



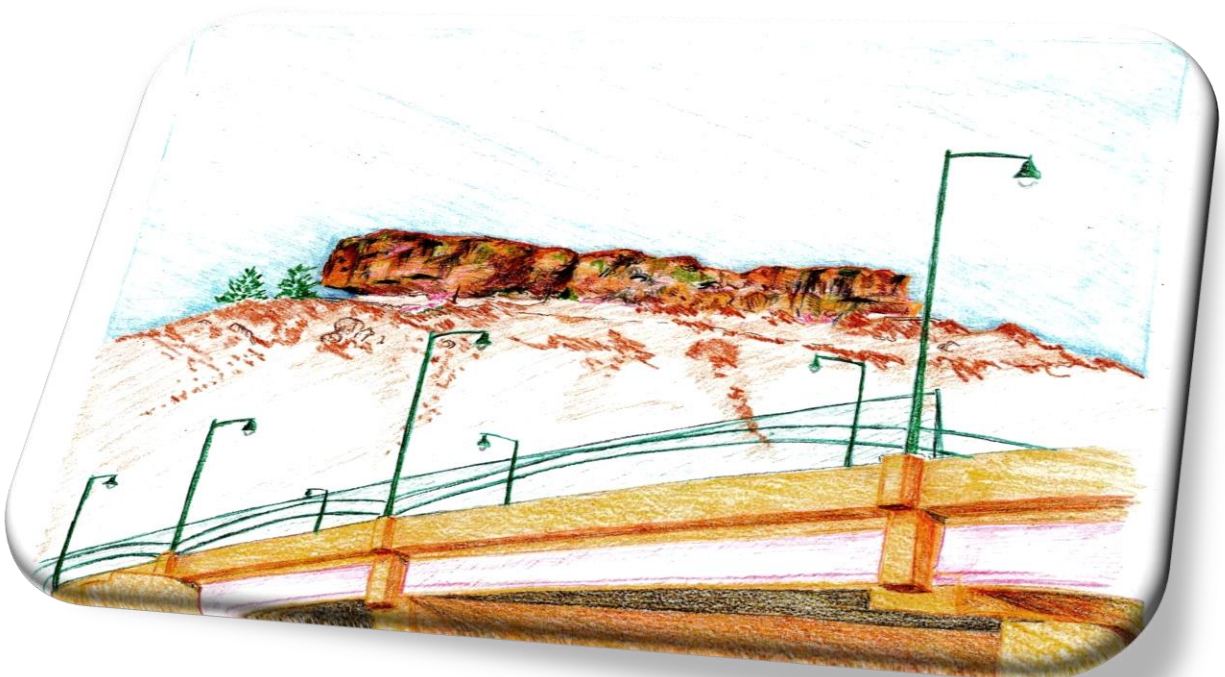
The Public Works Department operates under the CAN DO philosophy
- We are committed to doing the job right with a positive attitude
while staying dedicated to meeting the needs of our Town values
and continually searching for opportunities to improve.

PUBLIC WORKS DEPARTMENT

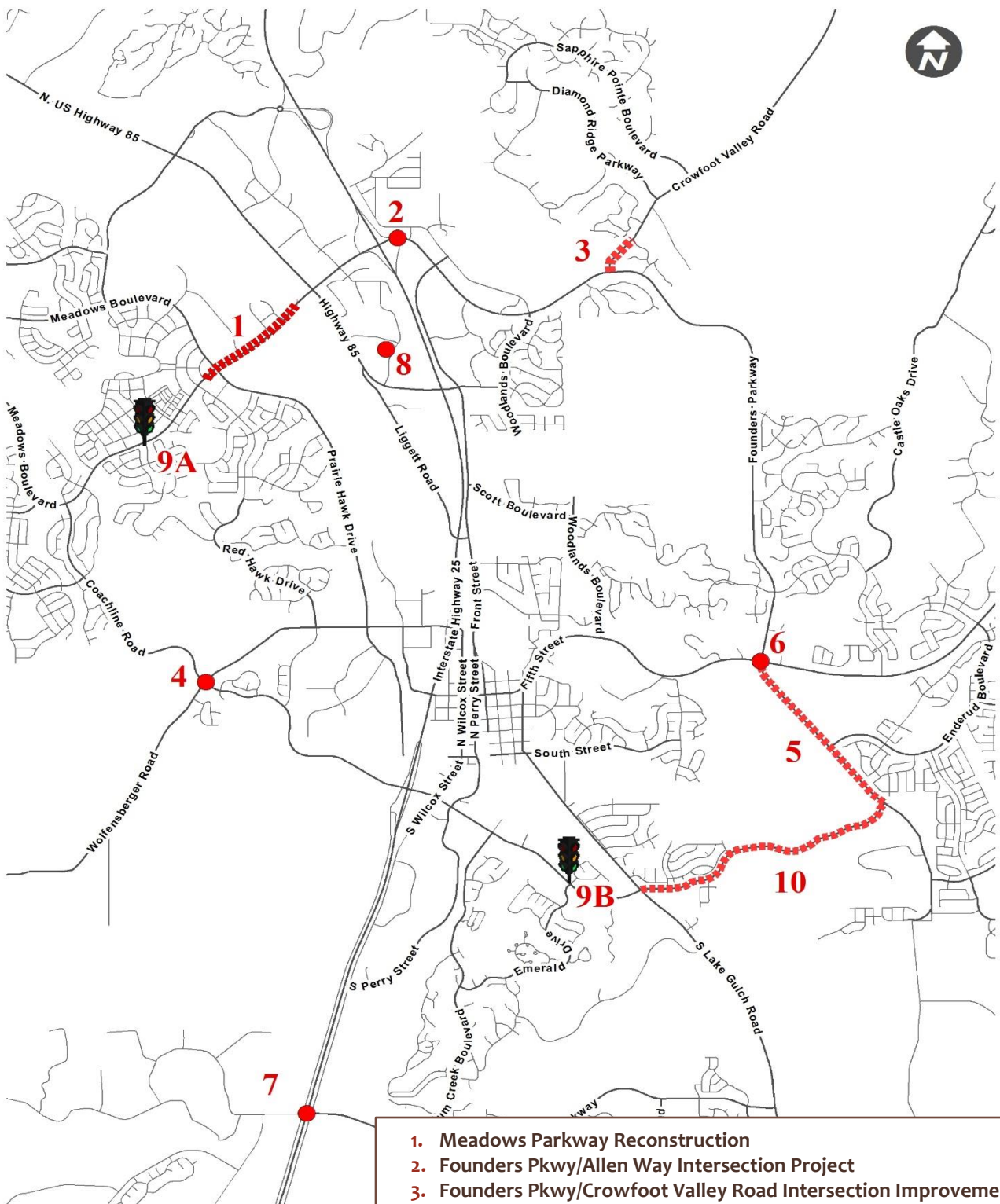


***Our Mission: To provide
outstanding service, safety
and support for
transportation infrastructure
and maintenance.***

MONTHLY REPORT – APRIL 2018



CAPITAL PROJECTS



1. Meadows Parkway Reconstruction
2. Founders Pkwy/Allen Way Intersection Project
3. Founders Pkwy/Crowfoot Valley Road Intersection Improvements
4. Roundabout at Wolfensberger Road/Plum Creek Pkwy
5. Ridge Road Widening (SH86 to Plum Creek Pkwy)
6. SH86/Fifth Street Intersection Improvements
7. Crystal Valley Interchange (Right-of-Way Acquisition)
8. Public Works Facility Expansion
9. 2018 Traffic Signal Program (9A & 9B)
10. Plum Crk Pkwy Widening & Plum Crk Pkwy/Gilbert Roundabout

1. Meadows Parkway Reconstruction - This improvement project will consist of the reconstruction of the existing 4-lane roadway of Meadows Parkway from the intersection of Meadows Parkway and Prairie Hawk Drive to the railroad overpass over Plum Creek near US 85. This reconstruction will also replace any broken curb/gutter, sidewalk, and add on-street bike lanes. **Phase:** Construction – The project was awarded to Schmidt Construction Company. Felsburg, Holt, and Ullevig (FHU) will assist the Town with construction management. An Open House was held on April 12th at the Grange in the Meadows Subdivision. Construction is scheduled to begin on May 29th. **Budget:** \$2,467,000
Construction Completion: Late Summer 2018

2. 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: Design & ROW Acquisition – Felsburg, Holt & Ullevig is the design consultant for this project. The following is a summary of the design activities that took place during this month:

- Continued to work on right-of-way appraisals
- A meeting was held with CDOT on April 17 and with Town staff on April 19 for the Final Office Review (FOR) plan comments. All comments are being compiled by FHU and will be addressed in May.

Budget: \$760,000 **Design Completion:** Summer 2018 **ROW Completion:** Fall 2018



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

- Design plans are at 99% completion
- Town's Legal and Public Works staff continue to work on right-of-way and easement agreements with neighboring properties
- A revised right-of-way agreement has been submitted to CDOT for review

Budget: \$650,000 (2016-17) **Design Completion:** 2nd Quarter 2018 **ROW Completion:** Summer 2018

4. 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** – Short Elliott Hendrickson Inc. (SEH) is the consultant for this project. The following is a summary of the activities performed this month:

- Staff is scheduled to present award of the construction contract to Rocky Mountain Excavating to the Public Works Commission on May 7 and to Town Council on May 15 for their approval.
- Completed right-of-way and temporary easements with Castle Rock Development Company

Budget: \$1.14M Construction Completion: Late Summer 2018



5. 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, Inc.,** has been awarded the design contract for this project. Design is currently at 30% awaiting design of the Founders Parkway/Fifth Street roundabout for tie-in location. **Budget: \$400,000 Design Completion: 2018**

6. Founders Parkway (SH86)/Fifth Street Intersection Improvements – The consultant investigated multiple alternatives to address safety concerns and capacity issues at the intersection and it was determined that a roundabout will be constructed at this location. **Phase: Design** –Short Elliott Hendrickson, Inc. (SEH) is the design consultant for this project. SEH has begun design and is scheduled to be completed by December 31st. Town staff met with Emmaus Anglican Church for relocation of their driveway access to the church to accommodate the design of the roundabout. Preliminary design will be presented to CDOT after the church driveway location is set. **Budget: \$340,000 Design Completion: 2018**

7. 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: Town of Castle Rock** entered into a service agreement with Woolpert, Inc. to provide land surveying services for the Crystal Valley Interchange east and west side Right-of-Way Plan Review (ROWPR). The consultant continues to work on the full right-of-way plan sets and legal descriptions. **Budget: Development Escrow ROW Completion: 4th Quarter 2018**

8. Public Works Facility Expansion – This project will complete design plans for the Service Center building expansion. **Phase: Design** - The following is a summary of the design activities that took place during this month:

- Continuing to work on the final design and bid documents
- Town staff, including the Water & Parks departments, is working on the Xeriscape landscaping design which promotes water efficiency.
- Town reviewed the 1st Amendment to the service agreement with D2C for additional design services requested by the Town.

Budget: \$220,000 Design Completion: Spring 2018



9A&9B. 2018 Traffic Signal Program - There are two intersections that are planned to be signalized this summer. These intersections include, Meadows Parkway/Low Meadows Boulevard, and Plum Creek Parkway/ Emerald Drive. Also included in this project is the Fire Department's emergency signal at their

new Fire Station #152 located on Crystal Valley Parkway. The 5th Street/Valley Drive intersection was also a part of the design project, and will be restriped to accommodate a westbound acceleration lane on 5th Street. **Phase: Construction** – The construction contract was awarded to WL Contractors. A pre-construction meeting was held and construction is scheduled to begin in early May. **Budget:** \$473,728 (Traffic Signals) \$172,967 (Fire's Emergency Signal) **Construction Completion:** Fall 2018

10. 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:

- Town staff and Kimley Horn had the project Kick-Off Meeting to discuss the major design concerns along the project corridor.

Budget: \$794,375 **Design & ROW Completion:** 4th Quarter 2018

Traffic Signal System Upgrades (Phase 3) – This project is the third and final phase of a multi-year project that was approved as part of the Town's Strategic Plan early in 2015. The two main components of the Phase 3 project are installation of CCTV and travel time monitoring devices at key intersections. In the month of April, staff performed reconnaissance field studies reviewing best locations for CCTV camera installations at all possible locations. This evaluation table will be used to prioritize the best proposed camera locations, including remote locations and supplemental CDOT Vision cameras, based on power, communication, and ability to see key intersections. Trial camera installations and management software will be evaluated in May, prior to final product selection and locations.

Staff, with assistance from our maintenance contractor, installed two different travel time monitoring technologies on a trial basis, Acyclica (Wi-Fi) and Trafficast's BlueToad (Bluetooth). An evaluation criteria has been established for desired system performance and an evaluation period has begun that will run through May. Bluetoad devices were installed on the Wolfensberger corridor from Red Hawk to I25, including an off corridor location at Meadows and Prairie Hawk. Acyclica devices were installed on Plum Creek Parkway corridor between Gilbert and I25, including off corridor locations at 6th and Wilcox, and 5th and Woodlands. Devices provide real time and historic data of travel time and speed on

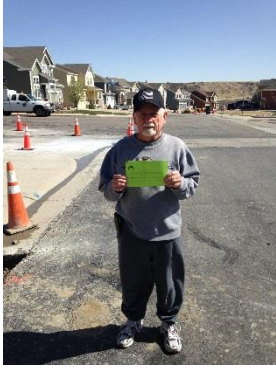


Town's primary arterial corridors, share the travel time info to public via web based viewer and with CDOT's COtrip information service, as well as provide a management center analysis data for origin and destination, and route finding. After a months' worth of data has been collected a thorough evaluation of reliability, ease of use, and other analytical tools each software provides will be reviewed.

Budget: \$520,000 **Project Completion:** Late Fall 2018

Engineering Division

2018 Pavement Maintenance Program (PMP) - The 2018 PMP will focus its efforts in the East PMP area with additional work taking place on primary streets (Woodlands Boulevard, Wilcox Street, Prairie Hawk Drive, Plum Creek Boulevard, and Meadows Boulevard).



Sidewalk, curb and gutter repairs kicked off in mid-April. The residents within the East PMP area were notified via letters mailed to their homes as well as the use of variable message boards. Work notices are delivered to the residents 48 - 72 hours prior to start of work.

In general, work will progress through the East PMP area in a clockwise manner, starting in the northern portion of Founders Village, then Castlewood Ranch. The Town's contractors will be preparing the streets to receive slurry seal and asphalt overlay treatments. Sidewalk, curb and gutter repairs are expected to run through May and asphalt patching is scheduled to begin in May and run into June. The asphalt overlays and slurry seals will follow.

Lantern Trail was closed between Mikelson Blvd. and Kensington Street on April 23, 2018. Work is progressing nicely, with the removal of the existing deteriorated concrete pavement in this first section.



Concrete pavement rehabilitation work started on Wilcox Street. The work started at Fifth and Wilcox streets and progressed south. The contractor is expected to be complete with concrete repairs by May 4, weather pending.



2018 Facilities Parking Lot Improvements Program - This contract was awarded to Straight Line Sawcutting, Inc. and is scheduled to start late August. This will provide needed improvements to three parking lots at Town parks, and one parking lot in the downtown area as follows:

- Parking Lot at 4th Street and Perry Street
- Metzler Park Parking Lot next to the In-line Skating Rink
- Metzler Park Main Parking Lots
- Rock Park Parking Lot

Maintenance will be performed on the Castle North Park parking lot, and the Town of Castle Rock Museum parking lot under a separate contract due to the nature of the treatment.

2018 Bridge Maintenance Program (BMP) – The Town’s on-call consulting engineer, Felsburg, Holt & Ullevig, is currently working on the design of structural repairs. The design is scheduled to be completed early July. The following locations have been identified for the 2018 BMP:

Structural Bridge Repair

- Castle Oaks Bridge at Rocky View Road
 - ✓ Girder repairs
- Fifth Street Bridge over I-25
 - ✓ Place riprap at column and repair spalled areas
- Perry Street Bridge over Sellers Gulch
 - ✓ Repair girder and girder bearing and upgrade approach rail

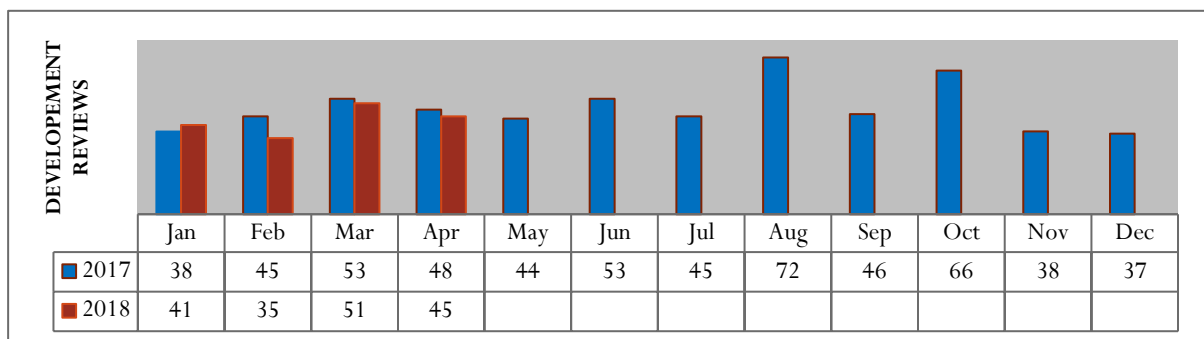
Bridge Surface Treatment

- Front Street Flyover
 - ✓ Mill and overlay wearing surface

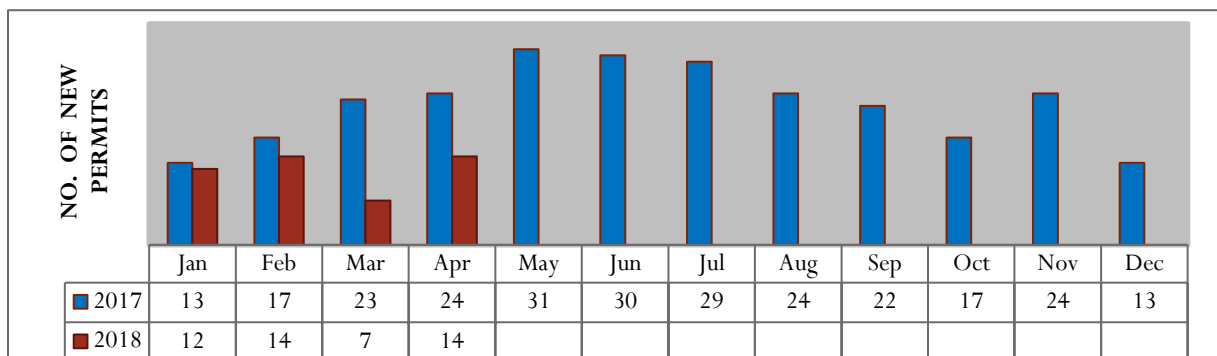
Treatments and locations may change pending current evaluation taking place and/or actual bid pricing received that may require some modifications.

Development Review and Permitting

Development Review - Included in the 45 submittals are 23 first time applications with two pre-applications. All reviews were completed on or before the due date assigned by the Public Works Review Team.

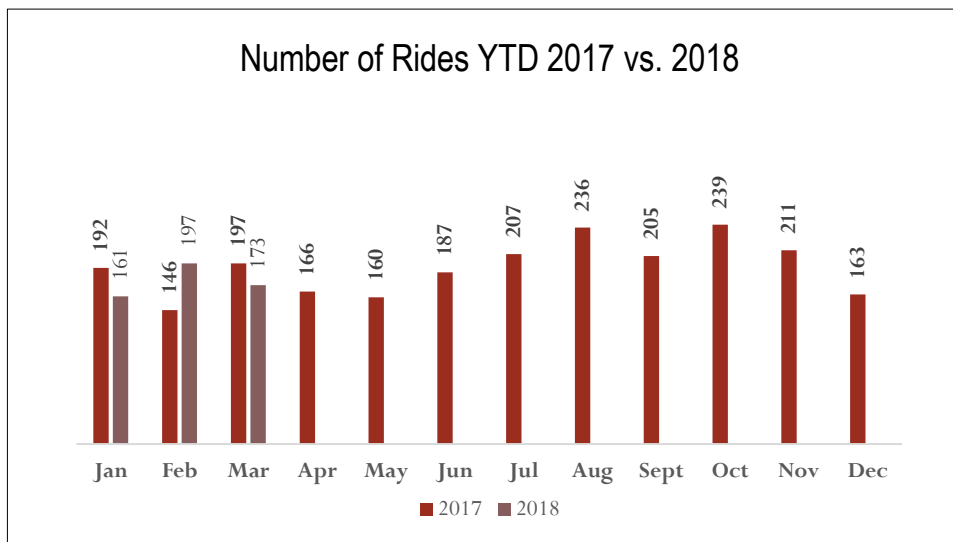


Permitting - Included in the 14 permits are: 1 residential (6400 S Tributary Drainage Improvements); with the remainder for work within the public right-of-way.

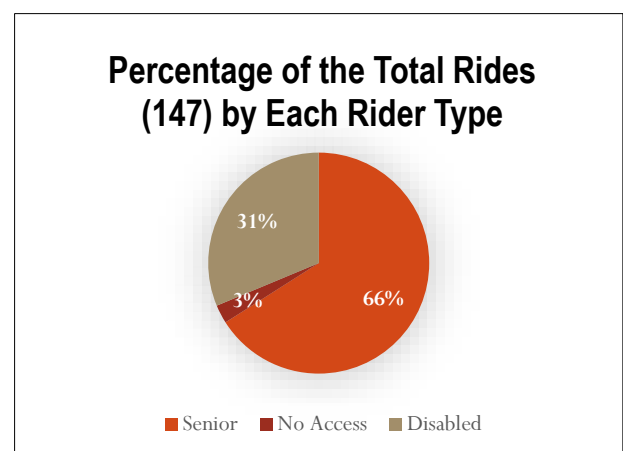
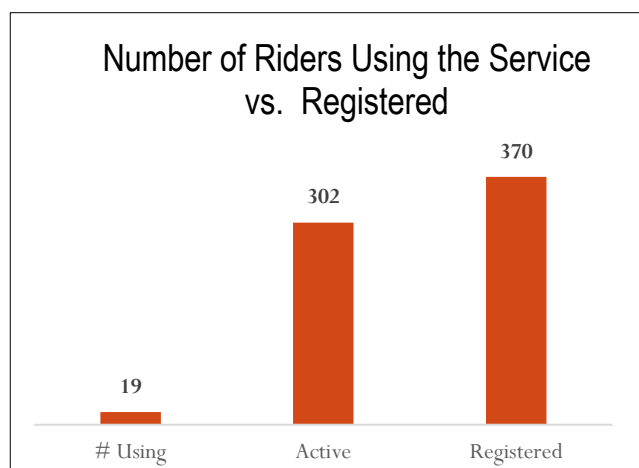
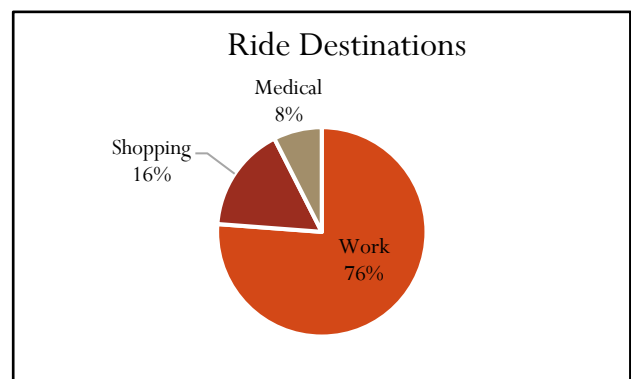
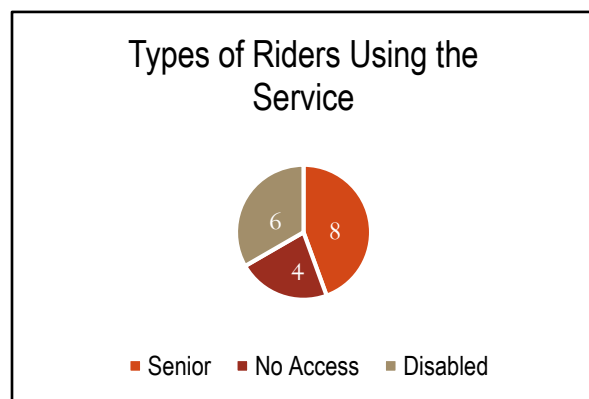


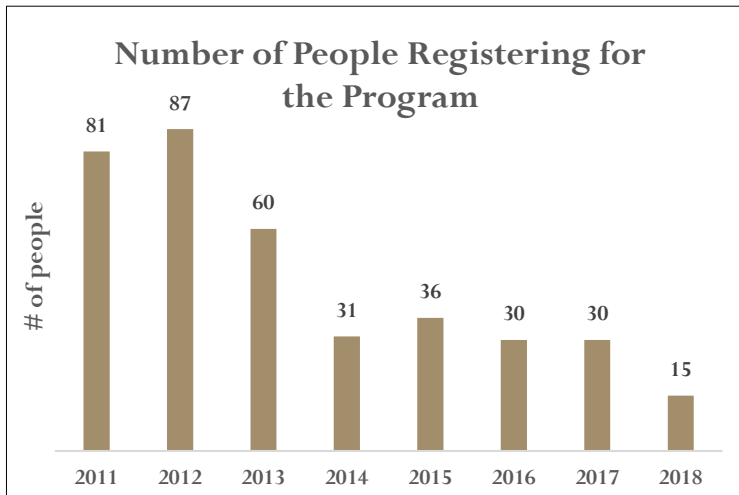
Transportation Division

Taxi Voucher – For the month of April, the Taxi Voucher Program funded 147 rides, this was an 11% decrease from last April's total of 166 rides.



Rides are available for work, shopping or medical trips. Transportation services are provided for Castle Rock residents who are senior citizens, have a disability that prevents them from driving, or do not have access to a vehicle.





There was one new registrant for the Taxi program this month. Since its inception, a total of 370 people have registered for the Town of Castle Rock Taxi Voucher Program. Currently 68 of these past registrants are inactive or have dropped out of the program.

Senior Center Shuttle The Senior Center provided 711 rides in the month of April which was a 2% decrease from last month's rides of 728. The volunteer driver program provides service Monday through Friday from 9 am to 3 pm.



Traffic Engineering & Operations



Traffic Signal Operations and Maintenance - In the month of April, staff addressed six requests from the public related to traffic signal and intersection operations and maintenance. A total of 37 non-routine traffic signal maintenance visits were completed by Town staff and approximately 17 visits by the Town's signal maintenance contractor. The Town maintenance contractor concluded their follow-up preventative maintenance tasks remaining from 2017, assisted in installation of Phase 3 signal upgrade trial components, and performed other non-routine emergency response maintenance. Town staff began 1st quarter preventative maintenance inspections, installation and repair of parts, signal troubleshooting, and work zone activities.

Street Signs and Pavement Marking Maintenance - The month of April was a very productive month with the help of the Street Operations & Maintenance Division lending the crew some help. Staff was able to complete 224 tasks in 224 hours which averaged out to be one hour per task. Among those tasks completed, staff was able to complete 9 hours of windshield inspections on various signs. With the extra help, staff also fabricated 46 signs, installed new signs and spent 44 hours repairing various signs around Town. A big **Thank You** goes out to the Street's Operations & Maintenance Division for being great team members with a huge **"Can Do"** attitude.



Transportation Planning

Neighborhood Traffic Calming Program (NTCP)

- **Sapphire Point Boulevard:** The resident submitted an initial support petition for the Town to look into speeding concerns. The Town is conducting speed and volume studies over the April/May timeframe.

Town staff identified projects:

- New roadway striping plans along Butterfield Crossing Drive, Heritage Avenue and Lantern Trail are expected to be completed this summer in conjunction with the PMP.

Development Review

- Staff reviewed and commented on one transportation impact study during the month. It was completed by the due date.
- Staff also continues to work on the Development Agreement (DA) for the Your Storage development/annexation proposal, two transportation corridor studies for the Meadows, and road plans for the Lanterns development proposal. All reviews were done on time.

Downtown Mobility Study - Town staff and the Town's consultant, Kimley-Horn, conducted several stakeholder meetings during April to gather feedback and collect data regarding downtown mobility concerns. Public outreach and data collection also included attending Councilman Bower's open house in Festival Park. Additional stakeholder meetings are planned for May, as well as a public workshop and a meeting with the Downtown Merchants Association and Downtown Development Authority. The project webpage that allows for the public to provide input is expected to be operational in the first half of the month.

I-25 / Crystal Valley Parkway Interchange Study - Town staff has issued the notice to proceed to FHU to begin assessing the Crystal Valley paired interchange concept. The report is currently expected to be completed toward the end of May. Once the analysis is complete Town staff will meet with CDOT and County staff to go over the analysis to see if the concept should be pursued further with the Department of Federal Highways.



DRCOG Active Transportation Plan (ATP) - The purpose of the ATP is to develop a regional active transportation vision, implementable plan, and products to support the development of a robust active transportation network in the DRCOG region. Town staff working with Douglas County staff has provided DRCOG a revised map showing regional trails that should be included in the final Active Transportation Plan.

DRCOG 2021 – 2023 Transportation Improvement Program - The TIP Working Group continues to work with the DRCOG Board of Directors to establish the regional project submittal process and scoring criteria. At the first sub-regional level meeting, representatives from the eligible jurisdictions and agencies gathered to hear DRCOG staff go over the new TIP process and what that means for the Douglas County sub-region. Representatives made it clear that while there is a set of criteria that every sub-region should follow, the criteria for Douglas County should be tailored to meet the needs of the County. Town staff will work at the technical level to ensure the process and scoring criteria is representative of the sub-region's needs. Call for sub-regional projects will occur after the regional projects are submitted and potentially scored later this summer and fall.



Downtown Parking - A small group of the Downtown Parking Committee walked the streets of Downtown with the parking enforcement officer to better understand some of the challenges and issues he faces when it comes to enforcing parking, such as the 2-Hour parking limit. Some of the issues identified were the placement of 2-Hour parking signs not bracketing all the parking stalls along the street. This made it difficult for the officer to enforce the 2-hour limit and instead treated the stall as an all-day parking stall. Other issues identified included missing signs, old

curb painting, and incorrectly marked parking spaces on the parking map. This information will be reported back to the entire Downtown Parking Committee for further action. The objective is to eliminate any public confusion to parking Downtown and provide an update parking map that can be shared with the public.



Fleet Services

"Keeping Castle Rock on the Move"



As we drive around this Town of ours and see how busy all the different departments are with all the growth, from the Fire and Police departments along with Parks, Public Works, Water and Development Services relying on their Town issued vehicles to keep up with the first class service that we provide to the citizens of Castle Rock here at the Fleet Services Division, we take great pride in knowing that those vehicles are reliable and safe to operate!

April was another very busy month for the Fleet Services team. The Fleet Services Division completed 111 work orders and billed out over \$66,000 of parts and labor; which was 10% ahead of last year. Also, Fleet Services Parts section was able to return over \$2,500 of obsolete parts for credit.



Performance Benchmarks

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

Outcome: Fleet team completed 66.3% of the work orders within 24-hours of opening repair requests or service requests. This benchmark was a little below our benchmark due to having several technicians on vacation or out sick this past month.

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

Outcome: Town vehicles and equipment were available 96.6% of the time. This high fleet availability rate means that Town vehicles and equipment are ready when they are called upon to perform.

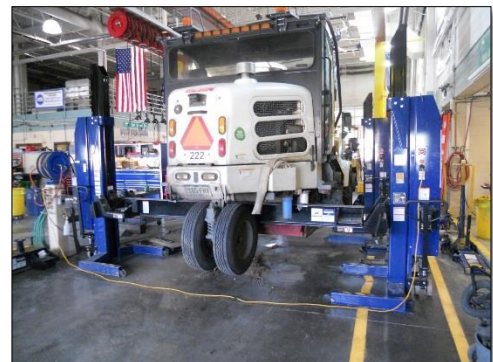
Objective/Benchmark: Technician productivity percentage of 70% (APWA standard)

Outcome: Technician productivity was 73.6%. This was above our benchmark of 70% compared to the standard set by the American Public Works Association (APWA).



New vehicles continue to roll in and the technicians are working hard to get them into service ASAP.

One F350 flat bed truck was put into service for the Water Department.



Using mobile lifts to service street



Bobcat with cab off to complete work

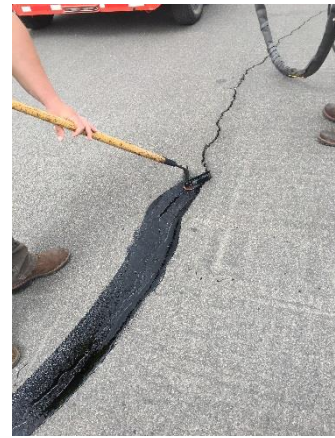
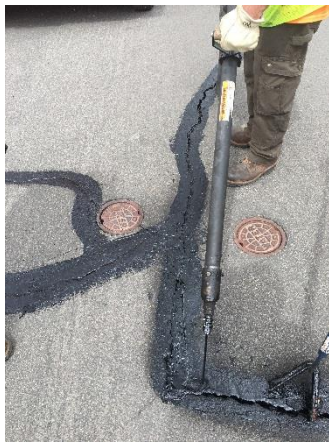
Street Operations & Maintenance Division

During the month of **April**, the Street Operations & Maintenance Division (SO&MD) performed work in six (6) maintenance operations:

- Crack Seal
- Street Sweeping
- Special Operations
- Bridge Maintenance
- Pothole Patching
- Equipment Maintenance

Crack Seal

April continued to bring unseasonably warm weather and the crew responded by getting a jump-start on crack seal operations. Of the 93-mile goal for the spring season operations, **14%** of this goal was met with the completion of **13 lane miles** so far. These operations work to preserve the life expectancy of the paved surfaces in the Town.



Pothole Patching

Streets O&MD received a number requests for pothole repairs during the month and completed repairs on **333 potholes**. The major areas addressed were Meadows Boulevard, Plum Creek, and Founders Village. Thirty-three bags of cold mix asphalt were used on roughly 100 potholes, and 78 bags of concrete were used on another 230 potholes.



Street Sweeping

Staff has begun the spring sweep! To date, the crew has completed **251.15 lane miles** of sweeping operations, which accounts for approximately **39%** of our goal of sweeping the entire Town for spring. These operations enhance the overall health and appearance of our town by reducing the amount of trash and detritus on the Town streets.



Bridge Maintenance

The crew has begun bridge maintenance operations on all the Town's bridges. This involves cleaning off sidewalks and expansion joints, removal of expansion plates and cleaning out the space under them, as well as exercising and lubricating the bolts to ensure they won't seize.



Equipment Maintenance

In this line of work, equipment maintenance is a necessity in order to keep things ready to go at a moment's notice. During this last month, staff worked diligently, ensuring snowplows and de-icing units were ready to tackle the snow events that did and did not arrive. Staff also worked on the street sweepers and crack seal machinery, making sure that they are operational and in good working order for the upcoming season. In total, staff completed **28 work orders** helping to ensure the equipment is consistently working at optimum performance and reliability.



Special Operations

The new Snow Storage and Slash & Mulch site has received some extensive gate repairs. Upon further inspection it was determined that the best repair would be to just build a new gate. The new gate was designed, built, and installed by the SO&MD crew and was completed at a large cost savings. This gate is functionally easier to use, is safer, and is more attractive than the previous one. This gate will increase the efficiency and safe travel to the Slash and Mulch facility as well as for the construction traffic that will be building the Parks Department's new Central Service Center. Crew also responded to graffiti complaints, trash found alongside the roadways, as well as placing 10 tons of material to fill in roadside washouts.



Training

Three staff members completed two L-Tap training about diversity in the workplace and another regarding verbal communication. The entire Division also attended training from CIRSA about safe backing and parking procedures. These courses will help our staff and our operations to be the best they can be and safer while doing it.

Looking Ahead

Looking to the month of **May**, we will continue our efforts to give the Town roadways a good spring-cleaning. We will continue to crack seal the areas outlined on the maintenance portion of the PMP map, (Castle Oaks, Sapphire Point, Terrain, and Cobblestone Ranch) to keep the roadways functional. We will also keep up our efforts to develop our personnel with ongoing training.