



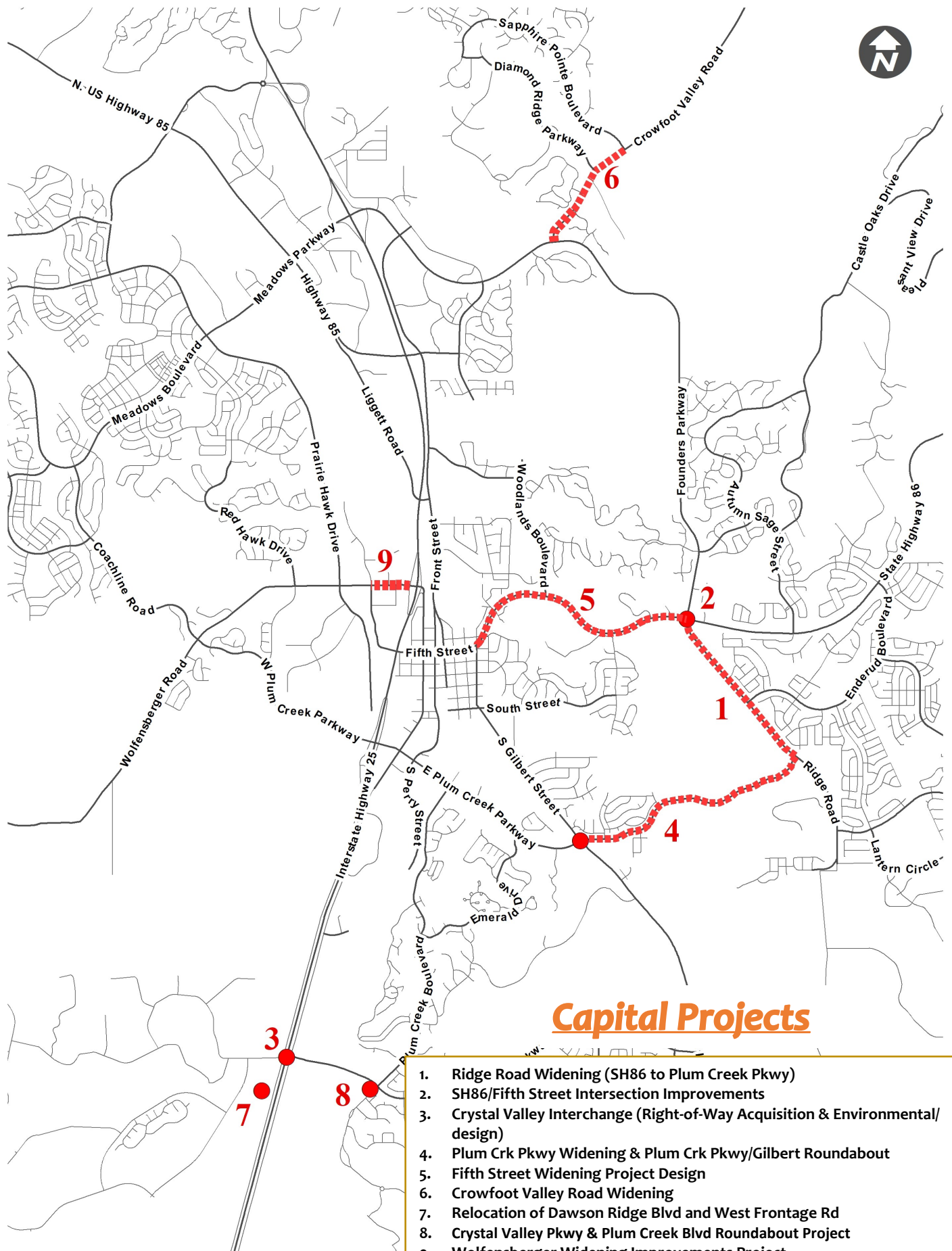
Monthly Report

April 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.





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

- Design completed and put out for competitive bid

Phase - Construction:

- Town Council approved construction contract with Schmidt for project general contractor
- Construction is anticipated to begin in early May and be completed by end of October 2022
- Prairie dog relocation issue came up recently and is being worked through to expedite relocation ahead of new lanes construction

Budget: \$5,225,000

ROW Acquisition: Late Spring 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:

- 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:

- Anticipating FOR 90% plans from consultant for review in May
- Utility coordination with CORE, Zayo and Town for relocations
- IGA with Douglas County approved by Town Council on April 5

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

Design Completion: 3rd quarter 2022

ROW Acquisition: 2nd quarter 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

- Acquisition Services
 - o Finalize survey for ROW plan revisions

- o Revise the ROW acquisition as a result of the preferred alternative configuration of the project on the Hyperion property
- o West Side of I-25 – The remaining property is in negotiation

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

- Solicited for ICE contractor and received proposals for selection
- 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
- Continuing work on TDM strategies report
- Preliminary design continues
- Working on structure and roadway innovations and layout
- Continued coordination with utility companies
- Continued coordination with Dawson Trails Blvd consultant

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

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:

- Working with contractor for Baldwin Park restoration
- Executed final change orders with prime contractor to begin final advertisement/closeout

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

Completion: Complete

Phase 2: Plum Creek Pkwy Widening (Eaton to Ridge): Design and ROW Acquisition (98% Complete) – The following is a summary of design activities performed this month:

- Continued coordination efforts with stakeholders relat-

ed to future utilities

- ESI is the low bidder for the construction of the widening project
- Expected construction contract approval for PWC and Town Council on 6/6 and 6/7

Design & ROW Completion: Design—Complete; ROW—May 2022

Targeted Construction Completion: Winter 2022-2023

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 (15% Complete)

Preliminary 30% design continues with Town Council approval of 4-lane alternative

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: Awaiting Douglas County comments on Town review comments

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

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:

- The project continues design
- Geotech work continues on the boring and development of pavement design
- Working through drainage concept and earthwork

Budget: \$299,000

Design Completion: December 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 June 2022, bid in June 2022, and constructed by Summer 2023.

Phase: Design -

- Submitted the 30% plan review for Town review comments
- Continue roundabout design

Budget: \$400,000

Design Completion: June 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—

- Posted RFP for Design on 4/18
- Held preproposal conference for design

Budget: \$2,500,000

Design Completion: March 2023

Right of Way Acquisition: 2023

Construction: 2024

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, Meadows Parkway, and Factory Shops Boulevard. Eight abutting Town signals will be included in the system. The adaptive system was estimated to be operational by April 2022, but the date has been pushed back until May 2022.
- The Town's ATSPM project is broken into two phases. Phase I includes detection purchase and installation at 15 intersections. Adiona Transportation Solutions completed Phase I last week except for two faulty cameras. Phase II includes software development and signal timing. Town staff and Kimley-Horn are brainstorming desired metrics for the dashboard creation.
- The Town is identifying detection upgrades at four intersections in 2023. Detection was replaced at Factory Shops Blvd and Promenade Pkwy; Factory Shops Blvd and Outlet Access; Front and Ligget; and Front and Sam Walton 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.

- The Butterfield Crossing Drive raised crosswalk was replaced on April 9th. Town staff are conducting a before and after analysis of speeds along the corridor.
- RRFBs will be installed at South Street and Wilcox Street; Blackfeather Trail and Trail Boss Lane; Meadows Boulevard and Shane Valley Trail; South Street and Burgess Drive; and at Gilbert Street and First Street in summer 2022.
- Roadway improvements to be completed in summer 2022 include pedestrian refuges at Blackfeather Trail and Trail Boss Lane and South Street and Burgess Drive to support RRFBs, and median enhancements at Front Street and Milestone Lane identified in the recent Crash Facts Report, and sidewalk extensions on Mickelson Boulevard and Turnstone Avenue, and Mickelson Boulevard and Bonner Street to support a Safe Route to School Program.
- As part of the Gilbert Street PMP Full Depth Replace-

ment Project, speed management improvements including speed cushions, a raised crosswalk, and curb extension is planned to increase safety and reduce speeds.

- A 1st quarter budget amendment was recommended by staff to complete these safety projects and will go to Town Council in April and May. The approved budget of \$100,000 is enough to complete the RRFB installations.

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

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

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, Mickelson Blvd, and Woodlands Blvd).

Sidewalk, Curb and Gutter

Sidewalk, curb and gutter repairs kicked off April 11. The residents and businesses within the North PMP area were notified via letters as well as the use of variable message boards, that repair and maintenance work was to begin.

Work began in the Sage Grouse, Sedge Wren Ave. area and will progress through the South PMP regional area in a clockwise manner. This year, damaged sidewalk curb and gutter will be addressed in nine (9) separate areas. The Town's contractors will be preparing the streets to receive slurry seal, crack seal and



mastic as well as asphalt patching. Sidewalk, curb and gutter repairs are expected to run through June. Asphalt patching and crack seal are scheduled to begin in mid-June and run through July. The asphalt slurry seal will follow July 6 after the holiday.

Concrete Pavement Remove and Replacement Reconstruction

The Concrete Pavement Remove & Replacement Reconstruction Project for Mt. Royal Drive/Champions Court & Masters Ct, began on Monday, April 25. Initial work will focus on saw cutting and the removal and replacement of damaged curb and gutter. This work will be followed by the removal of existing concrete pavement, addressing the subgrade and subsequent placing of new asphalt pavement. Mt. Royal Drive will be the first area to see construction. The contractor will then move operations to Masters Ct. and then Champions Ct.

Maps for Mt. Royal Drive, Masters Court and Champions Court are below.



Asphalt Overlay Project

Asphalt Overlay Project began construction April 11, with asphalt patching repairs on Woodlands Blvd. Crews spent the first week here before moving onto other areas in a counter clockwise fashion. Asphalt patching will continue for several weeks, followed by concrete curb, gutter & sidewalk repairs.



Full Depth Reclamation Project

Full Depth Reclamation concrete repair work started on April 11. The work started in the Baldwin Park area. The contractor removed and replaced damaged sections of sidewalk, curb and gutter. Concrete repairs are expected to continue the rest of this month. Reclaiming operations are expected to begin in May.



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.

Parking lots that are scheduled include the following:

Perry St. Fire Station #151
Police Department
Centennial Park (Burgess Pool)
Butterfield Park Parking Lot
PCWPF Treatment Plant

Meadows Treatment Plant
Diamond Ridge Pump Station
Matney Park
Coachline Parking Lot

2022 Bridge Maintenance Program

Staff has secured a service agreement with Basis Partners to provide technical support for the Bridge Maintenance Program. Basis Partners will complete the prioritization of bridge(s) that will require maintenance in 2022, by the end of the month. Staff will work with them to prepare maintenance packet for complete bids. Maintenance operations are expected to begin this Spring.

Development Division

Review and Permitting

Development Review - All 63 reviews were completed. No late reviews this month.

Permitting & Inspection – 21 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

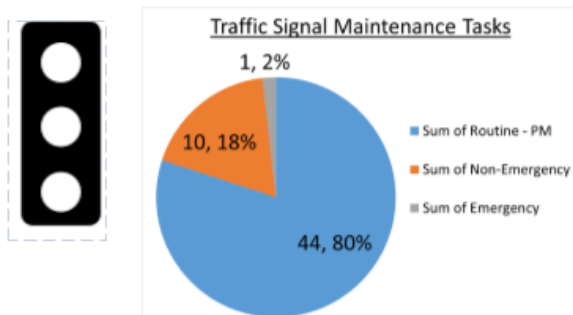
Taxi Voucher Program

For the month of April, the Taxi Voucher Program funded 103 rides; which is a 32% decrease to last year's April total of 153 rides, and a 30% 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 April, 19 individuals used the Taxi service. Of those individuals, 84% of the rides were for work, 10% for shopping trips, and 6% for medical appointments. Fourteen rides were provided for people without access to a vehicle, 30 rides to seniors, and 59 rides to disabled riders.

The Castle Rock Senior Center provided 913 rides in April.

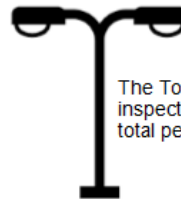
Traffic Engineering and Operations

Traffic Signal Operations and Maintenance



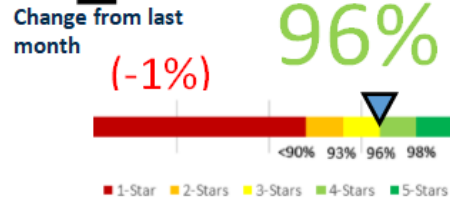
- Most frequently visited signals: Meadows Pkwy and Meadows Blvd, and Wolfensberger Rd and Prairie Hawk Dr.

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.

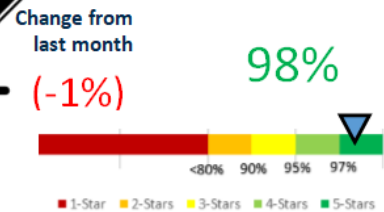


Beacon



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.

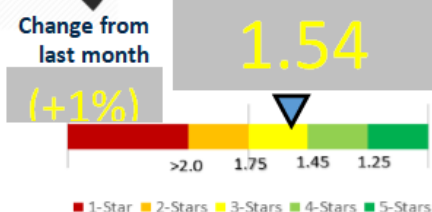


Operations



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 April, the crew completed 412 tasks. Of these tasks, 103 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. We had 193 RRFB related tasks, including windshield inspections, and repairs. Other tasks included 60 small projects,

three tasks associated with open houses providing traffic control, four traffic count tasks, 48 were marking related specifically for thermoplastic replacement and one special event set. In April, all three technicians received IMSA training and certification testing, and two attended ATSSA Traffic Control Technician certification classes.

Transportation Planning

Castle Rock Downtown Alley Master Plan:

The project team was busy developing and delivering the draft report in April. It has been placed on the project web page for public review and comment. The review period ends May 5. A presentation was provided to the Downtown Alliance groups and members in April. The presentation to the Chamber of Commerce has been rescheduled for May. It will then be shared with the Public Works Commission and Town Council in June for adoption.

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 April. A speed study for Jonquil Street was performed but due to a bad battery, the test will have to be redone. A speed study for Switch Grass Drive will also have to be rescheduled when the equipment issue has been resolved. The point of contact for both streets will be notified of the results once the studies have been completed. If the study data meets the program criteria, the neighborhood will be asked if they would like to proceed with the next step of the traffic calming program.

Downtown Castle Rock Grants:

The CDOT Revitalizing Main Streets grant for \$150,000 with a local match of \$15,000 continues with a modified scope of work. The project will now reconstruct two existing curb extensions and patio areas in concrete, which are located in front of the B&B Café and Castle Café. CDOT has approved the change. The schedule for the high visibility crosswalks is still scheduled for May. Town staff is proceeding with the purchase and installation of the benches and trashcans, which will be distributed throughout Downtown. All work is scheduled to be completed by the end of July or sooner.

DRCOG Transportation Improvement Program (TIP):

DRCOG has closed the first call for projects. The regional projects submitted by each sub-region can be viewed and commented on through the DRCOG web site. The DRCOG Transportation Advisory Committee has recommended funding for several regional projects, including the Lone Tree Mobility Hub. The project is recommended to receive \$4 million of the \$8 million requested. The remaining \$4 million will be provided by the Douglas County sub-regional funds through Call #2. The 2nd call for projects is expected to be released in May. This call will focus on bike, pedestrian and transit projects in Douglas County. Town staff is reviewing candidate projects to submit on behalf of the Town.

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 kept Castle Rock on the move with a very busy month of April with plenty of maintenance work and preparing new vehicles for service. We completed 98 work orders and processed 115 vehicles for the month. Total output for the month was \$98,463 parts and labor billed out this was another excellent output especially with only three technicians out of allowed five. Good news we have another technician starting on 5/16. Technician productivity was also very good for the month of March coming in at 79.2%. And fleet availability came in at 97.3% which is back to pre-pandemic levels and well above our benchmarks.

All three of our technicians completed diagnostic training which was focused on air conditioning. Fleet also put into service an F350 work truck for the Streets Division and we received another F350 for Fleet which will be our new service truck. And are now putting the finishing touches on a new truck for the Streets Division. A group of special needs teens from CVHS came by the shop and we gave them a tour. Lots of fun and they loved it.



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

Outcome: Fleet team completed 79% 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 97.3% 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 79.2%. This productivity number was a very good increase considering the difficulty in getting some parts and some larger jobs that were completed.

the crew used 30 tons of hot mix asphalt to complete four large asphalt patches requiring 177 hours to complete.

Looking Ahead

Looking into May, the Streets Division is looking to continue the Spring Sweep, pot hole repair operations as well as asphalt patching. Additionally, crews will begin to ramp up road verge maintenance as the warmer weather brings vegetation and the high winds the area has experienced has resulted in a significant amount of trash accumulating along Town roadways.

Street Operations & Maintenance Division

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

- | | |
|--------------------------|-----------------------------|
| *Crack Sealing Operation | * Road Shoulder Maintenance |
| *Gravel Road Maintenance | *Asphalt Repair |
| *Sweeping | *Pothole repair |

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

Crack Sealing Operations

In the month of April, the Streets Division personnel dedicated 875.5 hours to completing crack seal operations in support of the Pavement Maintenance Program (PMP). These operations work to minimize water and vegetation intrusion that could lower the life cycle of the roadway. The crew used 11.48 tons of material to complete the final 22 lane miles for the spring operation.

Gravel Road Maintenance

Crews worked to grade out 3.84 lane miles of Rocky View Road to maintain a smooth driving surface. These operations typically seek to smooth the road surface and re-establish road crown, as well as drainage patterns.

Sweeping

The Streets Division swept just over 123 lane miles to begin the Spring Sweep operation. The Spring Sweep is the Town wide sweeping operation intended to sweep each and every roadway in Town to polish up the Town after winter operations have ceased. Crews spent 111 labor hours cleaning Town roadways in the month of April and removed 82 tons of material.

Pothole Repair and Asphalt Patching

The crews spent 168 hours working to repair the equivalent of 358 potholes throughout Town using a combination of concrete patch, cold patch asphalt as well as hot mix asphalt. In addition