



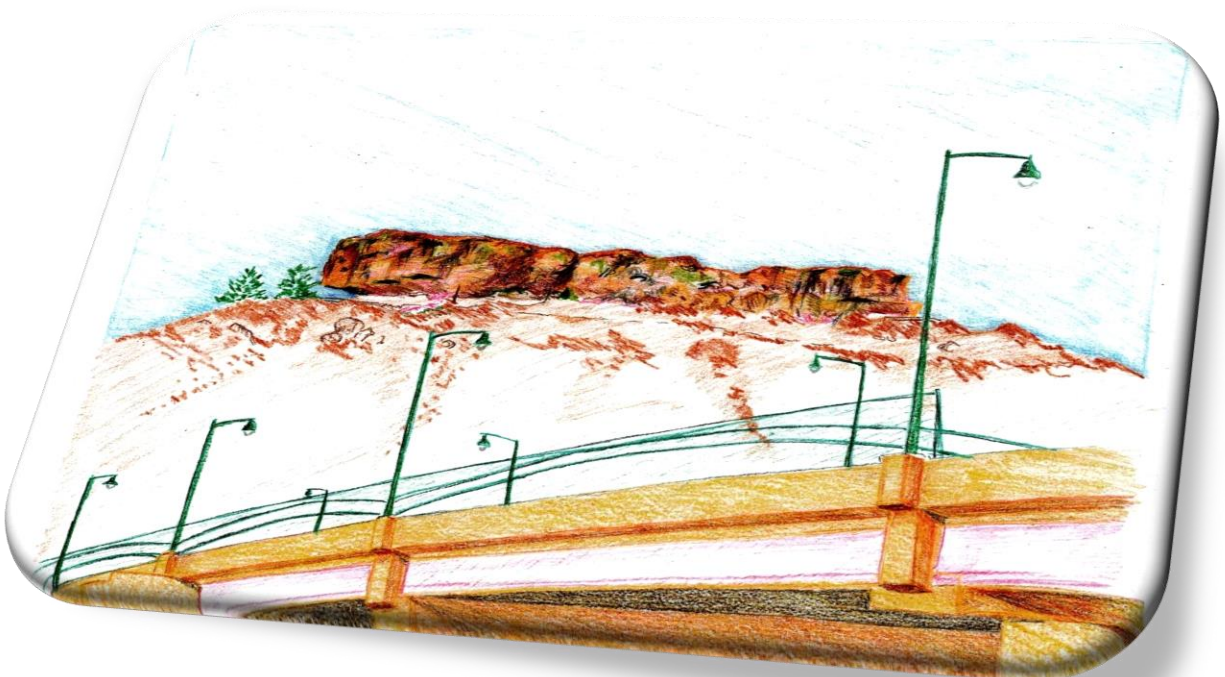
The Public Works Department operates under the CAN DO philosophy
- We are committed to doing the job right with a positive attitude
while staying dedicated to meeting the needs of our Town values
and continually searching for opportunities to improve.

PUBLIC WORKS DEPARTMENT

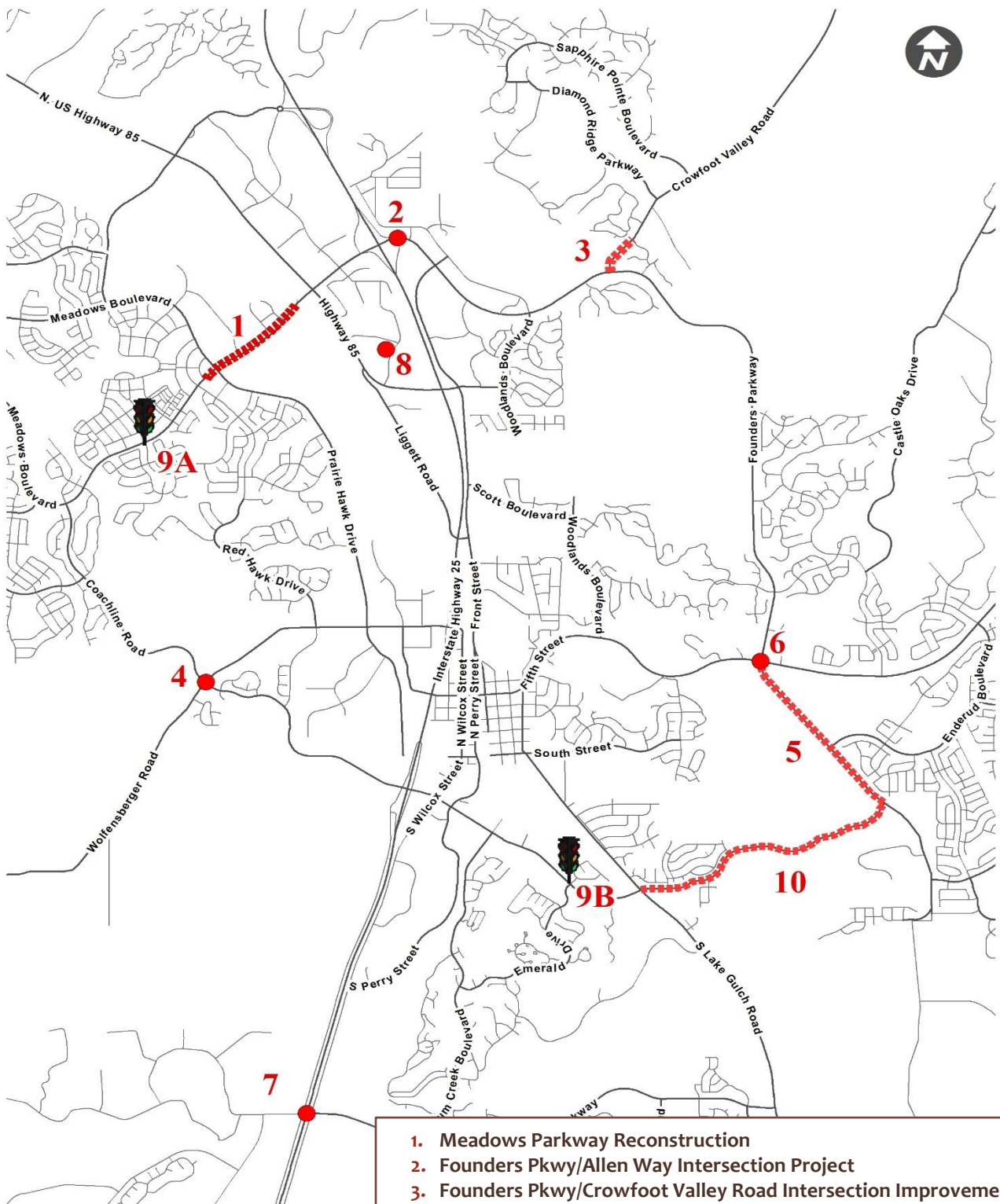


***Our Mission: To provide
outstanding service, safety
and support for
transportation infrastructure
and maintenance.***

MONTHLY REPORT – JUNE 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. Construction began May 29 and is scheduled to be completed August 11. **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:

- Right-of-Way appraisals have been provided to CDOT for fair market value comparison and authorization to proceed to negotiation with property owners.
- Received confirmation from CDOT that the Minor Interchange Modification Request (MIMR) can be updated with “No Right Turn on Red”. This should complete the MIMR for FHWA review/concurrence.
- Final Office Review (FOR) pending due to the traffic signal changes requested by CDOT.

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 complete and under review by CDOT
- 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 - Rocky Mountain Excavating was awarded the construction contract and is scheduled to start July 24.

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 Town's design consultant, Short Elliott Hendrickson, Inc. (SEH) investigated multiple alternatives to address safety concerns and capacity issues at this intersection. A roundabout was the preferred alternative by CDOT, who owns the right-of-way for this intersection. **Phase:** Design –SEH has begun design and is scheduled to be completed by January 2019. 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:** 2019

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:** Right-of Way Acquisition – Final Right-of-Way Plan Reviews (ROWPR) have been submitted to CDOT for authorization. **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.

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 Fifth Street. **Phase:** Construction – The construction contract was awarded to WL Contractors. Ground surface work was completed in June including installation of signal cabinets and associated hardware, as well as remaining concrete repair work. Electrical connections and meter installation work is remaining, as is fiber for connection to traffic network. Poles have been set, with mast arms, signal heads and pedestals to be installed in July. **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:

- Completed topographic survey including survey of utility locates
- Conducted field review of existing utilities and obtained utility maps
- Reviewed previous drainage studies and construction plans
- Conducted debrief of received public comments and resulting action items
- Reviewed existing roadway alignment between Gilbert Street and Eaton Street for intersection sight distance
- Prepared corridor traffic analysis including roundabout operations and intersection turn lane requirements
- Began conceptual layout of Gilbert Street roundabout

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 June, a second manufacturer's pan-tilt-zoom (PTZ) camera was installed on a trial basis at Meadows Parkway and Prairie Hawk Drive intersection. The Town now has a total of two camera types and software interfaces. Trial camera installations and management software will be evaluated prior to final product selection and locations.

Staff is continuing to trial travel time monitoring technologies, Acyclica (Wi-Fi) and Trafficast's BlueToad (Bluetooth) products through the month of July. Staff's comparison of traditional travel time measurements with reported time from these technologies had some problems so manufacturers are investigating potential issues and another round of trials is planned in July. Bluetoad devices were installed on the Wolfensberger corridor from Red Hawk Drive to I-25, including an off corridor location at Meadows Parkway and Prairie Hawk Drive. Acyclica devices were installed on Plum Creek Parkway corridor between Gilbert Street and I-25, including off corridor locations at Sixth Street and Wilcox Street, and Fifth Street and Woodlands Boulevard. 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



management center analysis data for origin and destination, and route finding. Town Staff are currently evaluating the reliability, ease of use, and other analytical tools each software provides.
Budget: \$520,000 Project Completion: Late Fall 2018

Engineering Division

2018 Pavement Maintenance Program (PMP) - The 2018 PMP is focusing 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 are complete throughout the East PMP area. Asphalt patching and crack seal operations continue in the East PMP area in preparation for the slurry seal treatment which is scheduled to start on July 9. The residents within the East PMP area were notified via letters mailed to their homes, as well as the use of variable message boards, that repair and maintenance work was to begin. Work notices will be delivered to the residents 48 -72 hours prior to start of work.



Work on primary streets continued with the completion of the Woodlands Boulevard mill and overlay.



The full depth reclamation (FDR) on Tabor Drive started on June 18. FDR is the process of blending the existing asphalt pavement into the subgrade to improve the quality of the material, then place a new bottom and top asphalt mat. Work is progressing nicely and the new pavement is scheduled to be in place by July 9. The Turnstone Avenue FDR is scheduled to start on July 9, and be completed by July 20.





Work on Lantern Trail is progressing nicely. With the completion of the bottom mat of asphalt pavement on the first two sections, the contractor has shifted the closure to the third section (between Galena Avenue and Enderud Boulevard). The contractor opened Lantern Trail from Enderud Boulevard to Mikelson Boulevard on June 29. The top and final mat of asphalt pavement is scheduled to be completed by July 9, with all pavement markings complete by July 12, weather permitting.



The Wagonwheel Trail reconstruction continues to progress nicely with the closure of Wagonwheel Trail between Brentwood Court and Still Meadows Place. All removals and subgrade preparation is complete. The bottom mat of asphalt is scheduled to be placed on July 9. The sidewalk, curb and gutter (SC&G) repairs will begin after the bottom mat of asphalt pavement is complete, but before the top mat is applied. SC&G work is scheduled to be completed by July 20 and the top and final mat of asphalt pavement is scheduled to be completed by July 23, with all pavement markings completed by July 26.

Public notification planning and website updates are continuing with assistance from the Community Relations team.



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.

Maintenance will also be performed on three Castle Rock Water facilities, Founders Treatment Plant, Waterman Treatment Plant, and Weaver II Well Field.

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

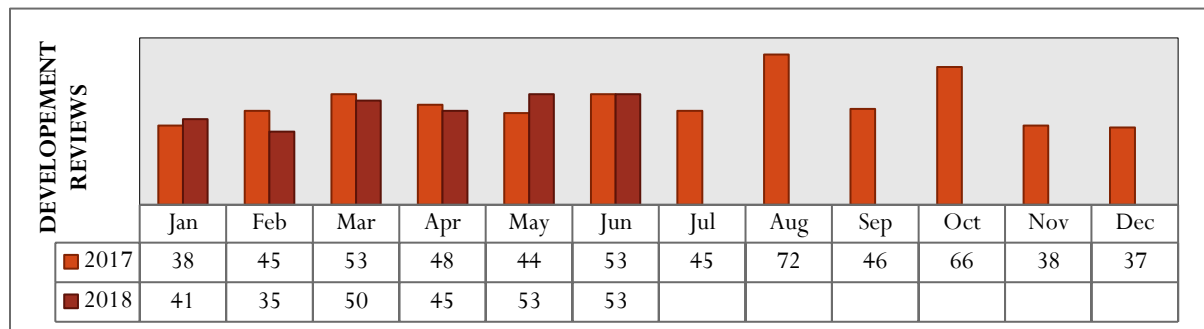
Bridge Surface Treatment

- Front Street Flyover
 - ✓ Mill and overlay wearing surface

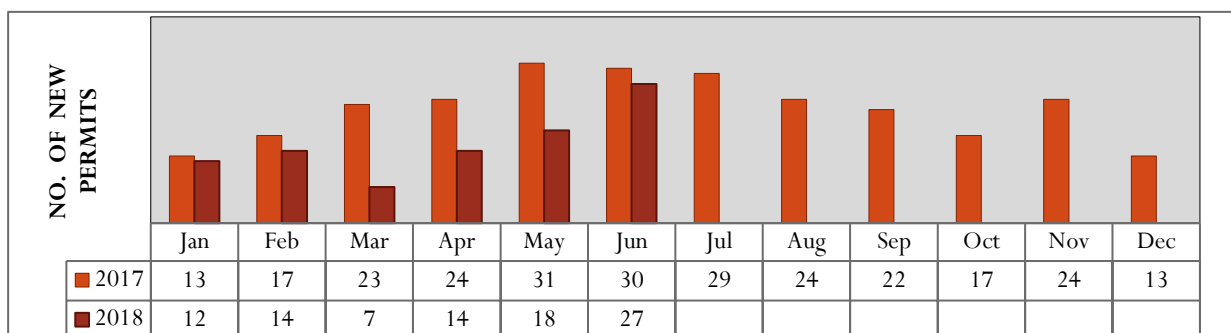
Treatments and locations may change pending current evaluation taking place and/or actual bid pricing received that may require some modifications.

Development Review and Permitting

Development Review - Included in the 53 submittals are 28 first time applications with two pre-applications. All reviews were completed on or before the due date assigned by the Public Works Review Team.

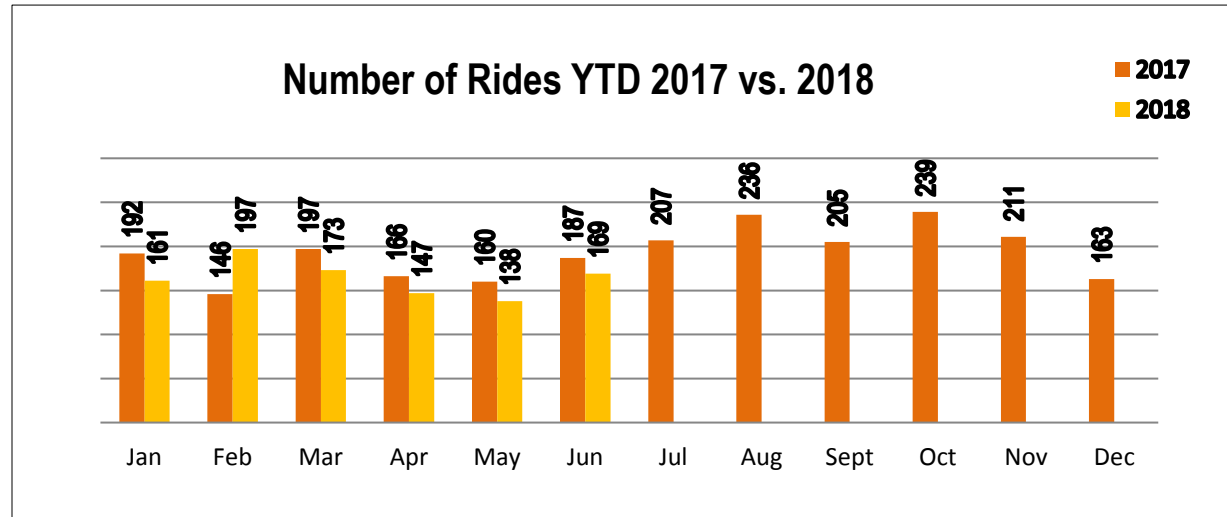


Permitting – Twenty-seven permits within the public right-of-way



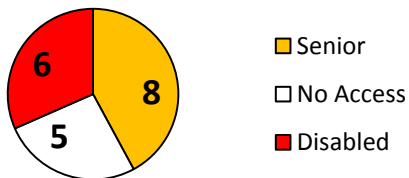
Transportation Division

Taxi Voucher – For the month of June, the Taxi Voucher Program funded 169 rides, this was a 10% decrease from last June's total of 187 rides. Ridership this month is up from last month due to three new riders needing daily rides to get them to their jobs.

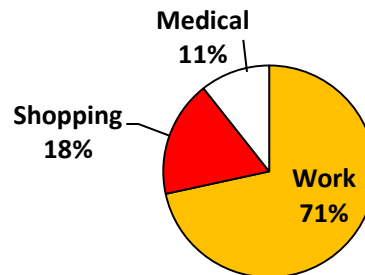


Rides are available for work, shopping or medical trips. Transportation services are provided for Castle Rock residents who are senior citizens, have a disability that prevents them from driving, or do not have access to a vehicle.

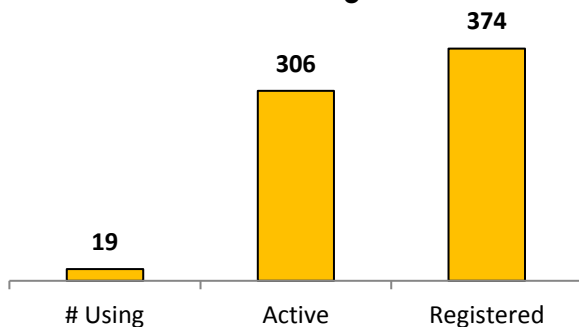
Types of Riders Using the Service



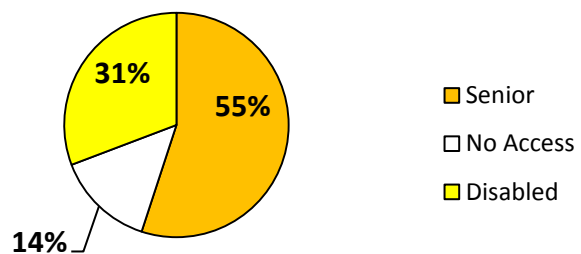
Ride Destinations



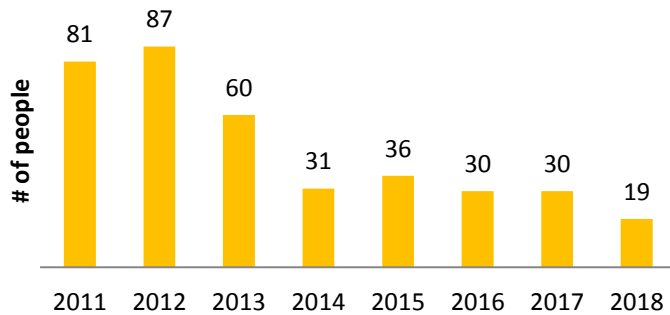
Number of Riders Using the Service vs. Registered



Percentage of the Total Rides (169) by Each Rider Type



Number of People Registering for Program



There were three new registrants for the Taxi program this month. Since its inception, a total of 374 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 696 rides in the month of June which was a 3% decrease from last month's rides of 721. 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 June we addressed five requests from the public related to traffic signal intersection operations, safety, and maintenance. A total of 92 traffic signal maintenance visits were completed in June. Sixty-five of those visits were planned inspections for quarterly preventative maintenance. Thirty-five of those visits were for non-routine traffic signal investigations, troubleshooting, special event work, and repair, replacement and installing of parts. Twenty-seven of which were completed by Town staff and approximately eight visits by the Town's signal maintenance contractor. Non-routine visits included preparing and managing a large annual event at the Fairgrounds, addressing detection recall, bulb burn outs, signal head adjustment, and other repair and replacement of parts. Second quarter preventative maintenance, performed by staff, was also started this month.

Street Signs and Pavement Marking Maintenance - The month of June was a productive month as staff completed 741 tasks utilizing our Sign Tech and three seasonal staff. Staff also completed reapplying 552 symbols consisting of stop bars, crosswalks, and arrows. As of June 30, our striping contractor, Colorado Barricade, has reapplied 90 assets consisting of long lines, stop bars, crosswalks and arrows at traffic signals. The crew also assisted with two special events; the Classic Rock Cruise-In Car Show, and "Back the Blue" Half Marathon.



Transportation Planning

Neighborhood Traffic Calming Program (NTCP)

Previous Inquiries --

- Sapphire Point Boulevard - The Public Works and Police departments have collected and reviewed the speed data for Sapphire Pointe Boulevard between Baguette Drive and Sulfur Lane. According to the data, the 85th percentile speed for both section of the street were below the 30 mph qualifying threshold. The homeowner was informed that the street does not qualify for the program and other options were made available. Staff has not heard if they will utilize the other options or appeal the findings of the study.
- Tree Top Drive - The support petition was received and verified by Town staff. The speed study was conducted and analyzed. The results showed an 85th percentile speed of 23 mph. However, the homeowner called and informed staff that a storage container and contractor trucks were parked on the street next to the speed tube location, thus interfering with the data by forcing traffic to slow down. Town staff agreed the situation slowed traffic during the study and asked if the homeowner would like to postpone the study. They agreed and thought it would be a good idea to conduct the study in August once school is back in session. The new speed study will be conducted in mid-to-late August once Aspen View Academy is back in session.
- Saddleback Drive - Phase 3 of the Woodlands and Escavera traffic calming plan will be implemented toward the end of August, weather permitting. Phase 3 will include one speed cushion on Saddleback Drive just south of Foxtail, and one median pedestrian refuge on Black Pine just east of Saddleback Drive. Notice will be given to the neighborhood as the construction work is closer.

Town Staff Identified Projects

- Butterfield Crossing Drive – Staff is working on signing and striping plan for Butterfield Crossing Drive. This is scheduled to be completed prior to the beginning of the new school year in August. Town staff will reach out to the HOA, and principals of Castle View High School and Meadow View Elementary informing them of the change.

Development Review

- Staff reviewed and commented on one transportation impact study during the month. Work was completed by the due date.

Downtown Mobility Study - The first public workshop was held on June 6. About a dozen people were in attendance and participated in several activities aimed to collect feedback on input about downtown. During the meeting, the Town's consultant, Kimley Horn, provided a presentation and led activities asking for participants to identify trouble spots. Some of the concerns included were inconsistent speed limits, congested interstate ramps, and hazardous crosswalks. They also identified their top downtown values; entertainment options like dining and shopping, community gathering place, historic charm, and walkable area with good access to trails. Public input is still being received through June and early July via the website (www.CRgov.com/MoveAroundDT)

I-25 / Blackfeather Trail Interchange and Founders Corridor Study - Town staff is working with Felsburg, Holt, and Ullevig (FHU) to finalize the scope of the study. Once finalized, the Town will approach CDOT and Douglas County for concurrence prior to pursuing the study.

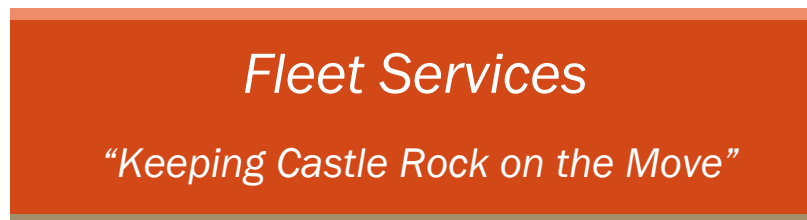
I-25 / Crystal Valley Parkway Paired Interchange Study – Early indication point to congestion relief for the Plum Creek interchange and a more efficient overall transportation network if a Crystal Valley Parkway and Tomah Road paired interchange is constructed. A first draft of the report was delivered by the Town's consultant, Felsburg, Holt & Ullevig (FHU). Staff has reviewed this draft and provided comments back to FHU for revisions.

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 has provided extensive data on the biking and walking conditions in Castle Rock for the DRCOG first Active Transportation Plan. DRCOG has produced the first draft of the regional bike/trail map for the ATP. Town staff is in the process of reviewing and commenting on the plan.

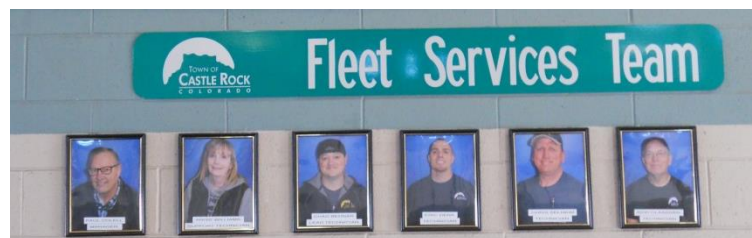


DRCOG 2021 – 2023 Transportation Improvement Program - The DRCOG board was presented the first draft of the TIP policy document. This document breaks down how the regional and sub-regional funding shares and processes will be handled. The regional call for projects is expected to be in August, while the sub-regional call for projects is expected in September. The sub-regional TIP Steering Committee meeting for June was cancelled. The Memorandum of Understanding and scoring criteria is still being written by the technical team.

Future CDOT Bustang Stop - During the south I-25 Planning & Environmental Linkages (PEL) study, the Town will be coordinating a Park-n-Ride structure with CDOT to accommodate the Bustang regional transit service. The Park-n-Ride facility will be located in Town near I-25. Off peak commuting hours, when the facility is not serving Bustang riders, may be able to serve local parking needs. This type of arrangement will be coordinated with CDOT.



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!



June 2018 was the busiest and most productive month of the year for the Fleet Services Division. Staff completed 140 work orders and billed out over \$95,000 of labor & parts.



The upgrade of our Fleet software system is coming along with 85% completed and looking at a “go-live” date of July 23.

New vehicles continue to roll in and the technicians are working hard to get them into service ASAP. Five new Police Interceptors were put into service this past month.



Paul Colell, Fleet Services Division Manager, attended the Government Fleet Expo where the Town of Castle Rock was mentioned as being in the top 100 Fleets nation wide!!



Performance Benchmarks

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

Outcome: Fleet team completed 80.4% of the work orders within 24-hours of opening repair requests or service requests. This benchmark demonstrates how quickly the Fleet Division is working on vehicles to get them back on the road.

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

Outcome: Town vehicles and equipment were available 97.6% 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: Technican productivity was 82.7%.



Due to mechanical problems Fleet Services and Street Operations & Maintenance worked together to drain one crack seal machine into another.



Street Operations & Maintenance Division

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

- Crack Seal
- Pothole Patching
- Road Verge mowing
- Gravel Road Maintenance
- Asphalt Patching
- Special Operations
- Training



Crack Seal

June continued to bring unseasonably warm weather allowing the crew to continue crack seal operations. Of the 100-mile goal for the spring season operations, 89% of this goal has been met with the completion of 83 lane miles to date. These operations work to preserve the life expectancy of the paved surfaces in the town.



Pothole Patching

Streets O&MD received a number of requests for pothole repairs during the month and completed repairs on **68 potholes** using cold mix asphalt and **90 potholes** being repaired with concrete. The major areas addressed were in the Plum Creek area.

Road Verge Mowing Operations

The Streets Division has completed round one of mowing operations for the season having worked on **55.5 edge line miles** of roadway. In preparation for the mowing, crews also cleaned up trash and removed larger obstacles that found their way into the verge area. This operation not only enhances the appearance of the Town, but also enhances safety for people who may need to use the shoulder as it keeps down tripping hazards and discourages snakes. It also allows for close inspection of some drainage areas and other roadway assets that may not be apparent from a drive by inspection in a truck.



Gravel Road Maintenance

Streets Division crews completed gravel road maintenance operations, specifically Rocky View Road. Crews also rebuilt the drainage areas adjacent to a large road base failure on Castle Oaks Drive subsequent to the asphalt patch being completed. These activities maintain a good driving surface and allow water to be directed away so as not to undermine the road itself.

Asphalt Patching

Crews responded to a number of large asphalt patching needs, including a large emergency patch on Castle Oaks Drive where the road was blown out from excessively heavy vehicles traversing it. Other locations that received large asphalt patches were on; Timber Hollow Loop, where garbage trucks broke up the road surface, and Wonder Drive which had a large transverse crack that led to significant compromise of road way surface. Crews used more than 20 tons to execute these repairs. These repairs will allow a safer and more pleasant drive for the travelling public.



Special Operations

The sound wall damages that had occurred on Castle Rock Parkway and Meadows Boulevard have been repaired. These walls serve to mitigate sound from busy roadways from affecting nearby residential areas negatively. Both were completed with minimal hassle to the affected residents and regular contact was made to ensure good communication with the property owners.



The team also worked hard to celebrate and shout out their peers and coworkers from other divisions and departments by organizing and hosting a [Snow Fighters Appreciation Lunch](#).

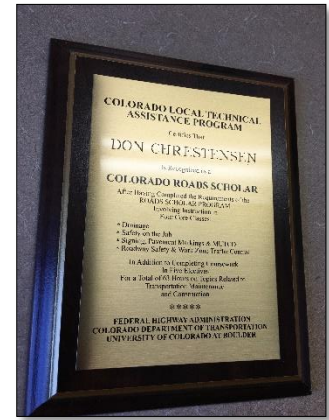


Training

Eight staff members completed an L-Tap training course on the “Safe Operation and Maintenance of Chainsaws”. These courses help our staff and our operations to be more efficient and versatile at serving the stakeholders of our Town while observing safety standards and safeguarding Town assets.



Additionally, Don Chrestensen received his Road Scholar Plaque, which took approximately two years of attending each course that was available on the Front Range.



Looking Ahead

Looking to the month of **July**, we will continue our efforts to keep the Town's roadways in good condition with potholing, asphalt patching, and street sweeping operations as needed. We will complete crack sealing and then move on to bridge maintenance operations, with the expectation of completing four bridges this season. We will continue to address potholes and sweeping needs as they arrive, as well as conducting equipment maintenance to ensure the tools needed will be available for the next round of crack seal operations coming up in **August**. Training will be an ongoing endeavor.