



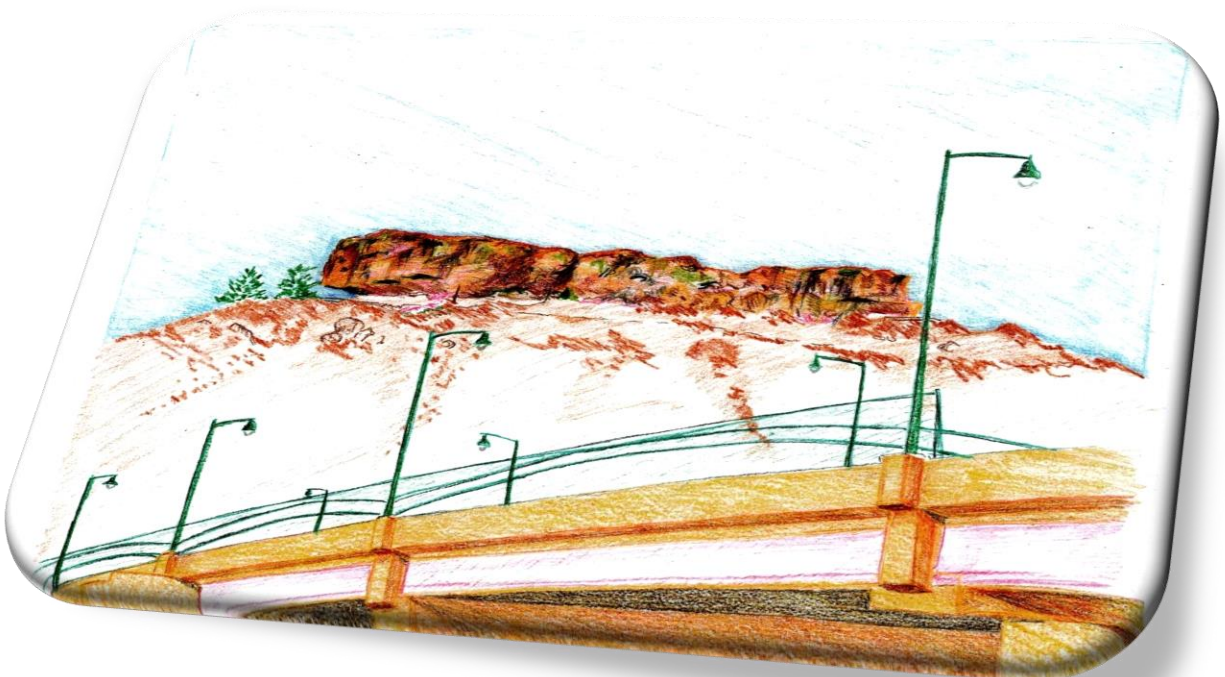
The Public Works Department operates under the CAN DO philosophy
- We are committed to doing the job right with a positive attitude
while staying dedicated to meeting the needs of our Town values
and continually searching for opportunities to improve.

PUBLIC WORKS DEPARTMENT

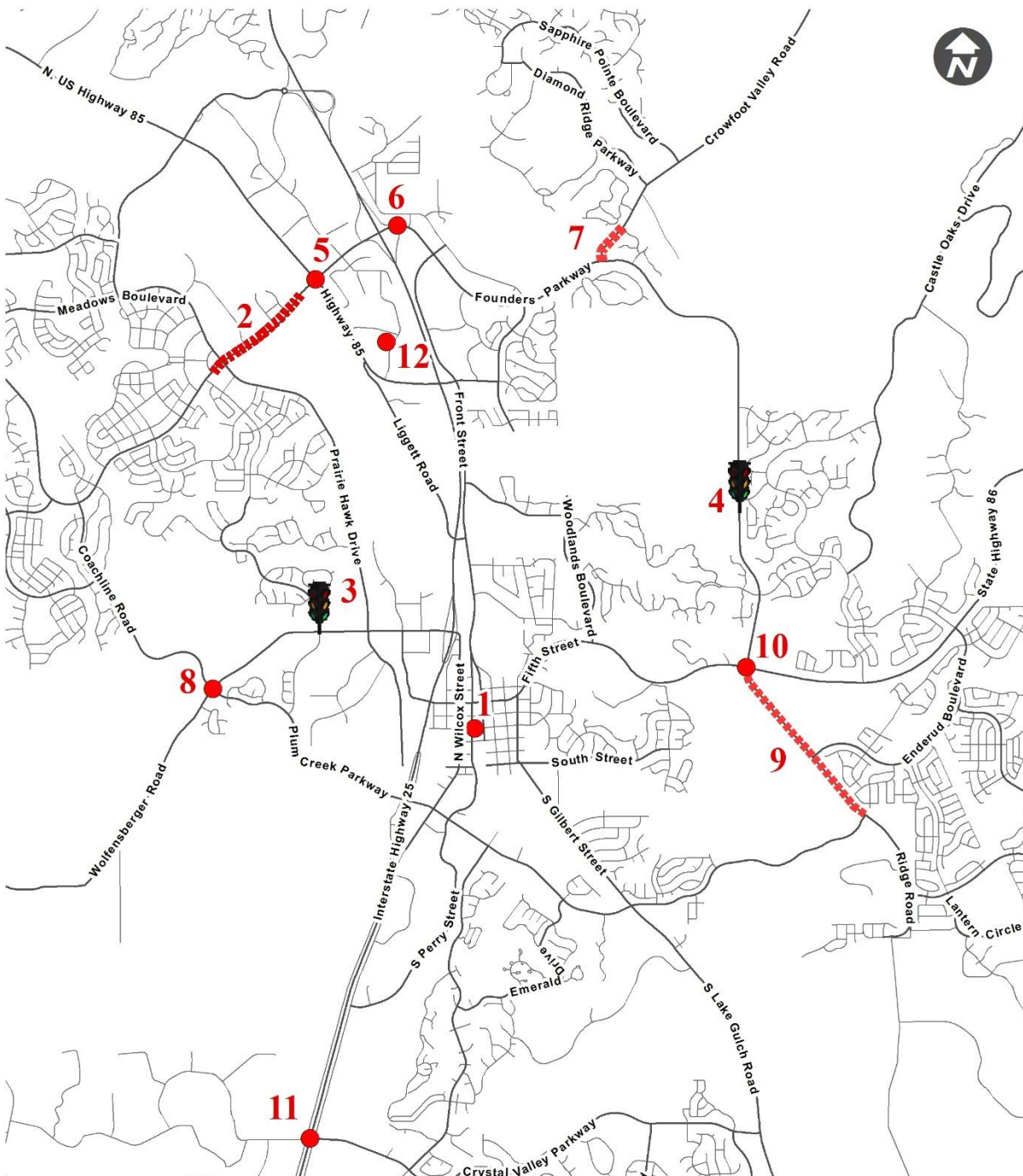


***Our Mission: To provide
outstanding service, safety
and support for
transportation infrastructure
and maintenance.***

MONTHLY REPORT – SEPTEMBER 2017



CAPITAL PROJECTS



1. Roundabout at Perry Street/Third Street
2. Meadows Parkway Reconstruction
3. Traffic Signal at Wolfensberger Road/Red Hawk Drive
4. Traffic Signal at Founders Pkwy/Rising Sun Drive
5. US 85/Meadows Pkwy Intersection Improvements
6. Founders Pkwy/Allen Way Intersection Project
7. Founders Pkwy/Crowfoot Valley Road Intersection Improvements
8. Roundabout at Wolfensberger Road/Plum Creek Pkwy
9. Ridge Road Widening (SH86 to Plum Creek Pkwy)
10. SH86/Fifth Street Intersection Improvements
11. Crystal Valley Interchange (Right-of-Way Acquisition)
12. Public Works Facility Expansion

- 1. Perry Street and 3rd Street Roundabout Project** – This construction project will convert the existing four-legged, 2-way stop intersection into a single lane mini roundabout. This will improve intersection capacity and traffic operations that can accommodate current and projected traffic volumes through the intersection while also enhancing the pedestrian environment. **Phase: Construction** – *This project has been completed excluding the final light poles that are estimated to be installed the first part of December.* **Budget: Construction: \$877,000** **Construction Completion: Summer 2017**



- 2. 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: Design** – *Felsburg, Holt and Ullevig is the design consultant for this project. Staff is working with consultant and CDOT to finalize incentive/disincentive language. Final submission will take place in the fall to allow for CDOT Standard Special Provision updates.* **Budget: \$112,385** **Projected Design Completion: Fall 2017**

- 3.& 4. Intersection Signalization Projects** – This project will complete the installation of two new traffic signals; one at the intersection of Wolfensberger Road/Red Hawk Drive; and one at the intersection of Founders Parkway/Rising Sun Drive. **Phase: Construction** – *Both traffic signals are in full operation. Final inspections are underway at both intersections and are expected to be complete during the month of October.* **Budget: \$460,000** **Construction Completion: Fall 2017**



Founders Parkway/Rising Sun Drive

Wolfensberger Road/Red Hawk Drive



5. **US85/Meadows Parkway Intersection Improvements** - This project will construct a second northbound left turn lane at Meadows Parkway/US 85 and replace the traffic signal pole on the northeast corner of the intersection. **Phase: Construction** – *This project is substantially complete. Town staff is working with the contractor and CDOT on minor punch list items.* **Construction Budget: \$212,000 Construction Completion: Summer 2017**



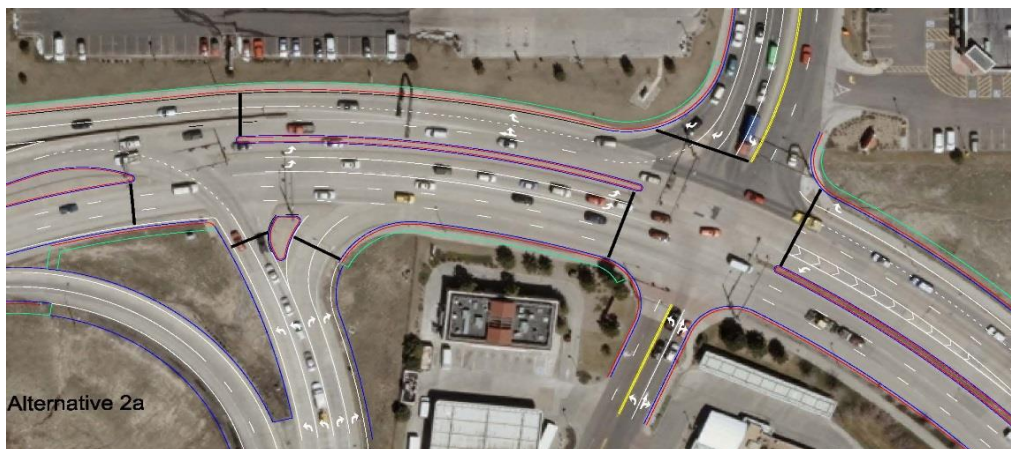
6. **Founders Pkwy/Allen Way Intersection Improvement Project** – This project will address the need for the following improvements:

- 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 needs are confirmed. Plans and legal descriptions have been prepared for CDOT review.*
- *Continue working on the Final Office Review (FOR) plans and specifications.*

Budget: \$760,000 Projected Design & ROW Completion: Winter 2017



Founders Parkway/Allen Way Proposed Intersection Layout

7. 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:

- Field Inspection Review (FIR) meeting held with CDOT.
- Staff has compiled community input and will be implementing street lighting and xeric landscaping features.
- Staff is working with CDOT on right-of-way and clear zone concerns along Founders Parkway (SH-86)

Budget: \$650,000 (2016-17) **Projected Design & ROW Completion:** Winter 2017

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

- Continuing to work on 60% plans.

Budget: \$150,000 **Projected Design Completion:** Winter 2017 **Construction:** 2018

9. 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. The following is a summary of the design activities performed this month:

- Survey work has been completed.
- 30% plans are near completion. The Town is awaiting CDOT input for Founders/Fifth/ Ridge intersection to determine tie-in point near King Soopers.

Budget: \$400,000 **Projected Design Completion:** Winter 2017 **Construction:** To be determined

10. Founders Parkway (SH86)/Fifth Street Intersection Improvements – The consultant will investigate multiple alternatives to address safety concerns and capacity issues at the intersection. Improvements under evaluation include:

- Southbound traffic – add left turn lane, add a free right turn lane, convert right turn lane to through/right
- Eastbound traffic – convert right turn lane to through right, add free right turn lane
- Northbound traffic – add left turn lane, add second through lane, add a free right lane
- Westbound traffic – add through lane, add a free right turn lane

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

- A roundabout is feasible and CDOT has said they would support the design.
- Town staff and the consultant will be meeting in early October to discuss an Open House for community input.

Budget: \$340,000 **Project Design Completion:** Winter 2017

11. 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:

- **Crystal Valley Interchange – East side ROWPR:**
 - ✓ Continuing with right-of-way monumentation surveys
 - ✓ Continuing with final authorization survey plan edits

Budget: Development Escrow

12. 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 the firm D2C performed during this month:

- Continue to work on 60% design

Budget: \$220,000 **Project Design Completion:** Winter 2017

Traffic Signal System Upgrades - Phase 2 - Over the month of September, the planning of the final stage of radio deployment and fiber optic cable installation occurred. The final installations will occur during October. 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 and radios to bring all of the Town's traffic signals onto the communication network. **Budget:** \$400,000
Construction Completion: Fall 2017

Engineering Division

2017 Pavement Maintenance Program (PMP) – Prestwick Way and October Place reconstructions are complete along with Coachline Road concrete pavement restoration. Staff is working with the contractors to develop punch lists for final acceptance.

The Crack Seal & Mastic project continues in the South PMP area. This project will see crack seal material applied to cracks with a general width of $\frac{3}{4}$ of an inch or less, and mastic material applied to cracks of $\frac{3}{4}$ inch or more. This treatment is being applied to streets within the south PMP area that did not receive a preservation or rehabilitation treatment.



The 2017 Miscellaneous Concrete Replacement project's bid opening was August 31 with Chato's Concrete being low bid. Staff has submitted the contract to the Town Manager for approval. The pre-construction meeting is scheduled for October 3 with construction scheduled to start the following week.

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

2018 Pavement Maintenance Program (PMP) - The PMP team continues working on the field reconnaissance for the 2018 PMP. This consists of the East PMP area, and scheduled primary streets, which include: Woodlands Boulevard, Plum Creek Boulevard between Ebony Drive and Plum Creek Parkway, Wilcox Street from Wolfensberger to Plum Creek Parkway, and Meadows Boulevard from N. Meadows Drive to Cherokee. 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. Changes in the proposed streets may occur due to current evaluation taking place and/or actual bid pricing received that may require some modifications.

2017 Facilities Parking Lot Improvements Program – All major construction activity has been completed for the 2017 Facilities Parking Lot Improvements Program. Staff is in the process of walking the parking lots with the contractor to develop punch list items for the contractor to address prior to accepting into warranty.



Before AND After

2018 Facilities Parking Lot Improvements Program - The PMP team has begun working on the field reconnaissance for the 2018 Facilities Parking Lot Improvements Program. This consists of the parking lots at the Metzler Park, Castle North Park, Rock Park, the parking lot at 4th Street and Jerry Street, and the parking lot at the Train Museum at 420 Elbert. Changes in the proposed facilities may occur due to current evaluation taking place and/or actual bid pricing received that may require some modifications.

2017 Bridge Maintenance Program (BMP) - Staff has identified the following locations for the 2017 BMP:

Bridge Repair

- Meadows Parkway Bridges over Plum Creek – Upgrade interior bridge railing
 - ✓ The bridge rail is being installed and is expected to be completed the first week of October.

Bridge Surface Treatment

- Meadows Parkway Bridges over Plum Creek – Mill and overlay of wearing surface
 - ✓ Work is tentatively scheduled to start October 8. All work is to be performed at night (8:00pm to 5:30am) and is expected to take three nights.

2018 Bridge Maintenance Program (BMP) - Staff has identified the following locations for the 2018 BMP:

Bridge Repair

- Castle Oaks Bridge at Rocky View Road
 - ✓ Girder repairs
- 5th 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

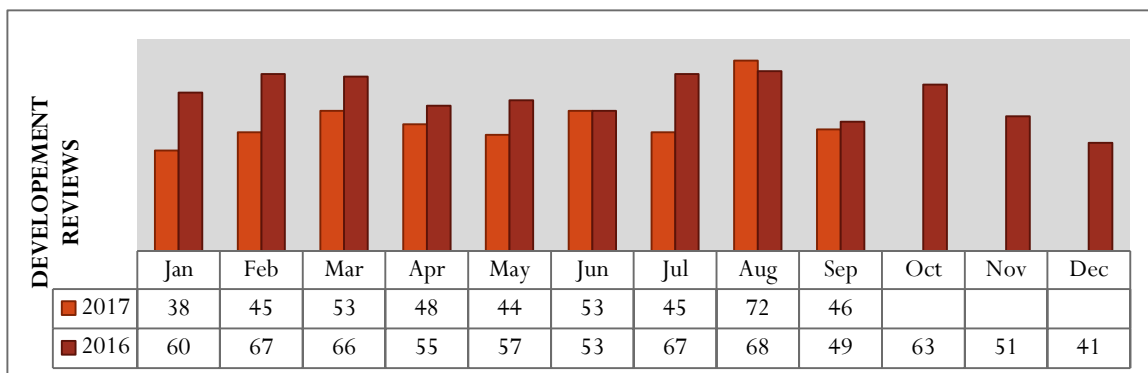
- Front Street Flyover
 - ✓ Mill and overlay wearing surface

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

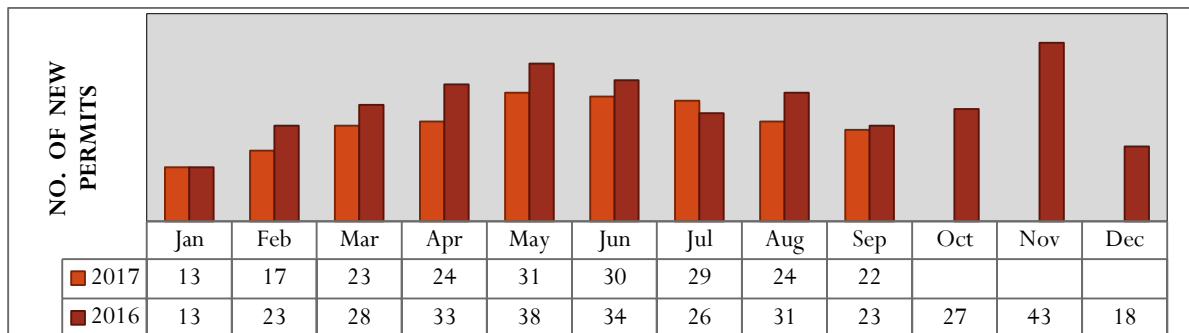
Skyward Subsurface Edge Drain Project - The work to be performed under this contract will include the installation of “ELJEN” drainage system along the back of sidewalk on Skyward Way to capture groundwater and nuisance flows across residential lots. This will also include the connection to an existing storm inlet, the removal and placement of concrete driveways, and the removal and restoration of existing landscaping including existing irrigation systems. Staff completed the bid package for this project, and the project was advertised for competitive bidding on September 8. The bid opening was held September 28. Staff is evaluating bids, and plans to make recommendations by mid-October.

Development Review and Permitting

Development Review - Included in the 46 submittals are 17 first time applications with four pre-applications. All reviews were completed on or before the due date assigned by the Development Services Project Manager.

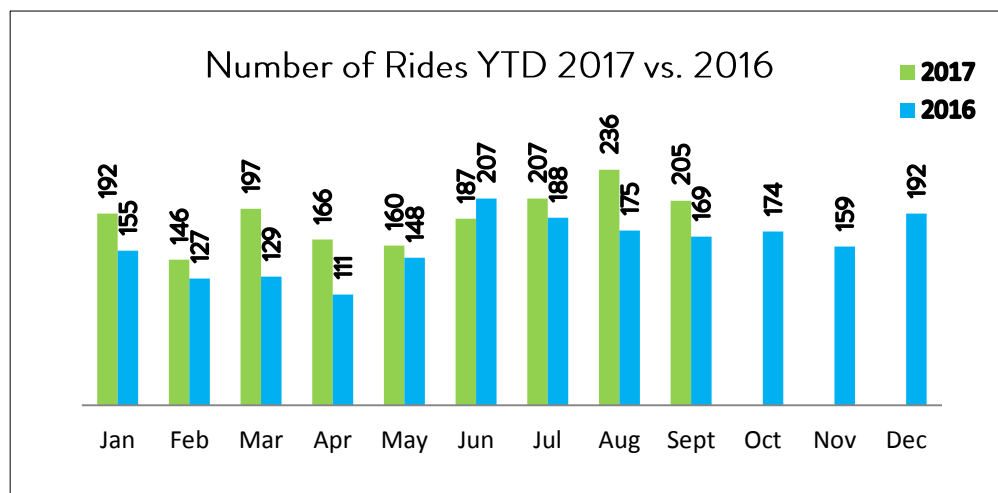


Permitting - Included in the 22 permits are: three Residential Development (Founders Village 25; CVR Drainage & Sanitary Sewer Phase 2; CVR Filing 17 Early Grading); four Commercial (Castle Plaza South Amendment 1 Lot 5, Promenade Block 2 Phase 1, Promenade Block 5 Car Wash SDP, Meadows F20 Ph1 Amendment 2- Ph2 Future Street); and 15 permits for work within the public right-of-way, three of which were necessary due to current development.



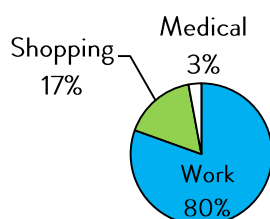
Transportation Division

Taxi Voucher – For the month of September the Taxi Voucher Program funded 205 rides, this was a 21% increase from last September's total of 169 rides. The increase in rides is a result of five residents joining the program to get transportation help to get to work, the grocery store and medical appointments.

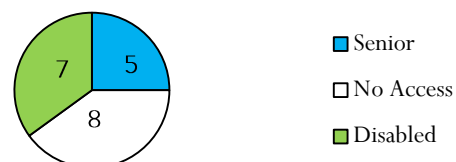


Rides are available for work, shopping or medical trips. Transportation services are provided for Castle Rock residents who are senior citizens, have a disability that prevents them from driving, or do not have access to a vehicle.

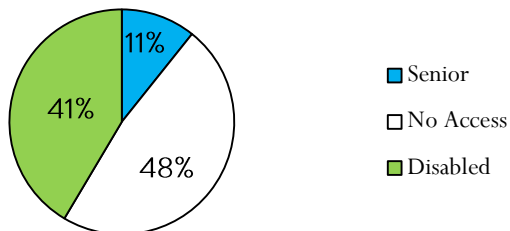
Ride Destinations



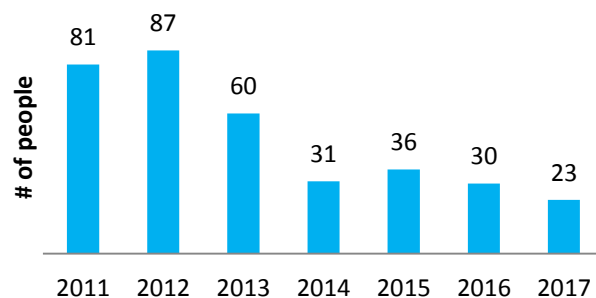
Types of Riders Using the Service



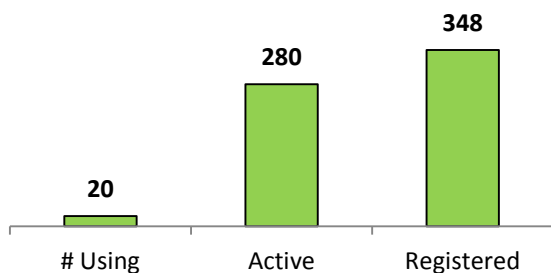
Percentage of the Total Rides (205)
by Each Rider Type



Number of People Registering for
Program Each Year



Number of Riders Using the
Service vs. Registered



There were five new registrants for the Taxi program this month. Since its inception, a total of 348 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.

Town Trolley - The Trolley drove for a handful of events in September which included Castle View High School Poms get together event, ArtFest, a Wedding Reception Party, Oktoberfest and a Douglas County High School Homecoming get together event.



Senior Center Shuttle - The Senior Center provided 693 rides in the month of September which was an increase from last month's rides of 619. The volunteer driver program provides service Monday through Friday from 9 am to 3 pm.

Traffic Engineering & Operations

Traffic Signal Operations and Maintenance - For the month of September, there were a total of thirteen non-routine traffic signal maintenance visits completed by either Town staff or the Town's signal maintenance contractor. Most of these visits were related to vehicle detection problems, battery change-outs or radio installations. Other repairs completed were associated with LED change-outs for vehicle signal heads.



Street Signs and Pavement Marking Maintenance - Last month the Town's two sign technicians replaced 105 pavement symbols. In addition, 158 markings were inspected for quality.

With the help of the GIS intern, 43 new signs were added to the sign inventory and staff replaced 29 signs that were missing, and/or at the expected life cycle.

In addition, the crew spent 29 hours on special event activities. The paint season is quickly winding down and the crew is preparing to assist with the upcoming snow plow season.



Transportation Planning

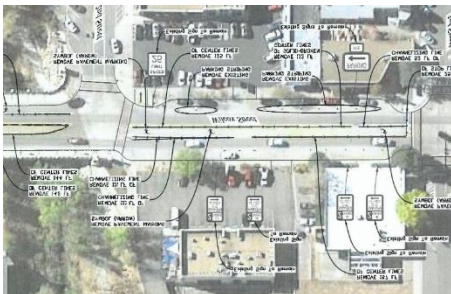
Neighborhood Traffic Calming Program (NTCP)

- **Eastview Drive:** Staff has determined that the street does not qualify for the NTCP. While the speeds are above the threshold, the traffic volume is below the 500 vehicles per day threshold. In addition, there is currently a lot of construction traffic on Eastview as the homes are being constructed. Once the construction is completed the volume is likely to drop further. The resident who sent in the petition has been notified.

Transportation Master Plan (TMP) Update - The adoption of the TMP has been scheduled for the October 3 Town Council meeting.

Development Review

- Staff reviewed and commented on five transportation impact studies during the month. All reports were completed by the due date.



Downtown Striping Plan - The downtown parking striping for Wilcox and Perry is scheduled to occur in October now that Festival Park work on the curb extensions and sidewalk are near completion. The striping will be coordinated with staff and their on call contractor.

South Perry Parking Modification Plan

The overnight parking restriction signs were installed along South Perry Street from the Safeway driveway south to the end of the street. Staff has been watching the area to see if the signs were successful at removing the truck parking along the street. At present the truck traffic parking has not been observed. Property owners and businesses have responded favorably to the new signs.



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, almost all of them have to rely on their Town issued vehicles to keep Castle Rock moving and growing. Here at the Fleet Services Division, we take great pride in knowing that those vehicles are reliable and safe to operate.

In the month of September 2017, fleet technicians worked on 113 town vehicles and equipment and billed out over \$51,000 worth of parts and labor. This number was great considering the Fleet Division is down one technician from our usual four. The fleet technician position has been posted and we expect to start with interviews the first week of October.



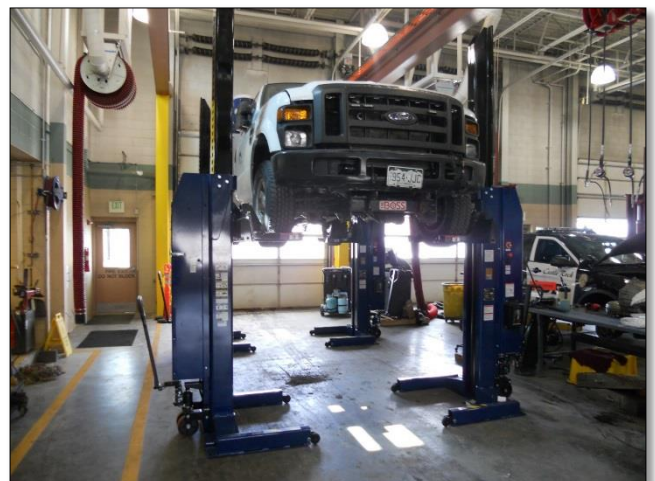
The Fleet Services Division is also excited to start the process of upgrading our fleet software system to a web based version, this new version of our software will provide many new features to our work process and will increase productivity.

The Fleet Services Division also conducted a very successful online auction bringing in \$115,000 for two used ambulances.



The Fleet Services Division continues to receive new vehicles and we are working hard to get them equipped and ready for service. This month we put into service one F250 truck for the Parks Maintenance Department.

Using mobile lifts to work on a Town vehicle.





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

Outcome: Fleet team completed 73.2% of the work orders within 24-hours of opening repair requests or service requests. This was a little below our benchmark due to being short one technician.

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

Outcome: Town vehicles and equipment were available 97% of the time. This high number of availability 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 80.2% which is well above our benchmark. This means that our Fleet Services technicians are working on Town vehicles 80% of the time they are here at work. A phenomenal number compared to the APWA standard!

Street Operations & Maintenance Division

During the month of **September**, the Street Operations & Maintenance Division (SO&MD) performed work in eight (8) maintenance operations:

- Crack Sealing
- Pavement Maintenance
- Pothole Patching
- Street Sweeping
- Snow & Ice Control
- Equipment Maintenance
- Special Operations
- Training

Crack Sealing

Staff completed crack seal operations on the roadways in the PMP East area of Town. During these operations, which spanned the entire month, two (2) crews worked hard and completed **51 lane miles** of roadway. Staff worked on the roadways in the Founders Village subdivision. These operations are in preparation for roadways that are scheduled to receive a pavement maintenance treatment next year. These operations improve the life of the roadway by minimizing the deteriorating effects of any new cracks that have appeared.

Pavement Maintenance

Staff assisted the Water Department by performing **three (3) full depth saw cuts** on Wilcox Street (one by Town Hall and another by Sixth Street) and another on Tulip Tree Place.

Pothole Patching

SO&MD received only a few requests for pothole repairs during the month and in each event they completed the repairs in less than a week, well ahead of our 10 day service level. In all staff repaired **22 potholes**. The roadways that received this work were Butterfield Crossing, Trailside Loop and Trailside Lane.



Street Sweeping

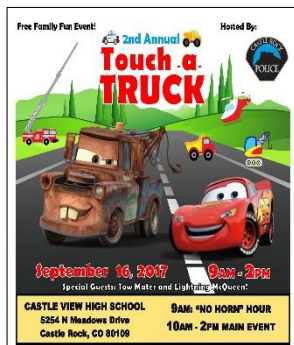
Staff performed and met their goal this month by street sweeping the business areas twice. These operations not only help to keep our Town vibrant and beautiful, they also help to keep our waterways and the air we breathe a little cleaner. During these operations staff swept **111 Lane miles** of roadway removing **12 tons** of materials.

Snow & Ice Control

Staff shifted gears a little during the month and started preparing for the upcoming winter season by getting our de-icing materials in stock. We received and mixed a total of **1,200 tons** of new materials during the month.

Equipment Maintenance

Continuing with the preparations for the upcoming winter season, staff started regular equipment maintenance on all of our snow control equipment. Staff completed **25 work requests** on snow plows, dump trucks, and our snow blower. These repairs are essential to keep the equipment working at optimum performance and reliability.



Special Operations

Staff responded to five (5) separate requests over the last month. One request was to participate in the **Touch-a-Truck** event sponsored by the Castle Rock Police Department at Castle View High School, another request was to assist the Water Department with the annual Household Chemical Waste Round-Up, and three other requests to remove roadkill.

Training

Several Staff members completed workplace training over the last month. Four staff members completed the American Public Works Association's Winter Maintenance Supervisor Certificate Training program. Additionally during the month, a staff member completed the "Safety on The Job" course as part of the Colorado LTAP Road Scholar program.



Looking Ahead

During the month of **October**, the SO&MD staff will be working on mowing and trimming, and will start working on our annual full town Fall Sweeping Program once the leaves start dropping heavily.