

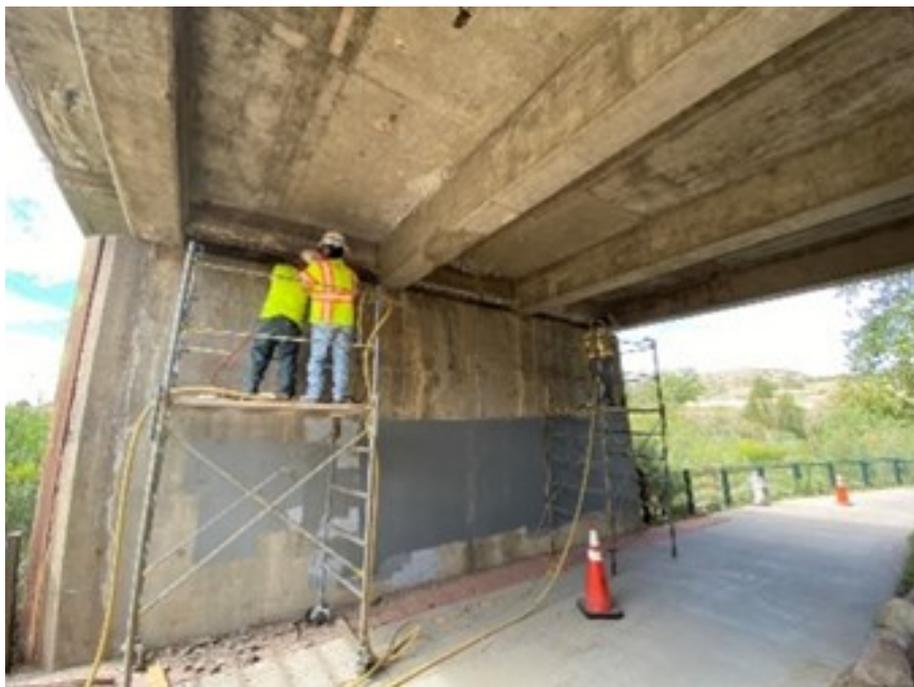


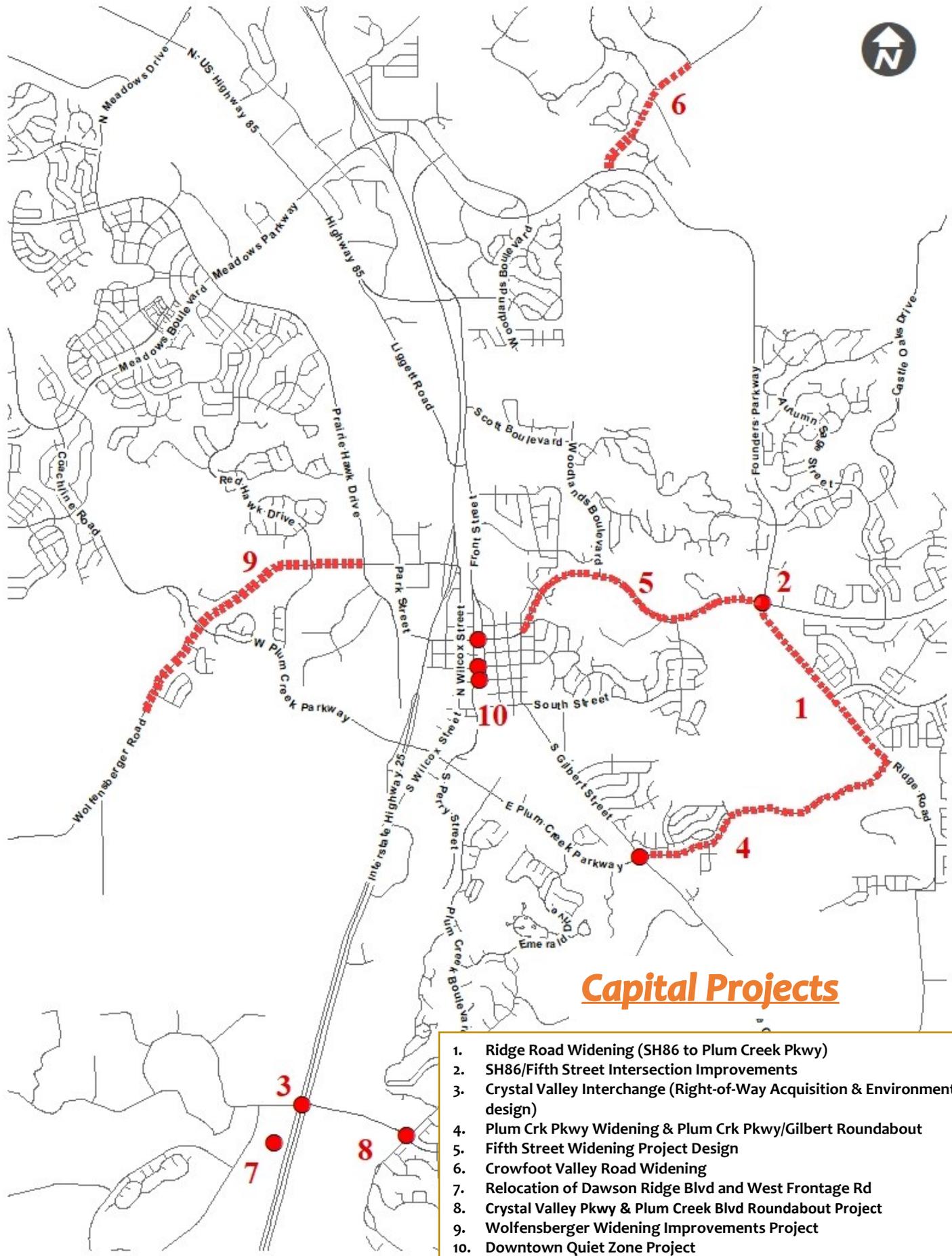
Monthly Report

September 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 TESC BMPs
- Continued surveying
- Continue the relocating of existing utilities
- Continued earthwork on major cuts and fills.
- Completed forming and placing concrete for drop inlets
- Started curb and cutter
- Started fine grading for roadway

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:

- FOR meeting held with project team and CDOT on 9/23
- FOR review resulted in various edits/revisions, DEA working to update
- Additional design scope for electrical/fiber design was requested, DEA working on schedule and pricing to complete
- Coordination for utility relocates is underway and progressing.
- ROW Acquisition is ongoing, three properties are scheduled for closing, awaiting signature from GKT (King Soopers)
- Consultant for Construction Management Services was approved by Town Council, RockSol consulting will provide services. NTP will be mid to late November concurrent with out to bid date.
- RockSol Project Management Contract completed 9/9/22 and closed out

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

- Hyperion Property - Town appraiser continues to work on full acquisition appraisal.
- Boone Property – Discovery and expert disclosures have been completed. Court date is tentatively scheduled for mid-March 2023.
- Dawson Ridge Metro District – On going negotiations with owner. Town appraiser is moving forward with new appraisal without the valuation of the billboards. No movement on lease termination.
- West Side of I-25 – Submitted offer to Westside Investments for the former MSP parcel. Continue negotiations with Douglas County Development Company on remaining parcels.

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

- 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, land use memorandum and separate action memos.
- Design firm continues working on preliminary design and early packet. 30% comments continue to be evaluated and addressed by the design firm.
- Town is reviewing second draft of the TDM strategy memo.
- The Construction Management Services – Benesch and Company was selected as the preferred firm. Town staff is negotiating with the Benesch on total fee, staff is tentatively scheduled to approach Town Council in December with a Service Agreement.

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 (100% Complete) - The following is a summary of activities performed this month:

- Mowing completed throughout site
- Warranty Inspection Completed

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:

- Continue the maintenance of erosion control
- Completed clearing and grubbing
- Continue major cuts and fills
- Continued the installation of storm drain pipe
- Started and completed the installation of sanitary sewer
- Started the installation of headwall for storm drain
- Continue the relocation of utilities

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:

- 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

- Design development from 30% to 90%
- Completed drainage design
- Completed water quality pond design
- Completed roadway design
- Completed construction phasing plans
- Initiated CORE Electric design
- Preparations for 10/3 open house #2

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—A project specific open house has been scheduled for October 27. Town staff is developing a communication plan, and presentation material.

Budget: \$2,000,000 (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:

- Design team continues to work on 90% comments.
- Have met with Lowell property owners to discuss access from Dawson Trails Blvd. Design team is working on an exhibit.

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

- Completing the 90% bid documents, scheduled to advertise is October 20, 2022.

- Continuing to work with CORE on their relocation of existing power lines.
- Continue working on the Temporary Construction Easement (TCE) with adjacent property owners and landscape with-in the TCE. Estimated scheduled to be completed the week of the October 10, 2022.

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 at Red Hawk/Auburn
- Stormwater drainage improvements
- Implementation of on street bike lanes west/east bound

Phase: Planning/Design

- Design survey is under way, should be completed by end of September
- Weekly meetings with business and property owners along the corridor.
- 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.
- Traffic control/ permits for SUE investigation complete and approved. SUE investigation will start October 3 and continue through the end of October.
- Utility coordination meetings ongoing.
- 30% design submittal scheduled for 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:

- Coordination and scheduling with Union Pacific crews
- Submitted Union Pacific permits
- Executed construction contract with TechCON for sidewalk improvements

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. Detection will be finalized at Allen St and Allen Way this week. CDOT ITS has provided the required licensing and the software will be turned on within the next month.
- Phase II of the Town's ATSPM project includes software development and signal timing. Traffic data is being collected in September for signal retiming in October. In August, staff and Kimley-Horn continued determining desired metrics for the dashboard. The new version of ATSPM software was released at the end of August. Kimley-Horn is currently checking for software issues before updating the Town's software. Kimley-Horn will update the Town's ATSPM system and use this system to perform signal retiming in the month of October.

Budget: \$868,700

Targeted Construction Completion: End of year 2023

2022 Safety Projects – This project includes installing RRFBs at five locations, roadway improvements, and safety improvements on Gilbert Street.

- RRFB equipment arrived in the last week of August. The Signs and Markings team have installed all new RRFBs for 2022.
- Pedestrian refuges have been installed at Blackfeather Trail and Trail Boss Lane and South Street and Burgess Drive to support RRFBs, sidewalk extensions have been completed along Mickelson between Mitchell and Turnstone, and a median has been installed at Front Street and Milestone Lane. This project is complete.
- As part of the Gilbert Street PMP Full Depth Replacement Project, speed management improvements including speed cushions, a raised crosswalk, and curb extension were installed. A formal evaluation of speed impacts was completed and showed a decrease in speeds.

- As part of the Wolfensberger Road reconstruction project, we installed a new median that will physically limit lefts out at Kinner Street and the gas station access. The median curb and signage have been installed.

2022 Budget: \$613,000

Targeted Construction Completion: Fall 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 in the planning phase and are proposed at four locations throughout the Town.

2022 Budget: \$58,000

Targeted Construction Completion: Fall 2022

Engineering Division

2022 Pavement Maintenance Program (PMP)

The 2022 PMP will focus its efforts in the South PMP area with additional work taking place on primary streets (E. Loop Rd, Fifth St, Gilbert St, Mikelson Blvd, and Woodlands Blvd).

Concrete Pavement Remove and Replacement Reconstruction

The Concrete Pavement Remove & Replacement Reconstruction project for Mt. Royal Drive/Masters Club & Champions Court began April 25. The contractor is currently doing road reconstruction of Five Iron Drive, Tee Lane and Overview Drive in Champions Court. This project is scheduled to be completed by early October.



Asphalt Overlay Project

The Asphalt Overlay Project began construction April 11. The contractor completed asphalt milling and asphalt patching on East Loop Road this month. Asphalt crews completed a 3" overlay of SMA mix, which was attended by representative of CAPA. The project will be submitted for 'Best in Colorado' award.



Full Depth Reclamation Project

The Full Depth Reclamation project began April 11. The contractor completed the Players Club area this month, and moved operations to Wolfensberger Road. Project is on track to be completed within allotted contract days and approved budget.



2022 Facilities Parking Lot Improvements Program

The contractor began work on Monday, September 20. The contractor is to perform various surface treatments, from asphalt mill and overlay, slurry seal, seal coat application as well as concrete pavement and curb, gutter and sidewalk repairs. The contractor completed the mill and overlay of the Police Department and Butterfield Park parking lots. The project is on track to be completed within contract time.



Parking lots that are scheduled include the following:

- | | |
|--------------------------------|----------------------------|
| 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

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. Work began with substructure repairs, asphalt milling, repairing of bridge deck, and asphalt overlay on the S. Wilcox bridge. The contractor will move operations to the Plum Creek Parkway bridge over UPRR when the S. Wilcox bridge has been completed. The project is on track to be completed within contract time.



Development Division

Review and Permitting

Development Review - All 55 reviews were completed. No late reviews this month.

Permitting & Inspection – 27 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

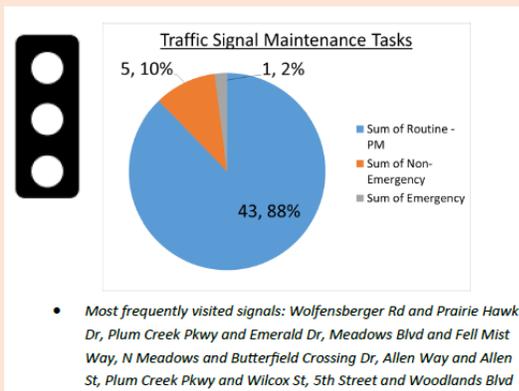
Taxi Voucher Program

For the month of September, the Taxi Voucher Program funded 104 rides; which is a 23% decrease to last year's September total of 136 and a 3% 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 September, 20 individuals used the Taxi service. Of those individuals, 67% of the rides were for work, 16% for shopping trips, and 17% for medical appointments. Thirty-five rides were provided for people without access to a vehicle, 25 rides to seniors, and 44 rides to disabled riders.

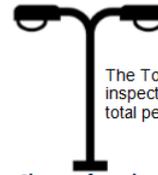
The Castle Rock Senior Center provided 1286 rides in September.

Traffic Engineering and Operations

Traffic Signal Operations and Maintenance



Street Light Operations



Street Light Operations

The Town owned and maintained street lights are inspected on a monthly basis with regard to the total percentage that are operational.



Beacon



Beacon Operations

The Town owned and operated beacons: school zone flashers, pedestrian rapid flashing, yellow flasher, and stop sign red flasher are inspected on a monthly basis with regard to the total percentage that are operational.

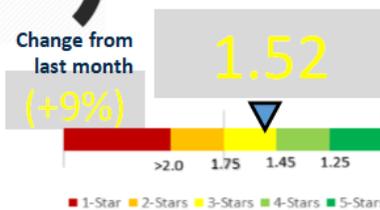


Operations



Travel Time Index (TTI)

Travel time index (TTI) is used to measure the operational condition of primary corridors in Town.



Street Signs and Pavement Marking Maintenance

For the month of September, the team completed 1,880 tasks. Of these tasks, 70 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. We had 101 beacon related tasks, including windshield inspections, and repairs. We did 1,675 tasks related to marking symbol installs and replacements. Other tasks included 28 small projects, and six special events. Local street crosswalk painting is 91% complete.

Transportation Planning

Castle Rock Downtown Wayfinding Sign Plan:

The task order and contract is going through the approval and signature process by Town Departments and once executed the notice to proceed will be issued.

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 September. Town staff is awaiting support petitions from residents on Bandit Drive in Cobblestone Ranch and on Coltin Trail in Crystal Valley Ranch. Once staff receives the petitions, speed studies will be conducted. Public Works staff have informed the Police Department of the complaints for any potential enforcement effort.

DRCOG Transportation Improvement Program (TIP):

Sub-regional grant applications for Call #2 were presented to the DRCOG Board. The Industrial Tributary Trail was approved for \$4.9 million funding. It will connect the Plum Creek Trail to the MAC, and go under the BNSF railroad and Prairie Hawk Drive. The Parks Department will manage the project and contract directly with CDOT.

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.



Technicians working on CRFD ambulance

The Fleet Division continues to keep Castle Rock on the move with a very productive month of September with plenty of preventative maintenance work and preparing new vehicles for service. We completed 118

work orders and processed 129 vehicles for the month. Total output for the month was \$99,956 parts and labor billed out. Technician productivity was also very good for the month of September at 82.3%. And Fleet availability increased to 98.1% which is above our performance measure.

Fleet technicians completed training for hybrid and electric vehicles. Support Technician John Arney is taking fleet management training by APWA.

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

Outcome: Fleet team completed 86.1% 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 98.1% 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 82.3%. 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 September, the Street Operations & Maintenance Division (SO&MD) performed work in the following maintenance operations:

- *Asphalt patching & Pothole repair
- *Street Sweeping
- *Road Shoulder Maintenance
- *Equipment Maintenance
- *Bridge Painting

Asphalt Patching and Pothole Repair

During September, roadway repair was once again the primary focus of the Division. The crews dedicated 561 hours to asphalt patching and pothole repair on asphalt and concrete roadways. 21.6 tons of asphalt millings, 120 lbs of concrete, 390 lbs of cold mix asphalt, and 58.62 tons of hot mix asphalt. These operations are focused on damage repair and mitigation prior the winter season when most asphalt plants will be shutting down.

Street Sweeping

The crews spent 60 hours sweeping the roadways in the Downtown and business areas to maintain cleanliness and make these

areas more inviting. 42 cubic yards of material were removed from the roadways during these operations.

Equipment Maintenance

The Streets Division has been working diligently to prepare the fleet for the upcoming winter season. The crews spent 121 hours maintaining equipment, and fabricating needed parts to ensure the ability to deploy properly.

Streets has also taken delivery of a new plow truck to replace an aging unit. The Fleet Division is currently



going over the finishing touches before the new truck is added to the fleet.

Road Shoulder Maintenance

September saw the Streets Division devote 434 hours to the maintenance of the verge areas and road shoulders. Mowing, trimming, trash removal, and shoulder repair were all undertaken to ensure the integrity of the roadway verges.

Bridge Painting

Progress is being made on the East Castle Oaks bridge. Cleaning is complete and a significant amount has been painted. These efforts will help mitigate the effects the salt used for snow and ice operations have on the bridge. A contractor has been utilized for this year's process due to staffing shortages.

Training

The Streets Division held the annual Snowfighters Training on two occasions in September. This training seeks to refresh old skill and teach new ones to experienced and inexperienced plow drivers alike. The classroom portion focuses on best practices, understanding levels of service, and outlines basic techniques. The hands on portion focuses on driving skills and familiarity of the controls, and the "feel" of the equipment.

Looking Ahead

In October, the Streets crew will continue to prepare for the upcoming snow season, continue vegetation control, training operations, and asphalt repair will be taking a priority while conditions and the availability of asphalt are supportive.