



Monthly Report

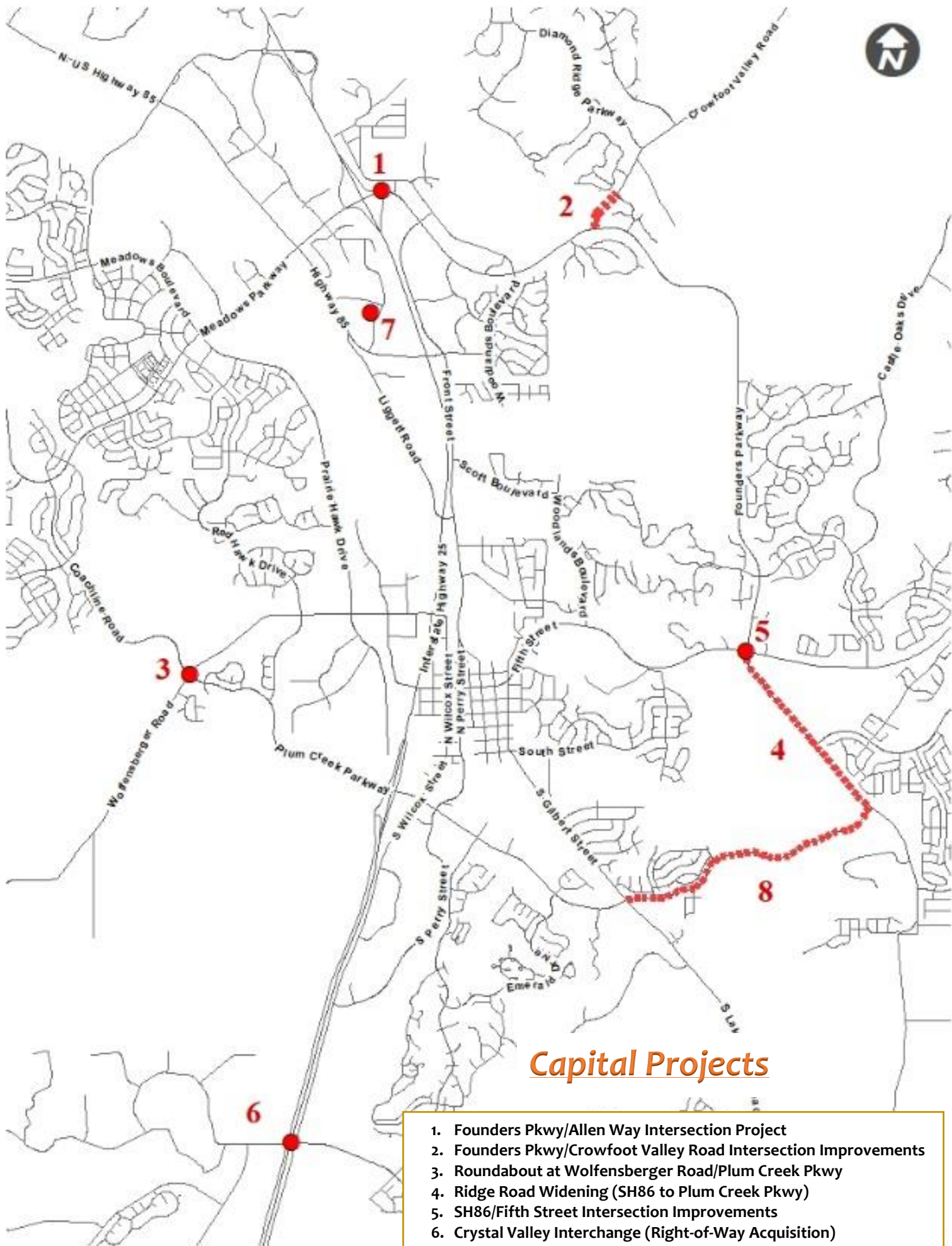
December 2019

The Public Works Department operates under the CAN DO philosophy – We are committed to doing the job right with a positive attitude while staying dedicated to meeting the needs of our Town values and continually searching for opportunities to improve.



PW Mission: To provide outstanding service, safety and support for transportation infrastructure and maintenance.





Capital Projects

1. Founders Pkwy/Allen Way Intersection Project
2. Founders Pkwy/Crowfoot Valley Road Intersection Improvements
3. Roundabout at Wolfensberger Road/Plum Creek Pkwy
4. Ridge Road Widening (SH86 to Plum Creek Pkwy)
5. SH86/Fifth Street Intersection Improvements
6. Crystal Valley Interchange (Right-of-Way Acquisition)
7. Public Works Facility Expansion
8. Plum Crk Pkwy Widening & Plum Crk Pkwy/Gilbert Roundabout

1. **Founders Pkwy/Allen Way Intersection**

Improvement Project – This project will address the need for the following improvements:

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

Phase: Construction – Close out phase. The following is a summary of the construction activities that took place during this month:

- The contractor continued to work the Traffic Signal, addressing issues with the detection system, and cycles.
- The contractor continues to work on punch list items, including the installation of additional “No Turn on Red” signs, as weather permits.

Budget: \$2.64M

Construction Complete: 2019

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

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

Phase: Construction, Intersection Improvements:

- The contractor continues constructing retaining wall on the west side of Crowfoot.
- The contractor paved the lower lifts of asphalt on the east side of Crowfoot. Top mat of asphalt is scheduled for spring of 2020, as weather permits.

- Temporary Pavement markings were applied in the permanent configuration to allow the project to be open for full use.
- The contractor has begun work on punch list items.
- The contractor is continuing to work on installation of conduit for the permanent street light poles.

Budget: \$3,550,000

Construction Completion: Spring 2020

3. **Wolfensberger Road/Plum Creek Parkway Roundabout Project** - This project will

accomplish the design and construction of a roundabout at this intersection to improve operations and minimize potential accidents.

Phase: Construction – Substantial completion was issued in Spring 2019. Punch list items are complete, with the exception of submitting as-built plans. The Town is working with the adjacent property owners to complete the final landscape tie-ins and adjustments.

Budget: \$1.14M

Construction Completion: Spring 2020

4. **Ridge Road Widening** –Ridge Road will be widened from two to four lanes between the Founders Parkway (SH86)/Fifth Street/Ridge Road intersection and Plum Creek Parkway. The goal is to reduce traffic congestion on the Ridge Road corridor.

Phase: Design -100% plans have been provided. The consultant continues to work on ROW acquisition. Staff is working with IREA to initiate agreements to have their facilities relocated.

Budget: \$400,000

ROW Acquisition: Early 2020

5. **Founders Parkway (SH86)/Fifth Street Intersection “Four Corners” Improvements** – With new traffic studies submitted, the Town, and CDOT will continue to investigate multiple alternatives to address safety concerns and capacity issues at this intersection.

Phase: Design –

- The DRCOG grant was awarded to the Town.
- Project will be designed per Federal requirements/standards.
- Negotiations with CDOT to design and manage the project continues to move forward. CDOT has begun working in the IGA.

- CDOT to select a PM in early summer 2020

Budget: \$340,000

Design Completion: Pending award

6. **Crystal Valley Interchange – Right-of-Way**

Acquisition – The purpose of this project is to achieve acquisition of remaining right-of-way and set aside future project funding allowing potential funding partnerships to assist with advancing construction.

Phase: Right-of Way Acquisition

- Appraisal Services – Working on Appraisals
- Acquisition Services
 - East Side of I-25 – Continued initial appraisal discussion
 - West Side of I-25 – Town received approval from CDOT and FHWA on the Access Line Locations. Continued initial appraisal discussions

Budget: Development Escrow

Completion: Fall 2020

7. **Public Works Facility Expansion** – This project consists of the addition and renovation of the Service Center building.

Summary: The last phase of the construction project is wrapping up which is the renovation of the existing office space. This phase is anticipated to finished one and a half months earlier than anticipated.

Renovation of Existing Office Space:

With this phase being the last and final phase of construction, progress has moved along very quickly! The drywall finish was completed, the walls painted, ceiling grid installed along with new cabinetry, tile, carpet and lockers.

The mechanical and electrical systems were upgraded as was the IT network. The only remaining work in this phase are minor items such as punchlist.

As mentioned above, this is the last and final phase of the construction project. The demo of the walls and floor has been completed and rebuilding has begun! This phase is moving quickly. The underground plumbing for the two added restrooms and break room have been completed and concrete placed back. The walls have been framed and drywalled. The tile installation is near completion.

Upcoming Work:

The furniture is scheduled to arrive on January 8th and installed in the following days. Shortly thereafter there are a few employees that will need to be located within the building, with the remaining relocated from the outside trailers.

Budget: \$4,960,349

Construction Finish: Spring 2020

8. **Plum Creek Parkway Widening and Plum Creek Parkway/Gilbert Street Roundabout Project** – This project will address the need for the following improvements:

- Convert Plum Creek Parkway/Gilbert Street intersection into a roundabout
- Reconstruct the existing 2-lane section of Plum Creek Pkwy from Gilbert to Eaton streets
- Widen Plum Creek Parkway from Gilbert Street to Eaton Street
- Widen Plum Creek Parkway from Eaton Street to Ridge Road

Phase: Design and ROW Acquisition – Kimley-Horn is the consultant for this project. The following is a summary of design activities performed this month:

- Phase 1B construction plans & specifications were posted on Bidnet with a pre-bid meeting scheduled in early January and bid opening scheduled for January 23, 2020. The project is tentatively scheduled to start in mid-March, weather permitting.

- Continued development of construction plans for Phase 2, the widening between Eaton St. and Ridge Rd., and the roundabout at Ridge Rd.
- Continued utility coordination for utility relocations

- Right of Way Acquisition / Appraisal
 - Continued coordination with property owners

Budget: \$794,375

Design & ROW Completion: Winter 2019

Phase 1A: Drainage design package

- The contractor continues installation of improvements on Gilbert St.

Budget: \$1,158,300

Construction Completion: Spring 2020

Traffic Signal System Upgrades (Phase 3) –This project is the third phase of a multi-year signal system upgrade project that was first approved as part of the 2015 budget process. The two main components of the Phase 3 project are the installation of closed circuit television (CCTV) and travel time monitoring devices at key intersections.

- Town Staff and CDOT continuing to work on an agreement about travel time device installations on CDOT signals. The plan remains that the Town will purchase the devices and CDOT will install and maintain the devices. Data from the devices would be shared which would allow the Town and CDOT to perform analytics.
- In December staff used traffic signal system upgrades, CCTV, travel time devices, and real time connectivity to intersection controllers, to manage construction and event traffic related to CDOT construction projects on Plum Creek Parkway and Meadows Parkway as well as holiday shopping around the Outlet Mall.

Budget: \$520,000

Construction Completion: Winter 2020

2020 Intersection Signalization Construction Project –

This project is planned to construct two new signalized intersections, one at Meadows Boulevard / Cherokee Drive and the other at Meadows Boulevard / Morningview Drive.

- In December, an RFQ was published for signal poles and mast arms. Signal poles are the longest lead time item, currently at 22-26 weeks.
- A draft contract agreement was initiated with IREA to install a power meter and to remove street lights that conflict with proposed signal pole locations. IREA's construction process is 8-12 weeks from a signed contract.

Budget: \$610,000

Construction Completion: Fall 2020

2019 Illuminated Street Name Sign Project –This project will be installing illuminated street name signs at several signalized intersections in Town along the major “ring” road that loops around the Town of Castle Rock.

- The Town has procured all of the signs to be installed in 2019 and will be initiating the 2020 project in January.
- CDOT's signal contractor has picked up the signs from staff to be installed on I-25 northbound and southbound off-ramps at Meadows / Founders Parkway and at I-25 / Plum Creek Parkway. They will be installing signs at these locations in early January.

Budget: \$55,000

Install Completion: Winter 2020

Engineering Division

2019 Pavement Maintenance

Program (PMP) – All major projects, other than Miscellaneous Concrete, for this year's PMP work is complete. This year saw a large portion of the West area (Meadows subdivision) have pavement maintenance such as reconstruction, restoration, slurry, full depth reclamation and extensive curb, gutter and sidewalk replacement.

The 2019 Miscellaneous Concrete Replacement project continues. This contract is providing the Town a means to repair concrete infrastructure, such as sidewalk, curb and gutter throughout the Town as well as work on Americans with Disabilities Act (ADA) compliance. This project addresses damaged concrete to improve drainage and improve safety.

Public notification planning and web site updates are continuing with assistance from the contractor and the Community Relations team.



2020 Facilities Parking Lot Improvements Program -

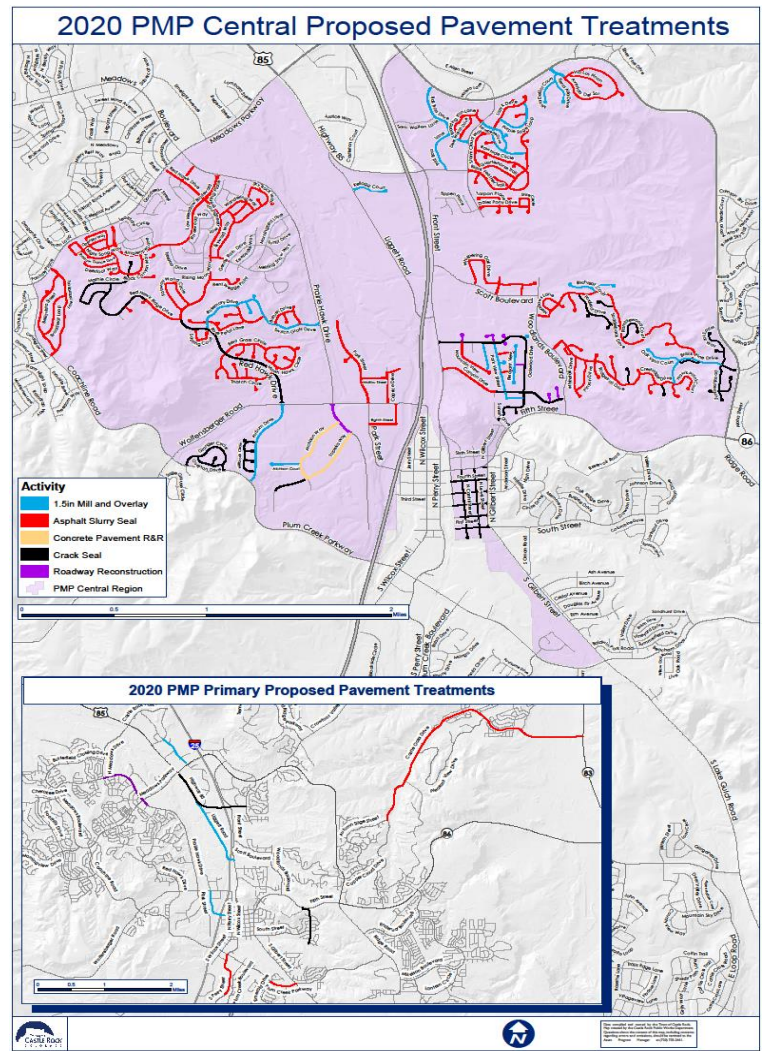
The PMP team has begun working on the field reconnaissance for the 2020 Town Facility Parking Lot Improvements Program. PMP staff is in the process of building quantities and bid books for the work. 2020 will see improvements for Red Hawk Golf Course, the Recreational Center, Public Works Service Center, Rhyolite Park and four (4) parking and access lots for Castle Rock Water. Changes in the proposed facilities may occur due to current evaluation taking place and/or actual bid pricing received that may require some modifications.

2020 PMP

The PMP team has completed the field reconnaissance for the 2020 PMP. This consists of the Central PMP area, and scheduled primary streets, which include; Meadows Blvd. between Prairie Hawk Rd. and Elegant St., Castle Oaks Drive between Autumn Sage St., and Hwy 83, Liggett Road between Hwy 85 and Front Street, Factory Shops Blvd., and Plum Creek Pkwy between Fairgrounds Drive and Lake Gulch Road. The purpose of the field reconnaissance is to quantify curb, gutter, and sidewalk as well as pavement areas, which are in need of repair prior to the application of the final maintenance surface treatments such as slurry seal, asphalt overlay, or pavement reconstruction. Staff is working to complete the bid books for the 2020 PMP projects for competitive bidding.

The PMP map (shown below) indicates the proposed scheduled treatments for street within the South PMP area and Primary Streets. This map may change based on maintenance treatments and resources available.

The PMP Bid documents have been posted to RM BidNet with a bid opening at the end of January.



2020 BMP

The consultant has provided a bid packages for the 5th Street Bridge. Currently, CDOT is reviewing submitted documents to allow access to the project site as this is off the I-25 interstate highway. The bid packet, design and construction plans are being completed for competitive bidding. This project is expected to start in May and be complete by mid-June.

Development Review and Permitting

Development Review - All 28 reviews were completed on or before the due date by the PW Development Services Team.

Permitting - 19 right-of-way permits were issued.

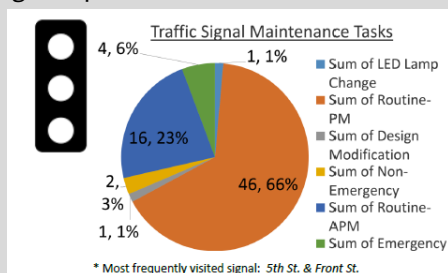
Transportation Planning & Traffic Engineering Division

Taxi Voucher Program

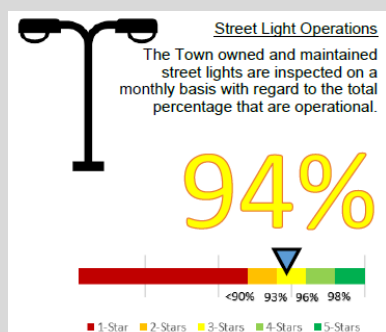
For the month of December, the Taxi Voucher Program funded 123 rides; this was slightly higher than last December's total of 115 rides. Ridership this month is down 7 rides from last month. Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do not have access to a vehicle. In December, 20 individuals used the Town's Taxi service. Of those that used the service, 59% of the rides were for work, 16% were for grocery shopping trips, and 25% for medical appointments. Four new people registered for the service bringing the total of registered riders to 427 in the Taxi Voucher Program. In 2019 a total of 1,568 trips were provided. The Castle Rock Senior Center provided a total of 680 rides in December and nearly 8,500 trips in 2019.

Traffic Engineering and Operations

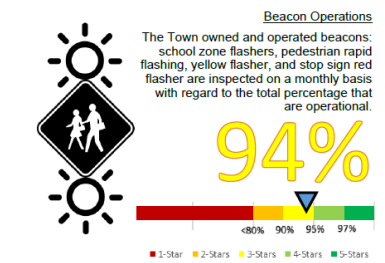
Traffic Signal Operations and Maintenance



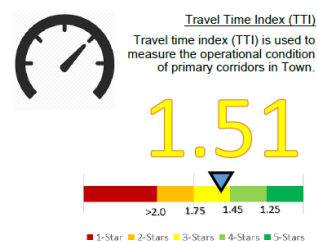
Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

During the month of December, the crew accomplished 591 tasks. Of these tasks 146 of them were sign work activities related to fabrication, install, repairs and replacements. 382 sign inspections completed were associated with the 2020 Central Pavement Maintenance Program inspection project. The team responded to and assisted the Streets Division with plow operations during a few snow events. The team worked at getting the permanent speed feedback radar signs up throughout Town and finished the installs of the remaining rectangular rapid flash beacons on Butterfield Crossing and at Wilcox & Second St. The crew also assisted with the set-up of the temporary Town Hall parking lots by laying them out, striping the spaces and getting signs installed. Finally, the team provided traffic control devices for one special event.

Transportation Planning

Neighborhood Traffic Calming Program (NTCP):

The NTCP exists to verify and address resident speeding concerns on local neighborhood streets and certain collector roadways.

There was one new speed study inquiry in December. Homeowners along N. Meadows Drive near Elegant Street requested information about the NTCP. The speed study along Manobrier Circle is currently being reviewed to determine if the speed and volume along the street qualifies for the program.

There are two streets that are currently active in the traffic-calming program:

- Diamond Ridge Pkwy: residents in the study area have developed a conceptual traffic-calming plan that includes a chicane and center median. Town staff will be conducting a demonstration project in January to determine if the proposed plan achieves the necessary reduction in speed prior to accepting the plan.
- Bittern Street / Loon Circle: a neighborhood meeting occurred on December 12 to discuss the existing calming devices in the Skyview neighborhood of Crystal Valley. The neighborhood group at the meeting recommended replacing both existing traffic circles with speed cushions. Ballots to vote on the proposed modification plan will be sent to residents living on each street in January.

Castle Rock Transit Feasibility Study:

Town staff continues to conduct the public outreach component of the study. During December Town staff attended several stakeholder meetings and events to collect public input, including a meeting with the CDOT transit division, the Castle Rock Planning Commission, and two senior events held at the Castle Rock Senior Center. Additional stakeholder meetings will be held during the month of January, such as the Public Works Commission, other Douglas County service providers, and two Councilmember's Open Houses. The public input period is expected to close at the end of January. Until then the public can still provide comments on the project webpage.

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Fleet Services



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 was busy “Keeping Castle Rock on the Move” in December 2019. The Fleet Division closed out 2019 on a high note with a very productive month. The Fleet Division billed out \$76,000 of parts and labor and completed 136 work orders. As well as meeting the following objectives and benchmarks:

The Fleet Division billed out \$58,000 of parts and labor and met the following objectives and benchmarks:

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

Outcome: Fleet team completed 79.4% of the work orders within 24-hours of opening repair requests or service requests. This benchmark number shows how quick the Fleet Division is working on vehicles to get them back on the road.



Police officer working on laptop while technicians perform a quick fix.

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

Outcome: Town vehicles and equipment were available 96.9% 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 69.7. This was just under our benchmark but still very good number for December.

Overall we completed 136 work orders and processed \$76,000 in parts and labor and another \$30,000 in fuel transactions. The fleet parts division was busy getting the inventory. They counted 2,800 distinct items worth over \$195,000 with a discrepancy of under 1.5%. Fleet technician Chris Selheim did a great job in handling all the year end CIRSA testing and inputting them into their system. Fleet technician Eric Dena did a great job with handling all the diesel emission tests and entering them into the state of Colorado system. Fleet also received an 2019 F350 dump truck and put it into service for the Parks Department.



New F350 Dump Truck for the Parks Department

Street Operations & Maintenance Division

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

- Snow and Ice Control
- Crack Seal Operations
- Special Operations
- Sweeping

Snow and Ice Control

The Streets Division personnel with support from Water, Parks, Development Services and Traffic responded to two snow events during the month of December. Snow clearance was completed in under 7.5 hours on both events. Removal of excess snow from the downtown area was completed within 36 hours of cessation of snowfall. In total 5338 miles were driven during plow operations and in excess of 350 cubic yards of snow were removed from the downtown.

Special Operations

In the month of December, Streets Crews put the final touches on the South Street Parking area for Town Hall for the Encore Project. Crews also hauled millings to Gordon Drive in order to provide stakeholders with a functional, temporary road surface until project is completed this spring.

Pavement Repair

A significant portion of the crew's time was spent on Pavement Repairs in the month of December. The Streets team used over 11 tons of hot mix asphalt and almost 3 tons of cold mix asphalt to keep up with the freeze thaw as well as some other issues around town. Crews work diligently to repair full depth patches, transverse cracks, pavement settling and potholes.

Sweeping

Crews are continuing the Fall sweep in addition to post storm sweeping. Roughly 78% of the town has been completed for the Fall Sweep program. Post storm sweeping operations are also being carried out independently of the Fall sweep, keeping in compliance with DRCOG air quality regulations.

Looking Ahead

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