear feet of ice across Town. During these operations crews used almost 25 tons of salt to aid in removal and encourage melting once ice was placed on the sunny side of the roadway.

Sweeping

The crews have been diligently working to sweep up much of the salt and sand deposited during snow events from the roadways. Very cold temperatures have slowed operations as sub-freezing temps are damaging to the sweepers themselves. In spite of this crews were able to clear 227 lane miles of roadways during February.

Snow and Ice Control

The Town snow plow crews responded to 4 snow events in the month of February. A total of 19.8 inches (official) fell on the Town and crews dedicated 1143 hours to quickly restore the Town roadways to normal use, completing plow operations on average 4.5 hours after the snow stopped. A total of 229.75 tons of straight salt and 49 tons of salt mixed with aggregate were put down to control icing.



Looking Ahead

Looking into March, the Streets Division will maintain vigilance for snow storms as this is statistically our snowiest month. Pre-treatment for weeds, identification and scheduling for road shoulder repair and grading operations, as well as crack seal operations are set to begin in March with weather permitting.