



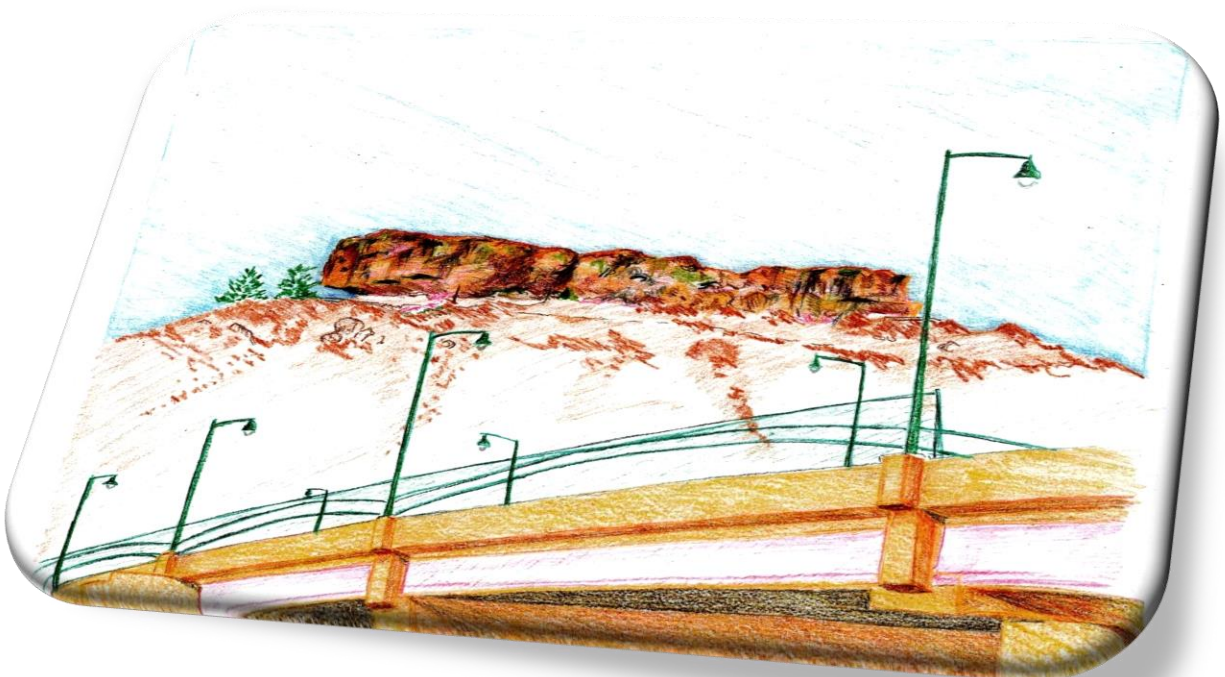
The Public Works Department operates under the CAN DO philosophy
- We are committed to doing the job right with a positive attitude
while staying dedicated to meeting the needs of our Town values
and continually searching for opportunities to improve.

PUBLIC WORKS DEPARTMENT

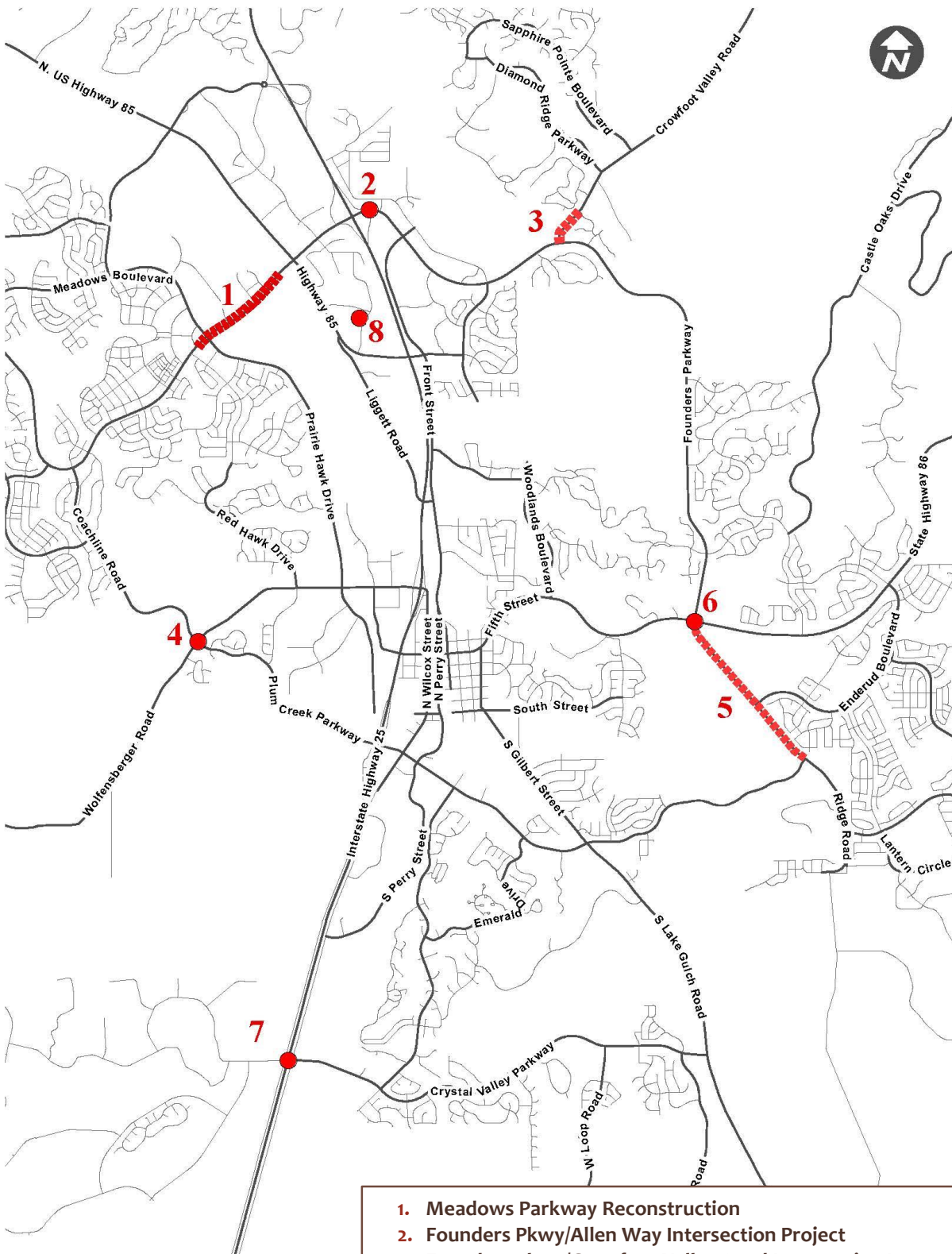


***Our Mission: To provide
outstanding service, safety
and support for
transportation infrastructure
and maintenance.***

MONTHLY REPORT – FEBRUARY 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

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 at the February 20 Town Council meeting. The Town has begun community outreach and will hold an Open House on April 12th. Construction will occur in the summer of 2018. **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:

- The Minor Interchange Modification Request (MIMR) was sent to CDOT for transmittal to FHWA
- Right-of-way Notices of Intent have been sent to property owners
- Right-of-way needs have been staked for appraisal and property owner discussions
- Right-of-way appraisals are scheduled to be completed in March and presented to property owners in April
- Final Office Review (FOR) is nearly complete pending FHU internal review, final quantities and specifications. The FOR is currently scheduled with CDOT in early April.

Budget: \$760,000 **Design Completion:** Summer 2018 **ROW Completion:** Fall 2018
Construction: 2019



Founders Parkway/Allen Way Proposed Intersection Layout

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 at 99% completion
- Town's Legal staff and Public Works 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
- Town staff has walked the site with neighboring HOA's

Budget: \$650,000 (2016-17) **Design Completion:** 1st Quarter 2018 **ROW Completion:** Spring 2018
Construction: Summer/Fall 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:

- Bid specifications have been advertised on BidNet with the bid opening scheduled for March 15.
- Town staff held a Pre-Bid Conference on February 21
- Working with Castle Rock Development Company on finalizing right-of-way and temporary easements

Budget: \$150,000 **Construction:** 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 **Construction:** 2021 (Tentative)

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 on the roundabout. Town staff will be meeting with SEH in early March to discuss traffic impacts before preliminary design is presented to CDOT. **Budget:** \$340,000 **Design Completion:** 2018 **Construction:** 2021 (Tentative)

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 following is a summary of the activities performed this month:

- Reviewed title commitments
- Completed the full right-of-way plan sets and legal descriptions

Budget: Development Escrow

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 completed the review of the office furniture layout plans and submitted comments back to D2C*

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

2018 Intersection Signalization Project - There are two new signalized intersections planned for construction in the summer of 2018. These intersections include, Meadows Parkway and Low Meadows Boulevard, Plum Creek Parkway and Emerald Drive. The 5th Street/Valley Drive intersection is also a part of this design project, and will be restriped to accommodate a westbound acceleration lane on 5th Street. **Design** – In February, Town Staff finalized design plans and specifications with the design consultant, Muller Engineering, for three traffic signals and roadway restriping. Staff concluded that including the Fire Department signal at Crystal Valley Parkway as “Schedule B” would be feasible and a more efficient way to construct that signal and was added to the 2018 signal construction bid documents. Bid Schedule B traffic signal construction will be funded by the Fire Department and managed by the Traffic Division, and built by the successful contractor. Bid advertisement is complete and bids are scheduled to be open on March 20. A pre-bid conference is scheduled for March 8 and all questions related to the bid documents are open until March 15. The target construction schedule includes presenting at the Public Works Commission and Town Council in April, providing notice to proceed in mid-May, 55 days for construction time, and full operation in August. **Design Budget: \$35,000 Design Completion: Complete Construction Budget: \$500,000 Construction Completion: Fall 2018**

In February, Town Staff collected bids and placed an order for long lead time items of signal poles, mast arms, signal controllers, and signal cabinets. These are Town supplied, contractor installed items in the bid documents. Anticipated delivery of the signal poles and mast arms is mid-May which is on time for the initiation of the project.

Traffic Signal System Upgrades - Phase 2 - *In February, Town staff completed the final punchlist items of remaining connectivity and communication issues work. A final report and binder of geographic location information, devices, specifications, and communication protocol was created and is awaiting distribution to the team. To date, this project has completed the installation of battery back-up units at all Town intersections, video detection equipment that sends live feeds back to the Service Center via fiber and radio to bring all of the Town’s traffic signals onto the communication network. This project is now complete. Budget: \$400,000 Project Closeout: Complete*

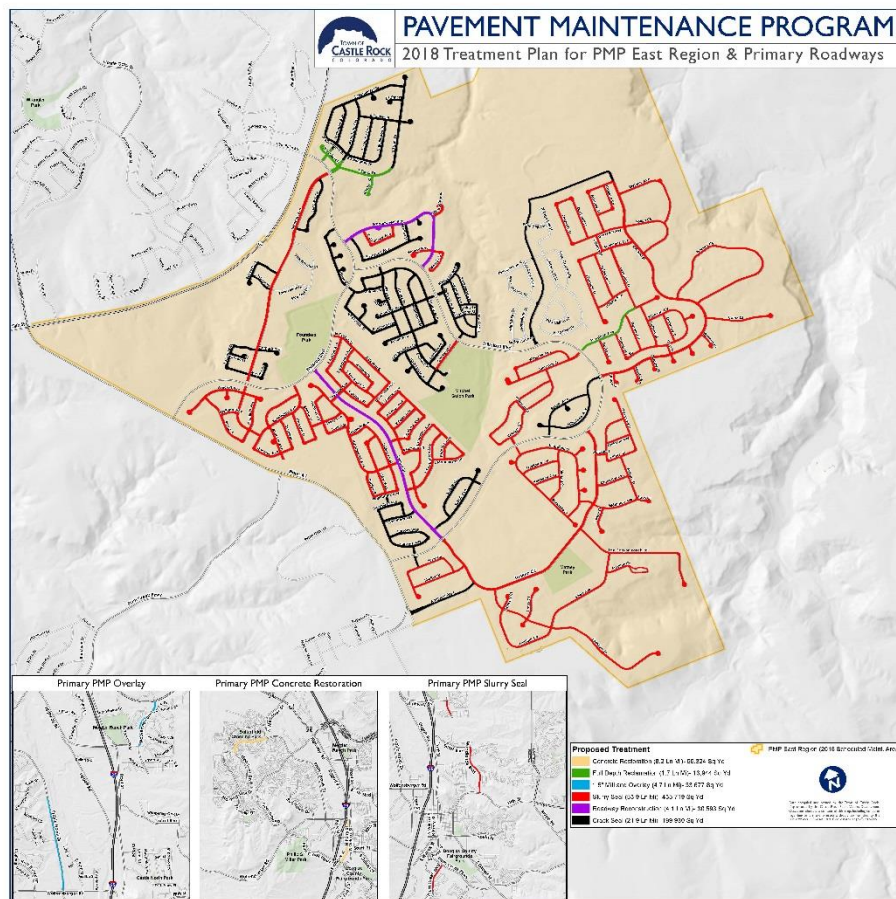
Traffic Signal System Upgrades (Phase 3) – This project is the third and final phase of a multi-year project that was approved as part of the Town’s Strategic Plan early in 2015. The two main components of the Phase 3 project are installation of CCTV and travel time monitoring devices at key intersections. A project charter has been completed and key partners from Town Staff and neighboring agencies have been contacted and confirmed interest and ability to assist Public Works with the project. Traffic Division staff have met to discuss our objectives and determine methodology to be used in evaluating potential products and locations. DoIT has recently evaluated and installed similar camera products and their model of product evaluation was used as a guide to the best approach. The Traffic Division has also been given access and permissions to use a PTZ Fire Department camera located on the top of the Rock that is being used to trial long range observation of signalized intersections. **Budget: \$520,000 Project Completion: Late Fall 2018**

Engineering Division

2018 Pavement Maintenance Program (PMP) - Bid openings for all eight PMP projects were held on February 1 and 2. All contract documents have been prepared and signed by the proposed contractors and will be presented to Public Works Commission on March 5 and to Town Council on March 6. Contracts under consideration are: Asphalt Overlay and Full Depth Reclamation Project, the Curb, Gutter and Sidewalk Replacement Project, Slurry Seal Project, Wilcox Concrete Pavement Restoration, Meadows Boulevard Concrete Pavement Restoration, Lantern Trail Reconstruction Project, Wagonwheel Trail Reconstruction, and the Mastic & Crack Seal Project.

A March 28 Public Outreach Open House is tentatively planned at a school or public building in the Founders Village area. This open house will provide staff the opportunity to brief residents and businesses on the maintenance activities, and schedules including night work pending Council approval.

The PMP map (shown below) indicates the proposed scheduled treatments for streets within the East PMP area and primary streets (pending Council approval).



2018 Facilities Parking Lot Improvements Program - The bid opening for this program is complete, and low bid was under budget. The process of checking and verifying the bid documents is currently underway. Staff plans to present the contract to the Town Manager by late-March with their recommendation to award. This contract will see 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) – Staff is preparing to receive proposal from the on-call consulting engineers for the design of structural repairs. 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

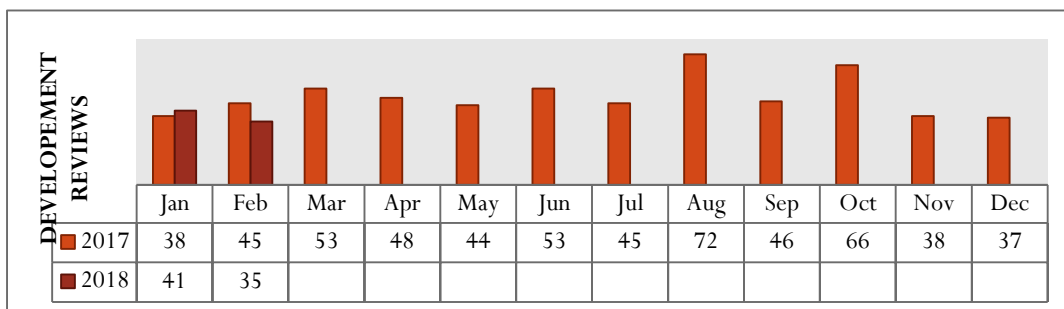
Bridge Surface Treatment

- Front Street Flyover
 - ✓ Mill and overlay wearing surface

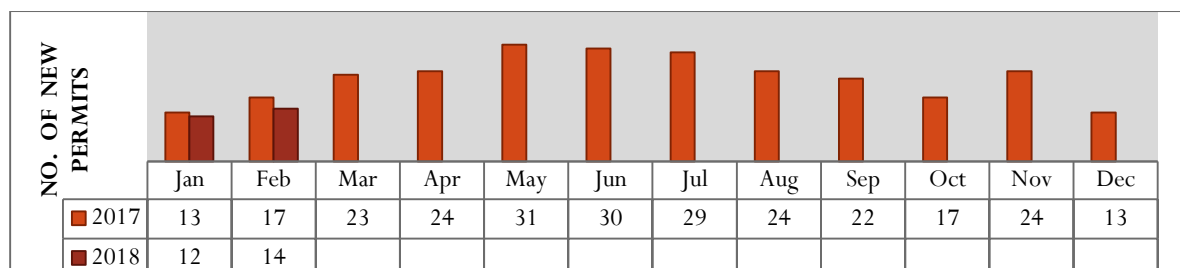
Treatments and locations may change pending current evaluation taking place and/or actual bid pricing received that may require some modifications.

Development Review and Permitting

Development Review - Included in the 35 submittals are 25 first time applications with four pre-applications. All reviews were completed on or before the due date assigned by the Development Services Project Manager.



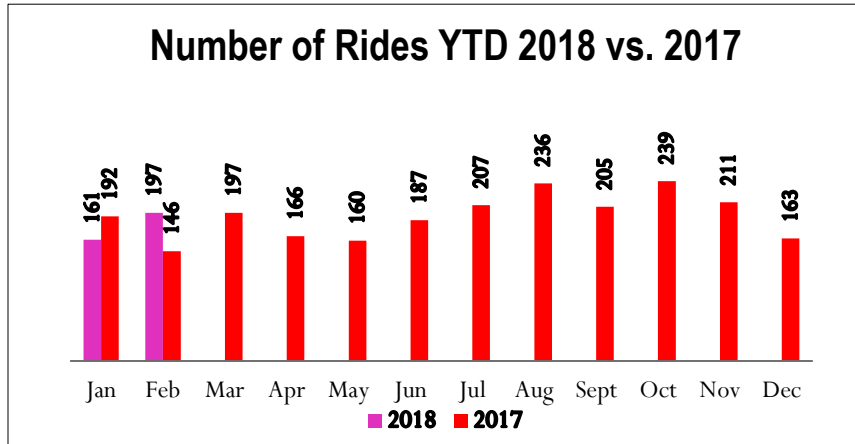
Permitting - Included in the 14 permits are: 1 residential (6400 South Tributary Drainage Improvements); the remainder are for work within the public right-of-way.



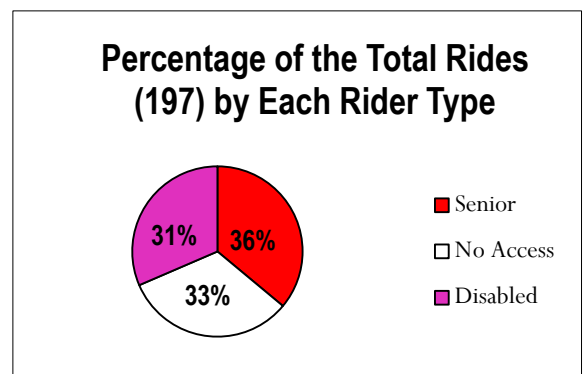
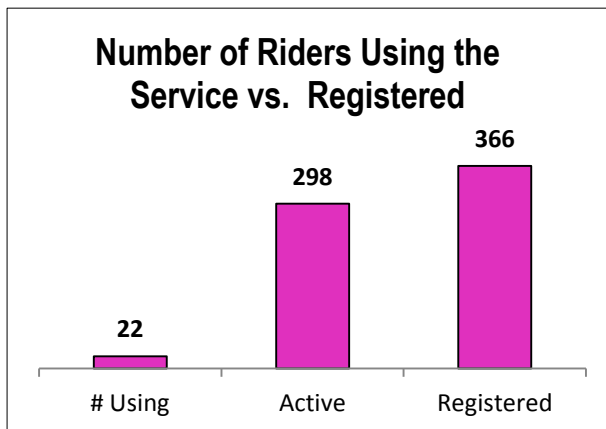
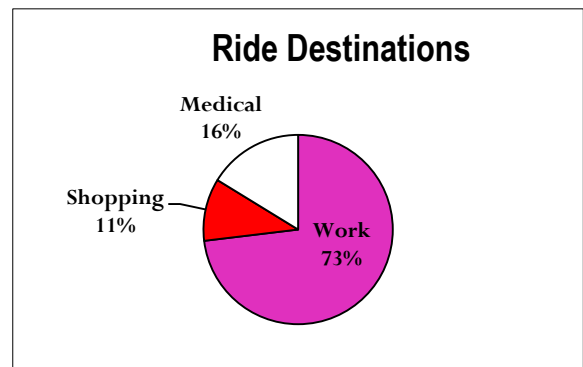
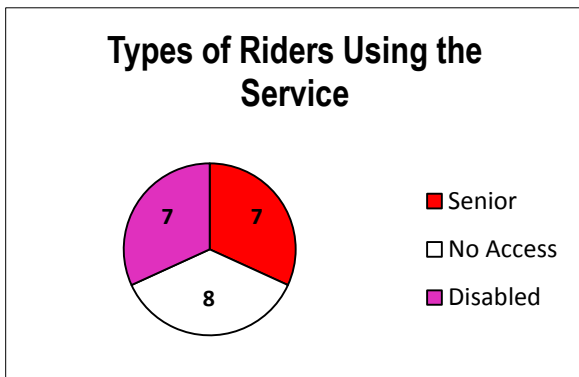
Transportation Division

Taxi Voucher –

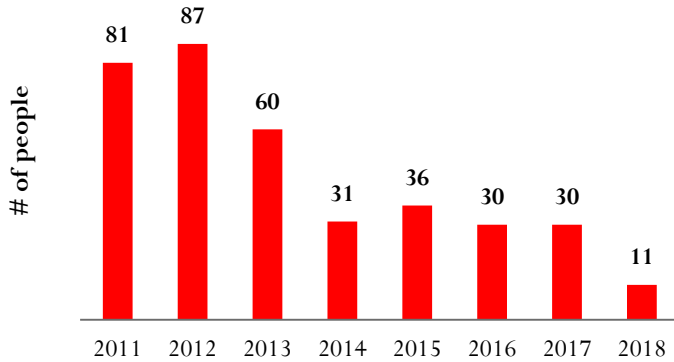
For the month of February the Taxi Voucher Program funded 197 rides, this was a 35% increase from last February's total of 146 rides. The increase in rides is a result six new taxi riders who need help getting to work on a weekly basis.



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.



Number of People Registering



There were six new registrants for the Taxi program this month. Since its inception, a total of 366 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.



WELCOME TO OUR NEW TROLLEY!!

This year we will get to see a NEW trolley take to the Town's Roads!!

Trolley sponsorships for 2018 went out and reservations are coming in for a handful of events and private rentals.

The Senior Center provided 633 rides in the month of February which was a decrease of 7% from last month's rides of 680. The volunteer driver program provides service Monday through Friday from 9 am to 3 pm.

Senior Center Shuttle

The



Traffic Engineering & Operations



Traffic Signal Operations and Maintenance - In the month of February, staff addressed seven requests from the public related to traffic signal and intersection operations and maintenance. A total of 32 non-routine traffic signal maintenance visits were completed by Town staff and approximately eight by the Town's signal maintenance contractor. These visits included non-routine maintenance, installation and repair of parts, signal troubleshooting, and work zone activities.

Street Signs and Pavement Marking Maintenance - During the month of February, one of the sign and marking section's technicians was on light duty so he spent the full month doing data entry into Cartegraph. Due to this effort, the sign module has more complete information with regard to the Town's sign asset which will help with reporting going forward.

The section's other sign technician spent the month in his maintenance area on the north side of Town by replacing damaged and worn signs. He also assisted the Street Division with snow plowing during the month. Finally, the section's supervisor spent the month putting specifications together for three variable message boards and a new sign making machine with the intent of obtaining bids for both purchases.



Transportation Planning

Neighborhood Traffic Calming Program (NTCP)

- **Sapphire Point Boulevard:** There was one new inquiry during February. A homeowner along Sapphire Point Boulevard has expressed concern regarding speeds and their difficulty in backing out of their driveway. The homeowner has been informed about the program and what is expected of her during the process. They have been sent the program document and the initial support petition. Staff is currently waiting for the homeowner to complete the petition before any speed study can be conducted.
- **Town Staff Concerns:** There were several locations brought up by the Police Department and Traffic staff for safety concerns. This includes Butterfield Crossing near Meadow View Elementary School, and Heritage Avenue near Rock Ridge Elementary. Vehicles along Butterfield Crossing have been reported passing one another on the 2-lane roadway. It was determined that the road will be restriped when it's reconstructed in 2019 but that an interim striping modification will occur this summer which is expected to address this concern.

Heritage Avenue will also be restriped this summer as part of the PMP to address vehicles crossing the double yellow line to pass one another during school drop off and pick up times. These restriping efforts will improve safety as well as address the passing concerns.

Development Review

- Staff reviewed and commented on six transportation impact studies during the month. All reports were completed by the due date.
- Staff also reviewed and commented on the Development Agreement (DA) for the “Your Storage” development/annexation proposal. The parcel is located on Wilcox Street/East Frontage Road, south of Plum Creek Boulevard. Several roadway improvements are being recommended in the DA, based on the proposed land uses for zoning. Improvements include acceleration and deceleration lanes as well as curb/gutter, streetscape and sidewalk.

Downtown Mobility Study - The Downtown Mobility Study (DMS) request for proposals were due on February 16. The Town received five separate proposals from our on-call consultants. Proposals have been circulated to the selection committee for review. The committee will select the preferred consultant the first part of March with the kick off meeting occurring soon afterward.

I-25 / Crystal Valley Parkway Interchange Study - Town staff is in the process of drafting the scope of work for the study. Key partners on the study, CDOT and Douglas County, have been contacted for their input. The RFP is expected to be released in March. It is still unknown if the RFP will be sent to the pre-qualified list of consultants from the Town, County, or CDOT.



DRCOG Active Transportation Plan (ATP) - Input is still being provided to the DRCOG staff regarding the ATP. The Town has sent DRCOG the bicycle and pedestrian GIS files developed as part of the Transportation Master Plan update. In addition, the Parks and Recreation trails plan has also been sent for incorporation into the study.

DRCOG 2021 – 2023 Transportation Improvement Program - The TIP Working Group has been working with the DRCOG Board of Directors to establish the regional project submittal process and scoring criteria. At the sub-regional level, Douglas County committee members held their initial meeting to

discuss regional processes and to get acquainted with the new sub-regional process. The first formal sub-regional meeting will likely take place in March. There are eight sub-regional committee members in Douglas County, including Douglas County, Castle Rock, Castle Pines, Aurora, Littleton, Larkspur, Lone Tree, and Parker. Sub-regional committee members are determined by their jurisdictional boundaries. So cities like Littleton and Aurora, while not entirely in Douglas County, do have small portions of their city in Douglas County. All sub-regional committee members are eligible to submit projects within the Douglas County borders. Call for regional and sub-regional projects are expected to be released this summer and fall. At this time each sub-region will begin working on their selection criteria for projects. The call for regional and sub-regional projects will likely be released late this spring or summer.



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!

February 2018 was an excellent month for the Fleet Services team. The Fleet Services Division completed 110 work orders and billed out over \$69,000 of labor & parts; which was 10% ahead of last year. Also 83% of all work orders were completed in the first 24-hours of being reported; which was a 5% increase from last month. Also the Fleet Parts Section was able to return over \$1,500 of obsolete parts for credit. The Fleet Services Division has changed locations of the parts room and the service office and that move has already increased productivity and customer service. Fleet Services staff is also in the final stages of the Faster fleet software upgrade. The fleet team is also installing GPS units on 15 Development Services vehicles.



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

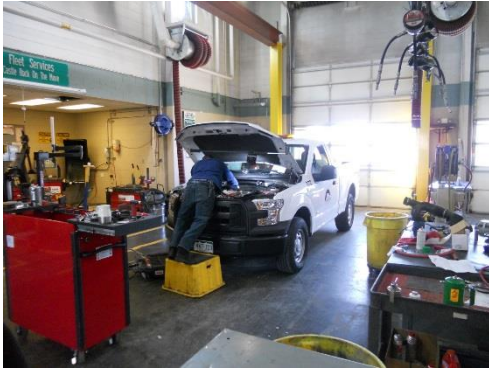
Outcome: Fleet team completed 83% of the work orders within 24-hours of opening repair requests or service requests. This benchmark was very good this month and shows how quickly the Fleet Division is completing work orders.

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

Outcome: Town vehicles and equipment were available 98.1% of the time. This high availability rate indicates 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%. This was above our benchmark of 70% compared to the standard set by the American Public Works Association (APWA).



Chris Selheim, Fleet Tech, working on F150



Clean Shop! Ready for vehicles...

Street Operations & Maintenance Division

During the month of **February**, the Street Operations & Maintenance Division (SO&MD) performed work in seven (7) maintenance operations:

- Snow & Ice Control
- Street Sweeping
- Special Operations
- Road Shoulder Maintenance
- Pavement Repair
- Pothole Patching
- Equipment Maintenance

Snow & Ice Control

February delivered three snow events, and three more were forecasted but did not truly materialize. The staff worked diligently to be prepared and react effectively to each of these events. The Streets Division prepared the staffing and vehicles to respond to predicted snow events on the 5th, 22nd and 23rd of the month with none of these events requiring actual response. Events on the 10th, 16th, and 19th delivered a total of eight inches to the area, during which the Streets Division in conjunction with the Water and Parks Departments successfully completed the operations. During these events, staff was often working in temperatures as low as -3° and was able to have the primary snow routes cleared within 6 hours of dispatch.



Pavement Repair

Streets Division received a few requests for asphalt repairs during the month and completed the repairs on Circle Drive, Rock Street, Senter Drive, and Hillside Drive in a timely manner following water main breaks. During these operations, staff placed 30,000 lbs. of asphalt in full depth patches to the roadways.



Pothole Patching

Streets O&MD received a few requests for pothole repairs during the month and completed repairs on 117 potholes using 2250 lbs. of cold patch material. The repairs were conducted ahead of our 10 day service level and most were identified while pothole crews were out looking for repair opportunities.



Street Sweeping

Staff executed sweeping operations subsequent to the ice and snow events in total removing 114.5 yards of material from 440 lane miles of our primary roadway network. The goal of sweeping 60% of roadways that received granular de-icing materials within four days of a snow event was exceeded by 19% during the month. These operations enhance the overall health and appearance of our Town by lessening the amount of particulate matter as vehicles grind it and send it into the air.



Road Shoulder Maintenance

Streets crews were able to take advantage of the mild weather this last month, in between the snow events, to take on some road shoulder repair needs that had been identified. Operations were undertaken on Prairie Hawk Drive, South Gilbert Street, Castle Oaks Drive, Ridge Road, and Plum Creek Parkway (in front of the MAC facility) using a total of 381 tons of road base material.



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 the staff worked diligently ensuring snow plows, de-icing units, and street sweepers were ready to tackle the snow events that did and didn't arrive. In total staff completed [92 work orders](#) helping to ensure the equipment is consistently working at optimum performance and reliability.



Special Operations

The site of the future Parks Department Central Service Center has seen some dramatic changes as Streets O&MD staff has been working to improve the Town's lot at the north end of Caprice Street. This last month marks the completion of this phase of the project as the access ramp, and the combined snow storage & slash/mulch site were completed and readied for operations this spring.



Looking Ahead

Looking to the month of **March**, we will continue to address snow events as they occur and sweeping operations after said events, plus pothole repair as needed. We will also continue to develop our personnel with ongoing training and other learning opportunities offered by Castle Rock University and Colorado LTAP.