



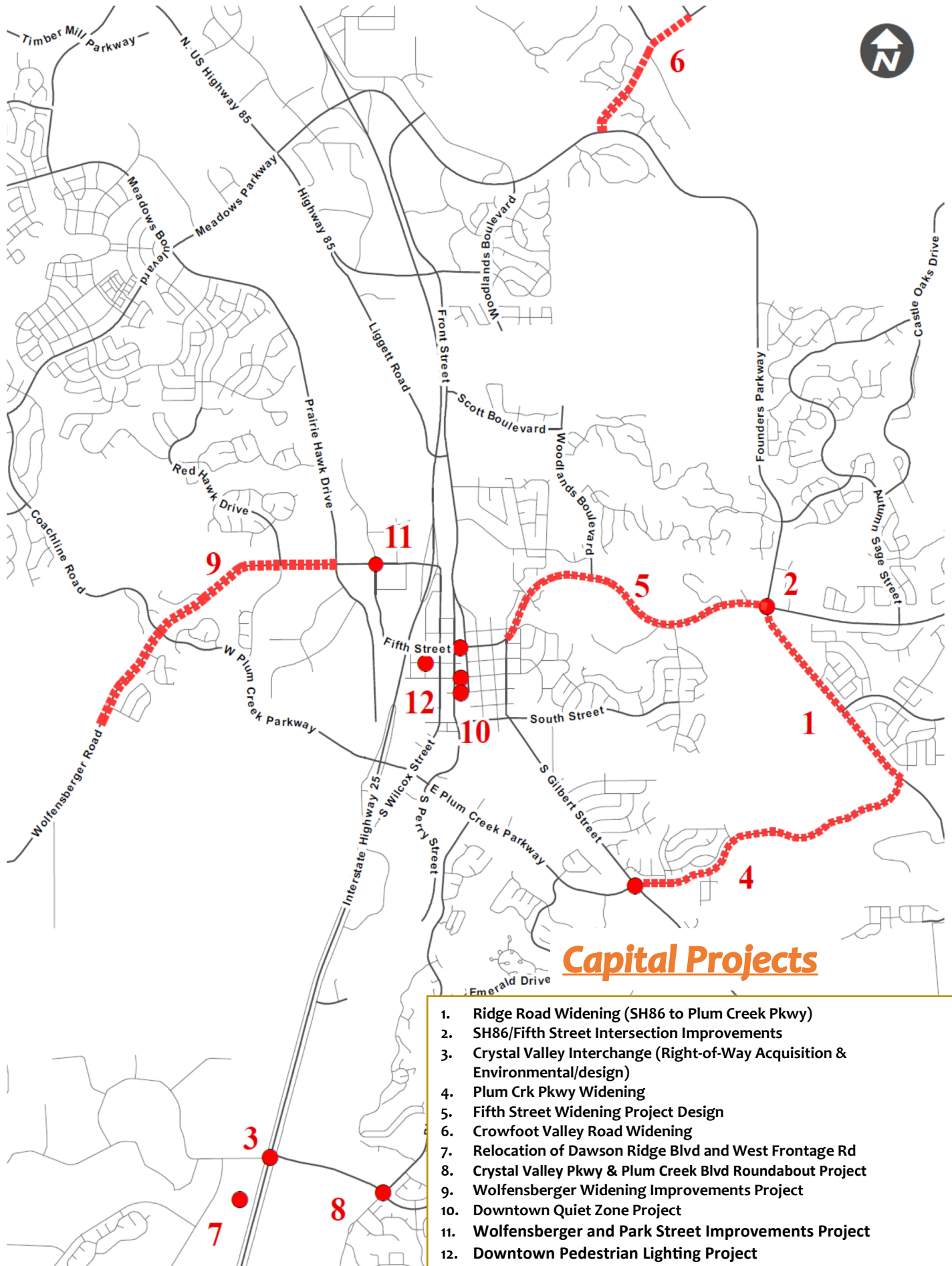
Monthly Report

October 2023

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.





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

- Construction is complete
- Town staff and contractor working on punchlist items

Budget: \$5,225,000 total funding

ROW Acquisition: Complete

Targeted Construction Completion: Fall 2023

2. **Founders Parkway (SH86)/Fifth Street Intersection “Four Corners” Improvements** – This project will enhance one of the primary intersections in Town. Founders Parkway, SH-86, Ridge Road and Fifth Street intersect at the project location. Each leg of the intersection is classified as a major arterial facility and the intersection is currently operating above its capacity. The improvements this project will implement include:

- Intersection will remain a full movement four-way intersection. Additional turn lanes and acceleration lanes will be added.
- Traffic signal improvements will be made to incorporate the larger intersection.
- Pedestrian and bicycle improvements will be constructed on all four sides of the project.
- Stormwater detention and water quality improvements will be constructed to capture the additional surface volume from the new intersection.

Phase: Construction

- Construction started on October 4th.

Budget: \$12,400,000 total funding

***Targeted Construction Completion:** Summer 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

- The Town’s Legal team is communicating with the owner of the remaining parcel, Douglas County Development Company. An ordinance to authorize the ROW swap with Westside Investments for a portion of the existing Territorial Road was approved by Town Council on November 7 and it is anticipated the parcels will be acquired prior to start of construction on CVI Package 2 in late 2023.
- East side of I-25 – Town has acquired immediate possession of the Hyperion parcel. The Town’s Legal team is communicating with the owner of the remaining parcel, Douglas County Development Company. Valuation trail for Boone parcel has been pushed to February 5, 2024.

Budget: \$2,430,000 total funding

Acquisition Completion: End of 2023

Phase—Design: - Interchange Access Request and Environ-

mental Assessment Reevaluation, and Design

Package 1

- Town received the US Army Corps of Engineers (USACE) decision for jurisdictional determination. Gambel Ridge drainage was found to be non-jurisdictional.
- Project team working on late comments from FHWA on the re-evals.
- Awaiting clearance from CDOT to proceed with Package 1 construction.

Package 2

- Anticipating approval of the TDM strategies and System Level Study at the November Transportation Commission meeting.
- Design firm continues working on design for Package 2, this included the new request for a single point merge on I-25, 100% design package was submitted in October.
- Maintenance IGA is being revised to include TDM strategies.

Budget: \$7,580,000 total funding

Design Completion: End of 2023

Targeted Construction Completion: Fall of 2026

4. **Plum Creek Parkway Widening Phase 2** – This project will implement the Transportation Master Plan’s identified improvements for this corridor which includes the addition of the remaining two lanes of the master planned four-lane roadway on Plum Creek Parkway between Eaton Street and Ridge Road. The project will also construct bicycle and pedestrian improvements in addition to 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:

- Construction is complete
- Staff and contractor working on punchlist items
- Staff continues meeting with contractor on non-compliance Rip-Rap channel

Budget: \$7,530,000 total funding

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

- Commence the performance of land appraisals for project private property interests

Budget: \$2,700,000 total funding

Design Completion: September 2023

Right-of-way acquisition: Summer 2024

***Targeted Construction Completion:** 2027

6. **Crowfoot Valley Road Widening** – This project involves the widening of Crowfoot Valley Road from the intersection of Knobcone Drive to the Town boundary. The objective of this project is to reduce congestion due to current and forecasted traffic volumes, as well as safety improvements for both vehicles and pedestrians alike. The project will include:

- Roadway widening to four through lanes
- Right and left turn auxiliary lanes where warranted
- Signal at Sapphire Pointe intersection
- Complete sidewalks throughout the project corridor

Phase: Design

- Completed and approved 10% design
- Received pricing from signal pole manufactures
- Coordinated project needs with utility providers
- Continued development of project design

Budget: \$810,000 total funding

ROW Acquisition: Late 2023 –2024

Design Completion: Early 2024

***Targeted Construction Completion:** Early 2025

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:

- Revised 100% plans are in review with the Town
- Town continues to explore coordinating management of the Town's portion of Dawson Trails Blvd construction with Westside Investments to gain efficiencies and cost savings
- IGA between Town and Dawson Trail Metro District for the construction management of Dawson Trails Blvd concurrent with the interchange construction was approved by Town Council on October 17.

Budget: \$299,000 total funding

Design Completion: Fall 2023

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, the existing traffic control will not be the most efficient and could contribute toward increased accidents. This project will install a two lane 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 Intersection has been constructed.

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Phase – Construction

- Soil stabilization continues behind curb and sidewalk.
- Paving operations continue with top mat of asphalt pavement the week on November 6.
- Anticipating full access by November 30.

Budget: \$3,500,000 total funding

Targeted Construction Completion: Fall 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
- Stormwater drainage improvements
- Implementation of on street bike lanes West/East bound

Phase: Planning/Design

- Revised 30% design submitted to the Town, design has been put on pause
- Working on service agreements for ROW acquisition

Budget: \$2,500,000 total funding

Design Completion: TBD

Right of Way Acquisition: TBD

***Targeted Construction Completion:** TBD

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 coordination with Union Pacific for railroad crossing gate installations anticipated to be constructed in December 2023

Budget: \$1,800,000 total funding

Targeted Construction Completion: Early 2024

11. Wolfensberger and Park Street Improvements Project-

Wolfensberger Road is a major arterial connection for local and regional travel between the westerly portions of Town and I-25. Roadway and pedestrian improvements for Wolfensberger and Park Street have been identified to increase intersection operations and provide better pedestrian access to the Downtown area.

The Wolfensberger and Park Street Improvements Project will complete all design elements for the implementation of pedestrian and transportation improvements.

- Relocate traffic signal pole
- Increase sidewalk width
- Replace existing ADA ramps
- Construct additional turn lane on Park Street

Phase- Planning/Design

- Obtained bids from contractors, 30% higher than available budget
- Came to agreement with adjacent property owners for acquisitions
- Staff identifying scope refinement opportunities to lower construction cost
- Re-advertise for construction late 2023

Budget: \$57,000

Design Completion: May 2023

Right of Way Acquisition: October 2023

***Target Construction Completed:** pending acceptable bids

12. Downtown Pedestrian Lighting Project—In 2019, the Town was awarded a grant to fund safety improvements in the Downtown area. The grant is to be used to provide improvements to existing areas with known safety issues. The Town has identified various areas in the Downtown area that are not properly lit to Town standards. The Town will work to design and construct additional lighting in areas that currently do not meet our criteria to ensure safe traveling corridors for pedestrians and motorists in the downtown area.

Elements that will be included in this project are:

- Photometric analysis of the downtown area
- Identify locations where additional lighting is needed
- Design and construct necessary facilities to provide power to lighting locations

Phase - Planning/Design

- Olsson completed and submitted conceptual plans to the Town and CDOT
- Work continues on design
- Historic Preservation Board would like to review plans once they get to a more complete set to give approval
- No ROW is necessary for project

- An assessment of lighting along same corridors in downtown area was submitted for Town use along with conceptual design

Budget: \$600,000 total funding

Design Completion: November 2023

Right of Way Acquisition: N/A

***Targeted Construction Completion:** December 2023

**These are subject to change based on adjusted revenue forecasts and results of bids received.*

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 to improve daily operations and communications between the Traffic Management Center and each intersection.

- Staff is monitoring the CDOT managed, adaptive signal system project that has implemented adaptive signal timing on Founders Parkway, and Meadows Parkway, and Factory Shops Boulevard. Eight abutting Town signals are included in the system. The Kadence system is continuing to be monitored for successful operation. The project team effort has been paused while the consultant contract is revised.
- Phase II of the Town's ATSPM project includes software development and signal timing. ATSPM Dashboard training was completed with the consultant and CDOT staff. Consultant has provided an updated draft of the Signal System Management Plan to incorporate these performance metrics for Town staff to review.
- The Town is awaiting a draft IGA from CDOT for Connected Vehicle hardware. The project is delayed due to year end priorities at CDOT. Once executed, this two-year project will kickoff in earnest. The Town's project scope focuses on messaging intersection safety and driver awareness of operations and maintenance at high crash locations using connected vehicle technology.

Budget: \$868,700

Targeted Construction Completion: End of year 2024

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

- Construction is complete on intersection safety improvements and a patio at 4th and Jerry.
- Construction is complete on pedestrian refuges at Mitchell and Fallon, Mitchell and Cass, Woodlands and Trail Boss, and Foothills and Morningview Lane. Construction is also complete on intersection safety improvements at 5th and Jerry and a raised crosswalk at Valley and South.
- The consultant for the Limelight ITS system has provided controller logic and system design as well as cost

estimates for various design options that are all within budget. Staff are recommending a hardwired unit for better reliability and similar benefit to cost and is proceeding to get three construction quotes.

Budget: \$410,000

Construction Completion: Winter 2023

Illuminated Street Name Signs – Town staff chose Gades Sales Co. for the 2023 illuminated street name sign materials. All signs have been received by the Town; staff is currently awaiting additional mounting hardware that is delayed in manufacturing. Installation of signs cannot proceed without the necessary mounting hardware at Founders Pkwy and Rising Sun, Founders Pkwy and Ridge Road (Four Corners), Wolfensberger and Park St, and Wolfensberger and Caprice.

2022 & 2023 PO: \$73,582

Targeted Construction Completion: Fall 2023

Rectangular Rapid Flashing Beacons (RRFB) – Town staff has determined six locations to install RRFBs for 2023. The RRFBs will be installed in locations in which they are the most effective and beneficial to the traveling public. Supplemental pedestrian refuges are being recommended for three of the locations. Equipment has been delivered and received by the Town. Staff plans to build and install signs in in October and install all of them by end of November.

2023 Total Safety Budget: \$90,000

Targeted Construction Completion: Fall 2023

Engineering Division

2023 Pavement Maintenance Program (PMP)

The 2023 PMP will focus its efforts in the East PMP area with additional work taking place on primary streets (Second Street, Fourth Street, Mikelson Blvd., and Woodlands Blvd.). A section of Enderud Blvd., as well as certain residential neighborhood streets, will see reconstruction this year.

Sidewalk, Curb and Gutter

The Sidewalk, Curb and Gutter project was completed in the month of June. The contractor completed all punchlist items. The project came in under contract time and budget.

Asphalt Overlay

The Asphalt Overlay Project continued through the month of October. The asphalt patching, asphalt milling and asphalt paving are proceeding and on track to be completed in November.

Full Depth Reclamation

The Full Depth Reclamation continues through the month of October. The work continued through October and is progressing in a clockwise manner. Reclaiming and paving operations are expected to begin on Enderud Blvd. at the end of the month. The project is on track to be completed in November.



Miscellaneous Concrete

The Miscellaneous Concrete Project began Monday, September 18 with the replacement of identified damaged curb, gutter and sidewalk around town. These are areas that residents and other Town Departments submitted to Public Works throughout the year. The contractor will also be upgrading existing ADA ramps in designated locations.



Slurry Seal

The Slurry Seal project was completed in the month of July. The contractor has completed punchlist items and the required sweeping.

2023 Facilities Parking Lot Improvements Program

The contractor completed reconstruction procedure of Gemstone Park. The contractor will 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 program is expected to be complete within contract time.



Parking lots that are scheduled include the following:

Founder's Fire Station #153
Prairie Hawk Fire Station #154
Founder's Treatment Plant

Gemstone Park Parking Lot
Weaver II Well Field
Ray Waterman Treatment Plant

Work is scheduled to be completed by November 3.

2023 Bridge Maintenance Program (BMP)

The bridge identified for necessary repairs in 2024 is the Plum Creek Parkway over Sellar's Gulch. The staff is working with BA-SIS Partners to complete documents and plans needed for the project bid packet to be advertised in December 2023.

Development Division

Review and Permitting

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

Permitting & Inspection – 9 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

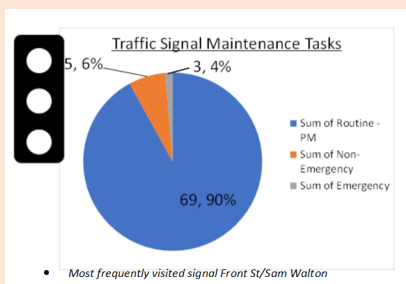
Taxi Voucher Program

For the month of October, the Taxi Voucher Program funded 115 rides; which is a 15% increase to last year's October total of 100, and no significant change from last month's total rides (116). 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 October, 24 different individuals used the Taxi service. Of those rides, 76% were for work, 9% for shopping trips, and 15% for medical appointments. Fifty-seven rides were provided for people without access to a vehicle, 43 rides to seniors, and 43 rides to disabled riders.

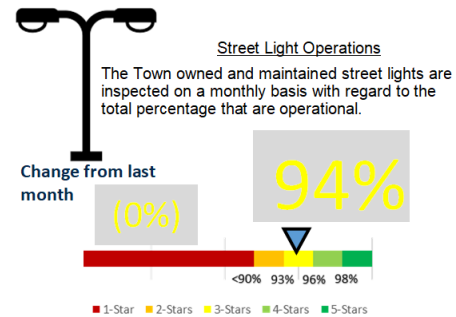
The Castle Rock Senior Center provided a total of 946 rides in October.

Traffic Engineering and Operations

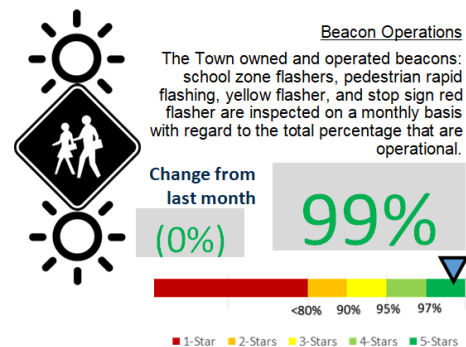
Traffic Signal Operations and Maintenance



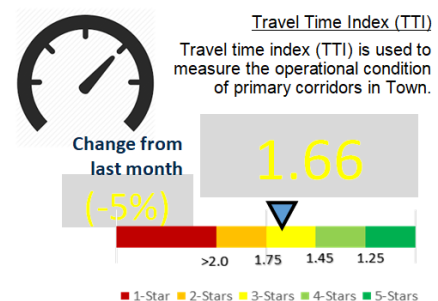
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

For the month of October, the team completed 386 tasks. Of these tasks, 199 of them were sign work activities related to fabrication, installation repairs, replacements, inspections and investigations. We had six beacon related tasks, including windshield inspections, and repairs. One-hundred forty-nine were marking related tasks that include inspections and replacements. Other tasks included 36 small projects, one liquor license posting, three locates, one traffic count, one tree trimming, one special event task and one work zone task.

Marking contractor, Colorado Barricade, is 84% complete for white and 90% complete for yellow long lines. Town Staff paint marking work is 89%, durable thermoplastic marking is 55%, summer sign projects are 55%, and RRFB installs are 10% complete.

Transportation Planning

Castle Rock Downtown Wayfinding Sign Plan:

The consultant has provided staff the sign locations and text for final review. The technical team is currently reviewing the data. A presentation was given to the Chamber of Commerce in October. The final sign design and sign locations were shared. Members of the Chamber commented that phasing of sign installation should take into account survey results with emphasis on directing people to public parking. Another presentation will be given to the Downtown Alliance in early November. The report is expected to be completed in November and shared with Town Council in December.

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 October. Speed data for Wildflower Way and Villageview Lane have been completed. Town staff is verifying the results of the study. The resident on Arabella Drive was notified that the street did qualify for the program. Staff is waiting to hear if he still wants to proceed with the process. Town staff has completed the proposed plan for N. Meadows Drive which was shared with the residents in the study area. Speed data for Foothills Drive did not show a speeding problem and therefore no traffic calming changes are recommended. Both N. Meadows and Foothills will be presented to the Public Works Commission and Town Council in November for approval.

DRCOG Transportation Improvement Program (TIP) & Federal Grant Applications:

The Town was contacted by the Multimodal Project Discretionary Grant team asking for additional information on the CVI project. All requested data was provided for them to complete their evaluation. The Industrial Tributary Trail project that received \$5.4 million in DRCOG grant money held their kick off meeting in October. Town staff will continue to pursue other grant opportunities as they are announced.

Fleet Services

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

and safe to operate and that they are providing a service for our community and our residents. Our services support the Police and Fire Departments, Public Works, Parks and Recreation and Castle Rock Water. We also support the important functions of Development Services, Engineering, Traffic, Signs and Markings, the Recreation and Activity Center and Town Hall.

The Fleet Services Division had a busy month performing repair activities and managing vehicle additions and replacements. Below is a snap shot of the Fleet Division activities this past month.

KPI's

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

- **Outcome:** Fleet Availability was 98%. Our technicians are doing a great job keeping our fleet available for our customers.

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

- **Outcome:** Fleet team completed 78% of the work orders within 48-hours of opening repair requests or service requests. Completion times ticked up this month as our focus shifted to more routine preventative maintenance.

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

- **Outcome:** Technician productivity was 74%. Work flows continue at a consistent pace with the majority of time spent on direct labor and training activities.

Productivity

Fleet completed 123 work orders in October. Most of our repairs were part of our preventative maintenance (pm) program which is a very important to maintaining our assets. The technicians do a great job finding additional repairs during the pm's which helps prevent unscheduled repairs and breakdowns. The technicians also made a number of unscheduled repairs such as flat tires and dead batteries as the weather patterns have changed. Our first snow storm of the year resulted in higher than expected snow totals and two of our technicians were called in after hours to get two snow plows back in service. We will continue to prep the fleet and the Service Center for the upcoming winter months.

Shop Operations and Management

Fleet welcomed Nicole Lund to the team in October as our Parts and Supply Specialist. We are excited to have her on the team and look forward to training her in the new role. She brings good energy and a business degree from Arizona State University. Procurement and planning for new vehicles continues to be a

main focus for our leadership team. We are getting very close to receiving seven new police cars. The last update, despite the strike, is that we should receive them in late November. We have received most of the police equipment to install on these cars and make it a police car. We are excited to begin this in-house project very soon. Vehicle accidents and hail damage claims continue to be high this year. We are working with our body shops to get these vehicles repaired and back in service. Our vendors are experiencing supply delays due to the UAW strike which is pushing our repairs times out by weeks. The Police Department had significant damage to three of their units in October, taking them out of service. Estimates for these cars are complete and we are making them a high priority with the vendor and working with Legal to get these repaired and back in service. Management is excited about the direction Fleet is heading and proud of the accomplishments by the team this year. The Fleet Technicians and support personnel are completing more work and producing at a high level. We are extremely grateful for their commitment to excellence in providing great work for our customers and our stakeholders.

Street Operations & Maintenance Division

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

- | | |
|----------------------------|-------------------------|
| *Patching & Pothole Repair | *Street Sweeping |
| *Crack Seal Operations | *Road Verge Maintenance |
| *Road Shoulder Maintenance | *Training |

Asphalt and Pothole Repair

The asphalt patching operations were in full swing during the month of October. The crews dedicated 387.5 hours to Asphalt Patching and Pothole repair throughout Town. The crews used 51.49 tons of hot mix asphalt to undertake these repairs. The crews typically use cold mix asphalt for potholes but because of the lesser cost and availability of excess hot mix from patching operations, crews used the left-over mix for the vast majority of pothole repairs for the month.

Crack Seal Operations

The Streets Division continued with Pre-PMP Crack Seal Operations through October. The team worked 790.54 hours to complete 30.34 lane miles of Town roadway in the west PMP region. The crews used 26,600 pounds of material to seal the roads to prevent water intrusion into the subgrade.

Road Shoulder Maintenance

In October, the crews worked to repair the road shoulders along 2.74 line miles of roadway. The damages were primarily caused by water runoff and regular tire wear. The crews replaced the shoulder material, graded, and compacted it to re-establish the smooth transition of the road to the verge area and maintain proper drainage.

Street Sweeping

Street Sweeping operations continued with AM Downtown and Business area sweeping. The crews dedicated 71 hours to cleaning 140 lane miles of roadway in these areas. The crews removed 50.75 Cubic yards of material from the roads during this operation. Planned Fall Sweeping will likely begin in November when the majority of the leaves have fallen.

Road Verge Maintenance

Road Verge Maintenance operations, primarily consisting of Mowing, Trimming, and Trash Pickup, were carried out during October. The crews worked a total of 19 hours finishing up the last few miles of these tasks for the season.

Training

The team undertook training in various job related areas, dedicating 295 hours with LTAP classes and CIRSA trainings all geared toward enhancing the crews capabilities and safety.

Looking Ahead

In November, the team will be focused on maintaining vigilance for snow, beginning the Town wide Fall Sweeping Operation. Also on the agenda is asphalt repair for as long as hot mix is available, as well as the completion of the Pre-PMP Crack Seal operation.