



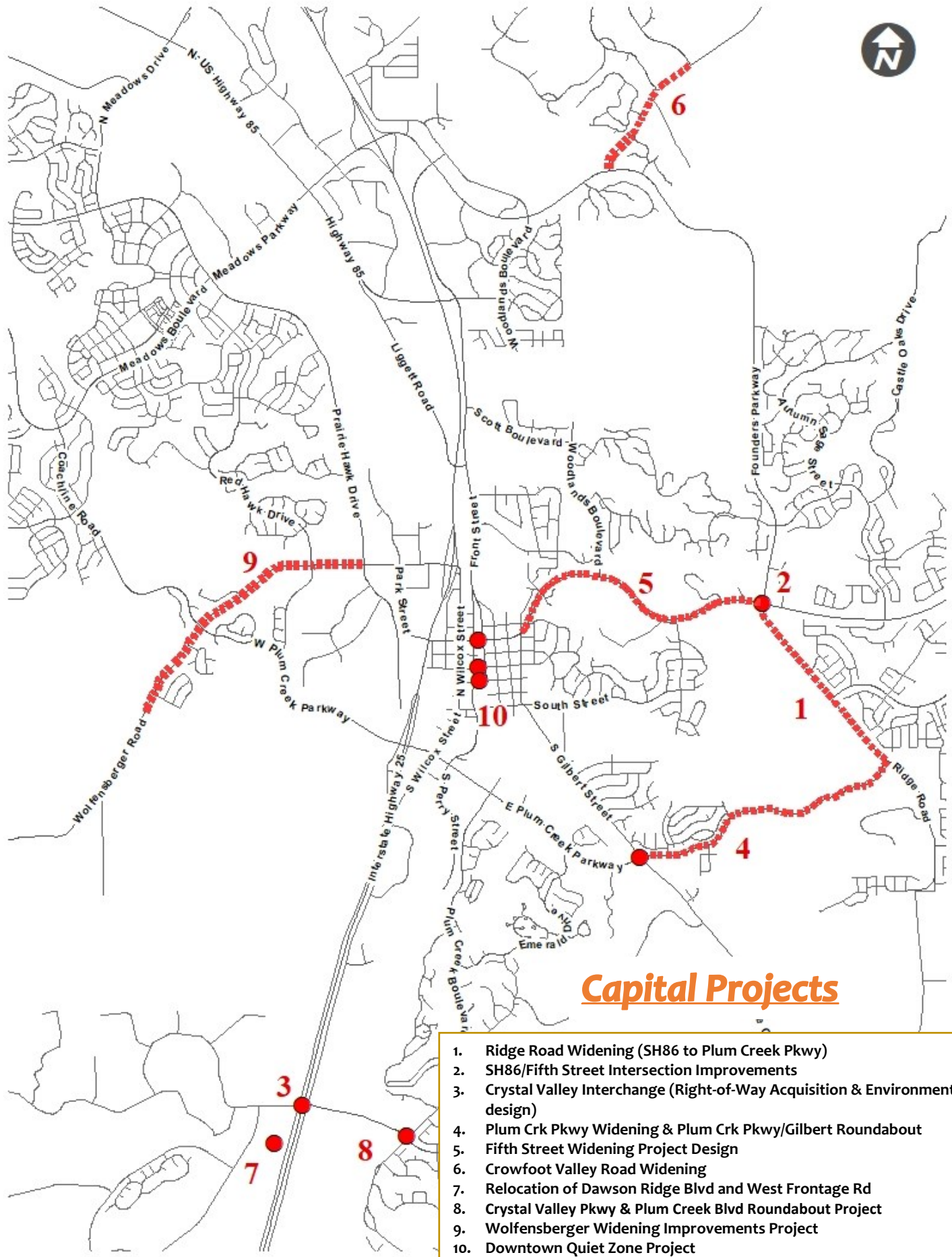
Monthly Report

August 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 clearing and grubbing
- Continued surveying
- Continued relocating of existing utilities
- Continued earthwork on major cuts and fills.
- Continued forming and placing concrete for drop inlets

Budget: \$5,225,000

ROW Acquisition:

- Condemnation commission panel being selected for final actuation
- Anticipated completion by late Summer 2022

Targeted Construction Completion: Fall 2022

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 plan set continues to be developed per TOCR and CDOT comments from previous submittal
- FOR review with CDOT will take place in September
- Coordination for utility relocates is underway and progressing
- ROW acquisition is ongoing, two properties preparing for closing and two properties in final stages of signing offer letters
- Consultant for Construction Management Services was approved by Town Council, RockSol consulting will provide services

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 - Revised ROW plans were approved by CDOT; Town appraiser was given notice to start new full take appraisal
- Boone Property – Discovery and expert disclosures have been completed; Court date is pending
- Dawson Ridge Metro District – On going negotiations with owner; Revised offer is needed if bill board lease is terminated
- West Side of I-25 – Submitted 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 from the Town have been submitted to the design firm
- Design team received comments from CDOT on Initial TDM strategies memo; Design team is evaluating, and met with CDOT for further clarification and direction
- The Construction Management Services – Two proposals were received; Selection panel is reviewing and scoring; If needed interviews will be set for mid-September

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:

- Project team obtaining quotes for mow and weed treatment throughout project limits

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
- Continue clearing and grubbing
- Continue earthwork, major cuts and fills
- Started the installation of storm drain pipe
- Retaining wall materials in production
- Large manholes in production

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:

- 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%
- Refining roadside drainage design
- Refining retaining wall design details
- 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— Town staff is developing a communication plan to get feedback from adjacent neighborhoods on the two conceptual plans for improvement along the corridor by September.

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

ROW Acquisition: Winter 2022 –2023

Design Completion: Winter 2022-2023

Targeted Construction Completion: Fall 2023

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:

- 90% comments have been submitted to the design team

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 2022, bid in October 2022, and constructed by Summer 2023.

Phase: Design

- Continuing to work on the 90% design set sheets; Expecting the 90% design set (plans, specifications and cost estimate) to be submitted to the Town for review on Tuesday August 29th
- Continuing to work with CORE on their relocation of existing power lines
- Continue working on the Temporary Construction Easements (TCE) with adjacent property owners and landscape with-in the TCE
- Continue working on the construction phasing plan

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
- 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
- Utility coordination meetings ongoing
- 30% Design submittal scheduled for February 2023

Budget: \$2,500,000

Design Completion: Fall 2023

Right of Way Acquisition: 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: Design - The following is a summary of activities performed this month:

- Prepare construction contract for Town Council approval
- Set pre-construction meeting
- Continue coordination with Union Pacific representatives

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 at Front and Milestone was completed the week of June 13th. The consultant is waiting on CDOT ITS to purchase a software package for final install and operational turn on. Initial operation is set for later this summer.
- 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.

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 are preparing for installation at five locations including Meadows Boulevard and Shane Valley Trail, Blackfeather Lane and Trail Boss Lane, South Street and Burgess Drive, South Street and Wilcox Street, and Gilbert Street and First Street.
- 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 will be complete when striping changes are made in the next few weeks.
- 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. The community feedback thus far has supported the new devices, one resident is concerned about additional noise from the cushions. A formal evaluation of speed impacts will be complete in early September.
- As part of the Wolfensberger Road reconstruction project beginning in September, we will be installing a new median that will prohibit lefts out at Kinner Street. This will remove vehicle conflicts and reduce the high crash rate at this location.

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).

Sidewalk, Curb and Gutter

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

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 completed the road reconstruction in Masters Club Circle and Masters Point. The contractor moved operations to Champions Court.



Slurry Seal Project

The Slurry Seal project was completed in the month of August. The contractor completed all punchlist items and the project came in under contract time and budget.

Asphalt Overlay Project

The Asphalt Overlay Project began construction April 11. The contractor completed asphalt milling and asphalt overlay on Stafford Circle and Gilbert Street this month. The asphalt crews moved their operations to Eveningglow Way and Antelope Ridge as well as E. Loop Road in the Crystal Valley area.

Full Depth Reclamation Project

The Full Depth Reclamation project began April 11. The contractor completed the Baldwin Park and Baldwin Ranch areas in August, and moved operations into The Peninsula subdivision. The project is on track to be completed within allotted contract days and approved budget.



2022 Facilities Parking Lot Improvements Program

This year's maintenance program will see needed improvement made to nine (9) parking lots from various Town Departments. These parking lots will see various improvements such as; curb, gutter & sidewalk replacement, asphalt mill and overlay, asphalt patching, slurry seal and seal coat. The project is scheduled to begin in September.

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 is scheduled to begin in late August with repairs to substructure. Asphalt mill and overlay of the bridge deck on the S. Wilcox bridge, is scheduled for September 7-8, 2022.

Development Division

Review and Permitting

Development Review - All 40 reviews were completed. No late reviews this month.

Permitting & Inspection – 16 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

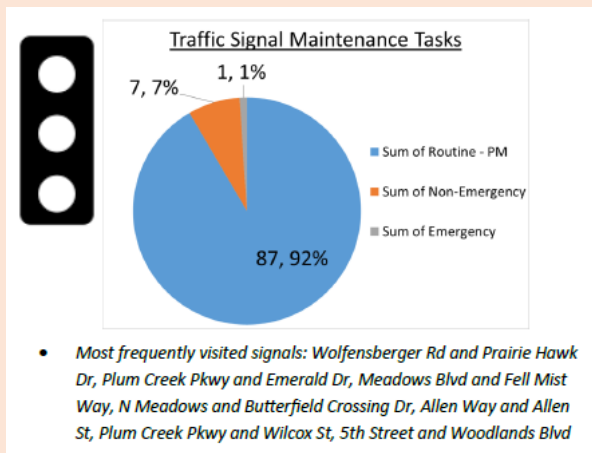
Taxi Voucher Program

For the month of August, the Taxi Voucher Program funded 107 rides; which is a 15% decrease to last year's August total of 129 and a 30% increase from last month's total rides. Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do not have access to a vehicle. In August, 25 individuals used the Taxi service. Of those individuals, 66% of the rides were for work, 12% for shopping trips, and 22% for medical appointments. Thirty-five rides were provided for people without access to a vehicle, 26 rides to seniors, and 46 rides to disabled riders.

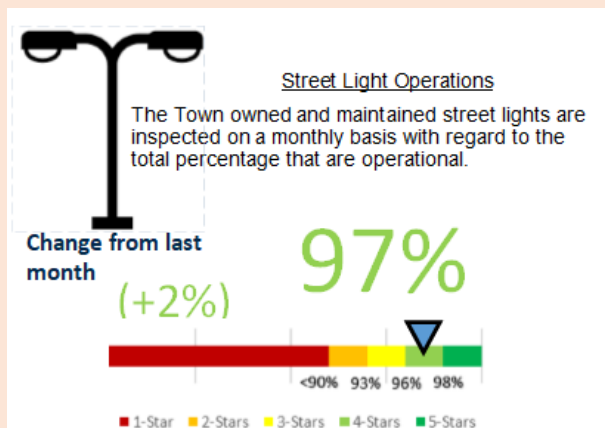
The Castle Rock Senior Center provided 925 rides in August.

Traffic Engineering and Operations

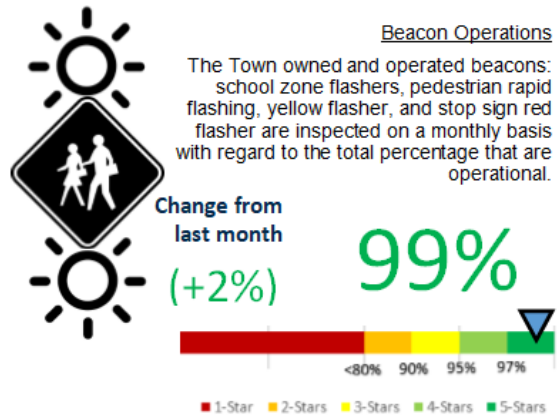
Traffic Signal Operations and Maintenance



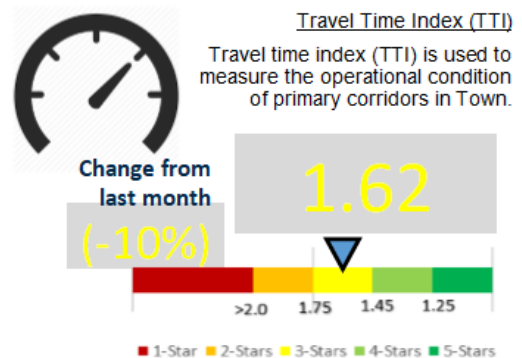
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

For the month of August, the team completed 2,324 tasks. Of these tasks, 95 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. We had 230 beacon related tasks, including windshield inspections, and repairs. We did 1,931 tasks related to marking symbol installs and replacements. Other tasks included 50 small projects, 10 special events, several liquor license postings, one delineator task, one core drill task, and one traffic count task. Local street crosswalk painting is 69% complete.

Transportation Planning

Castle Rock Downtown Alley Master Plan:

The final invoice and reimbursement form was sent to CDOT for processing. Upon payment this will close the project out.

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. Two new inquiries were received in August. A resident on Bandit Drive in Cobblestone Ranch and on Coltin Trail in Crystal Valley Ranch were sent support petitions and the policy document. Staff is still awaiting

petitions to be returned before a speed study can be conducted. Public Works staff has informed the Police Department of the complaints for any potential enforcement effort.

Downtown Castle Rock Grants:

The final reimbursement forms for the Revitalizing Main Street grant were sent to CDOT for processing. Upon payment this will close out the project.

DRCOG Transportation Improvement Program (TIP):

The Douglas County Steering Committee selected sub-regional grant applications for Call #2. The Industrial Tributary Trail was recommended for \$4.9 million funding. The project will connect Plum Creek Trail to the MAC, and go under the BNSF railroad and Prairie Hawk Drive. Portions of the trail will be constructed by Miller's Landing and ACME developments. These recommendations will be presented to the DRCOG Board for adoption in September.

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 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 continues to keep Castle Rock on the move with a very busy month of August with plenty of preventative maintenance work and preparing new vehicles for service. We completed 156 work orders and processed 159 vehicles for the month. Total output for the month was \$109,314 parts and labor billed out. Technician productivity was also very good for the month of August at 81.7%. And Fleet availability increased to 97.7% which is above our performance measure.

Fleet also put into service an vac trailer for CRW and the first all electric vehicle for Public Works a Mustang-MachE for use as a pool vehicle.



Electric vehicle for Public Works

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

Outcome: The Fleet team completed 85.5% 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 97.7% 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 81.7%. 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 August, the Street Operations & Maintenance Division (SO&MD) performed work in the following maintenance operations:

- *Asphalt patching & Pothole repair
- *Equipment Maintenance
- *Street Sweeping
- *Special operations

Asphalt Patching and Pothole Repair

In the month of August, Streets Division crews primarily focused on roadway repair. The crews dedicated 1356 hours to asphalt patching and pothole repair. In all, 113.3 tons of hot mix asphalt and nearly ¼ ton of cold mix asphalt were used to execute various roadway repairs throughout Town

Street Sweeping

The Streets Division Crews worked 167.5 hours towards cleaning the Town roadways. The crews continued with the Downtown morning sweeping program as well as responded to numerous sweeping requests from spilled material or runoff in the roadways.

Equipment Maintenance

The Streets Division, in anticipation of the snow season, is ramping up efforts to ensure the readiness of snow equipment is maintained. The crews spent 155 hours maintaining equipment, and 75 hours fabricating parts for plows in order to keep these assets serviceable.

Special Operations

The Streets Division has completed numerous special operations in August, the largest was the creation of a newer, larger snow storage area. This area replaces an older, smaller facility and will allow the Town to store snow from Downtown snow removal operations and permit it to melt. In addition to this, 2500 tons of ice slicer was received and stored in preparation for the upcoming snow season.



Looking Ahead

In September, 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.