



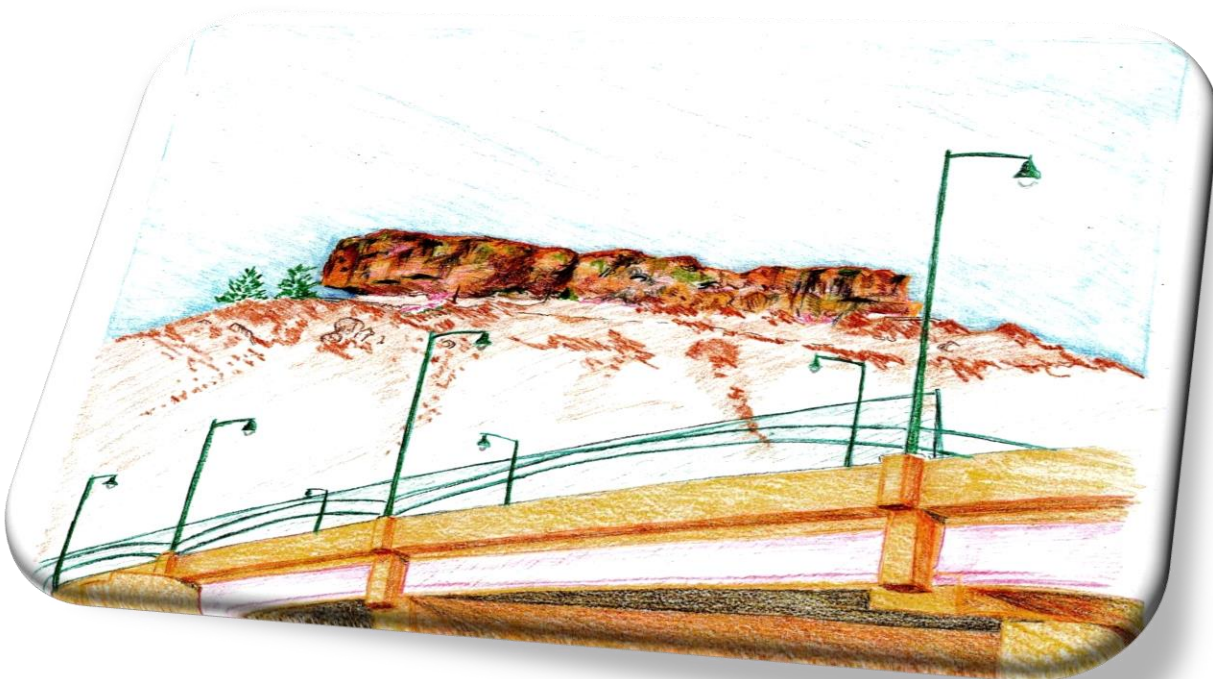
The Public Works Department operates under the CAN DO philosophy
- We are committed to doing the job right with a positive attitude
while staying dedicated to meeting the needs of our Town values
and continually searching for opportunities to improve.

PUBLIC WORKS DEPARTMENT

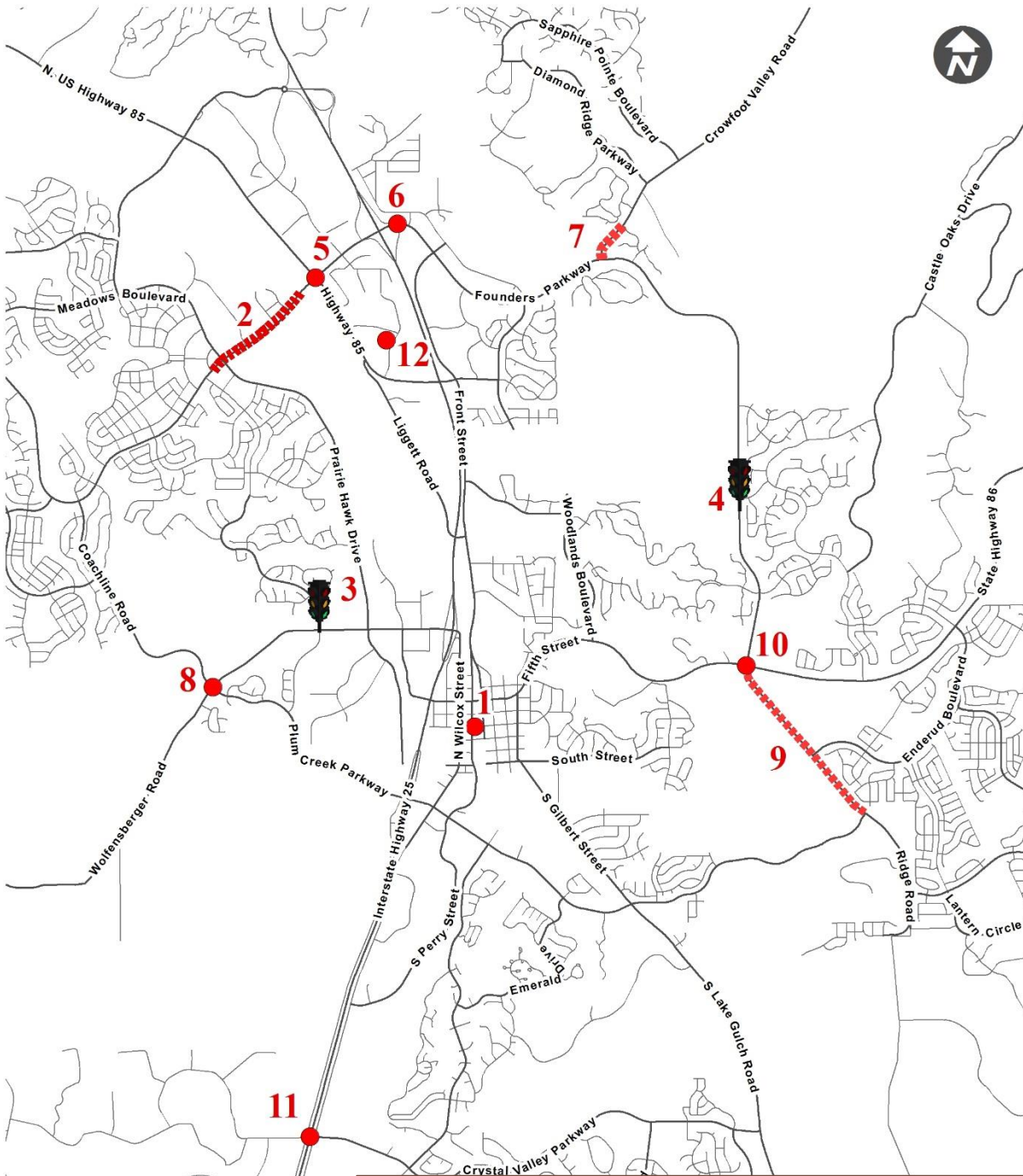


*Our Mission: To provide
outstanding service, safety
and support for
transportation infrastructure
and maintenance.*

MONTHLY REPORT – JUNE 2017



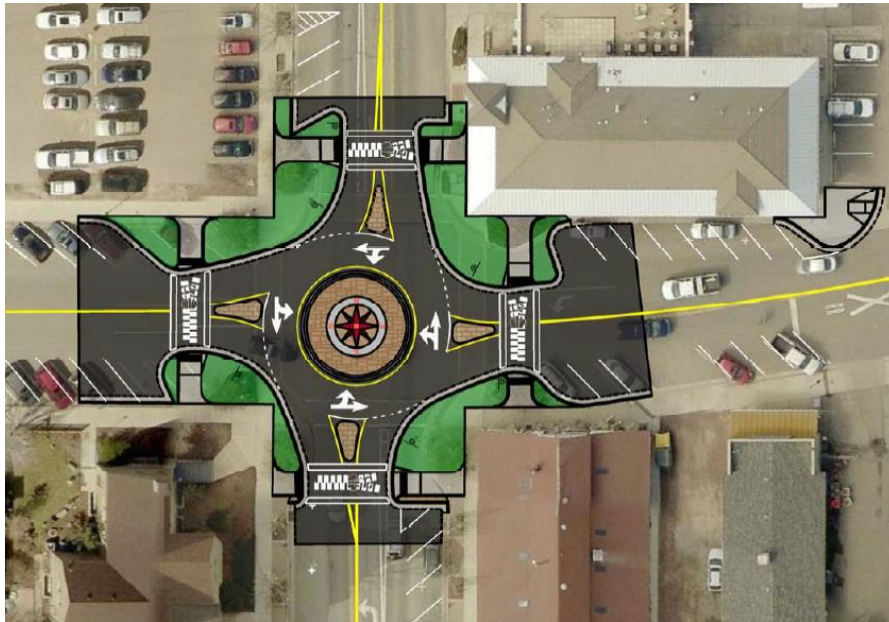
CAPITAL PROJECTS



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** – K.E.C.I Colorado, Inc. was awarded the contract for construction at the June 20 Council meeting with construction scheduled to begin on July 5. The Town hosted an open house on June 29 that covered the construction phase of the project. **Budget: Construction: \$877,000**
Projected Construction: Summer 2017

ROUNDABOUT GRAPHIC



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**

*On an additional note: Under the 2017 Bridge Maintenance Program, the Meadows Parkway bridges over Plum Creek will receive an interior bridge railing upgrade and under the 2017 Asphalt Overlay and Full Depth Reclamation project, they will receive a mill and overlay treatment.

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** – During June, several pre-construction tasks were completed, including the review of the submittals from the Town’s contractor on materials to be used during construction. The signal poles for both intersections also arrived. Town staff continues to work to obtain notice to proceed from CDOT on the access permit at Rising Sun Drive. A field meeting was held during June to discuss the remaining right-of-way concerns with CDOT. Based on these discussions, construction is expected to start during July. **Budget: \$460,000** **Construction Completion: Fall 2017**

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 began on June 26. The left turn lane is scheduled to be completed mid-July and the traffic signal pole work to begin shortly after the lane work is completed.* **Construction Budget: \$212,000 Construction Completion: Fall 2017**

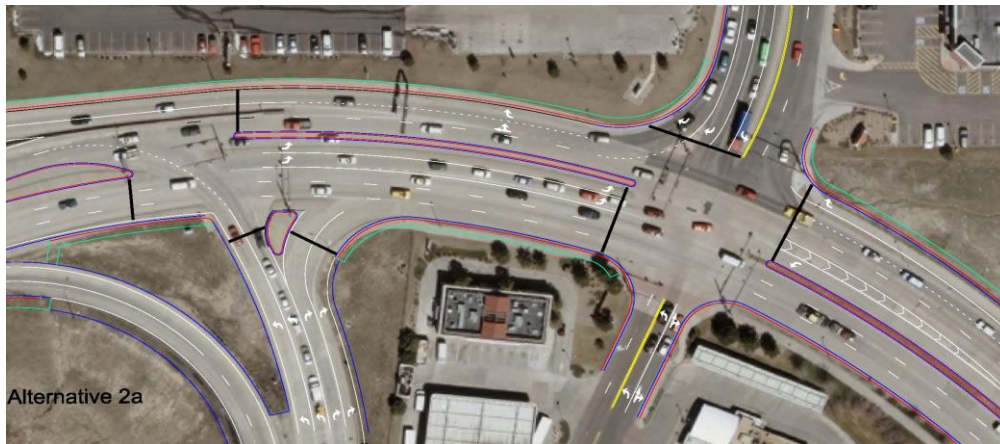
6. **Founders Pkwy/Allen Way Intersection Improvement Project** – This project will address the need for the following improvements:

- 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:*

- *FHU has completed the Field Inspection Review (FIR) plans which have been sent out for review to CDOT and Town staff.*
- *Environmental clearance documentation has been submitted to CDOT.*
- *Town has given FHU direction to start the Right-of-Way Plan Review (ROWPR) documentation based on the FIR plans.*

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



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:*

- Completed 30% plans which have been submitted to CDOT and Town departments for review.
- Right-of-Way plans are underway and will finalized after 30% plan approval from CDOT.
- Field Inspection Review (FIR) meeting set with CDOT for late July.
- Open House was held on June 1. Community input has been coming in and is being documented for review and/or implementation, if feasible.

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. SEH continues to work on the site survey and is developing 30% 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 completed. 30% plans scheduled to be submitted to the Town in mid-to-late July.
- Staff has been coordinating with property owners and developers in the area.

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:

- Completed conceptual design of intersection improvement alternatives – standard intersection widening, roundabout, and continuous flow intersection. SEH and staff are working with CDOT to schedule a meeting to discuss the options.
- Survey work has begun.

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 side Right-of-Way Plan Review (ROWPR). Staff is now in the process of putting together a scope of work for the Crystal Valley Interchange west side ROWPR.

- Continuing with right-of-way monumentation surveys
- Continuing with final authorization survey plan edits
- Town staff is in the process of putting together a scope of work for the Crystal Valley Interchange – west side ROWPR.

Budget: Development Escrow

12. **Public Works Facility Expansion** – This project will complete design plans for the building expansion. Phase: Design - The following is a summary of the design activities that the firm D2C performed during this month:

- Continuing on the 30% schematic design

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

Traffic Signal System Upgrades - Phase 2 - The Town's contractor, consultant and vehicle detection vendors continued to assist with the deployment of the equipment needed to bring existing video feeds back to the Service Center. Work also continued on the deployment of more radios to complete the addition of the remaining Town traffic signals to the communication network. The remainder of the work for the project will be complete by the end of summer. Budget: \$400,000 Construction Completion: Spring 2017

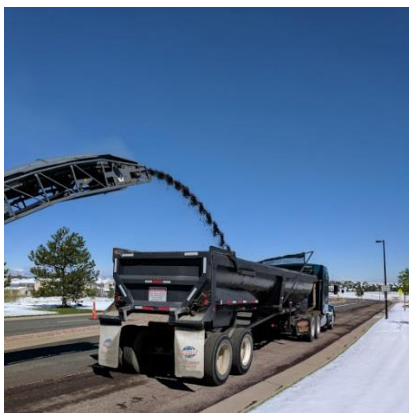
Engineering Division

2017 Pavement Maintenance Program (PMP) - The 2017 PMP will focus its efforts in the south PMP area with additional work taking place on primary streets (Mikelson Boulevard, Black Feather Trail, Valley Drive and Wilcox Street).

Completed sidewalk, curb and gutter repairs throughout the south PMP area in preparation for the slurry seal and crack seal treatments.



Asphalt patching continues and is scheduled to be completed by the first week of July. The slurry seal contract is scheduled to begin on July 10 and be completed by July 18. Crack seal operations are tentatively scheduled to start in late August.



Traffic was shifted on Mikelson Boulevard to the northeast bound lanes. Asphalt patching, sidewalk, curb & gutter repairs, milling, and paving operations continue along the southwest bound lanes of Mikelson Boulevard. When Mikelson Boulevard paving is complete, the contract time will be put on hold awaiting the completion of the waterline improvements along Johnson Drive. When the new waterline installation is complete, possibly mid-August, the Asphalt Overlay contract will resume with full depth reclamation on Johnson Drive and the overlay on Valley Drive.



The contractor continues to perform concrete repairs on Mount Royal Drive. The contractor has started pavement grinding which is the process of removing the imperfections of the concrete pavement to improve rideability.





Work is progressing nicely on Emerald Drive Reconstruction; the contractor has shifted the closure to section four (between Kahala Drive and Foursome Drive). The contractor is scheduled to shift the closure to section five (from Foursome Drive to Plum Creek Parkway) the week of July 17. A waterline break within the first section (between Emerald Court and McCracken Lane) will slow the placement of the top mat of asphalt pavement along the entirety of Emerald Drive as the contractor will need to close this section again to make permanent repairs to the pavement. Staff is working with the contractor to revise the project schedule.

The Coachline Road Concrete Pavement Restoration is scheduled to start on July 5. The contractor will start at the north end of Coachline and work their way south.

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

2017 Facilities Parking Lot Improvements Program –The parking lots scheduled for improvements are:

- Prairie Hawk Fire Station will receive asphalt patching, asphalt seal coat, concrete repairs, and concrete pavement joint sealing.
- Bison Park will receive asphalt patching, asphalt seal coat, and concrete repairs.
- Wrangler Park will receive asphalt patching, asphalt seal coat, and concrete repairs.
- Gemstone Park will receive asphalt patching, asphalt seal coat, and concrete repairs.
- Paintbrush Park will receive asphalt patching, asphalt seal coat, and concrete repairs.
- East Plum Creek Trail Head lot will receive asphalt patching, asphalt seal coat, and concrete repairs.
- Castle Rock Water Headquarters will receive asphalt patching, asphalt seal coat, concrete repairs, and concrete pavement joint sealing.

This project is tentatively scheduled to start in late August and completed by the end of September.

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

Bridge Repair

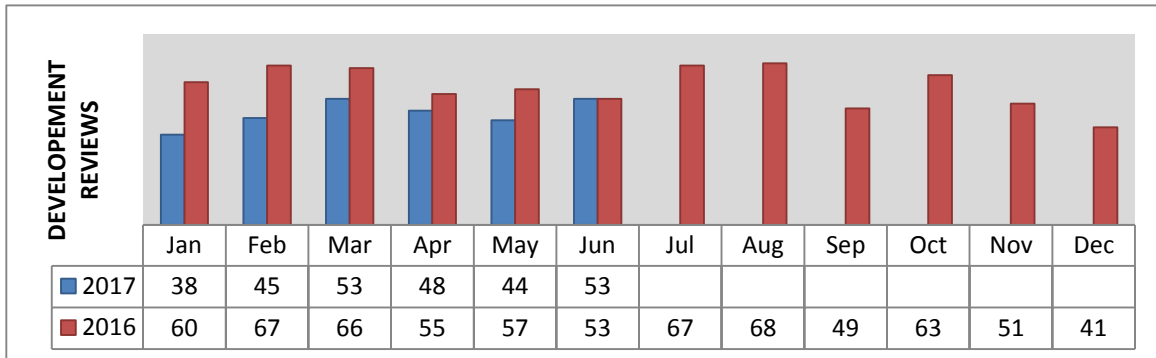
- Meadows Parkway Bridges over Plum Creek – Upgrade interior bridge railing
- Plum Creek Parkway Bridge over the Union Pacific Railroad – Repair bridge deck, and girders
 - ✓The contractor, Kraemer North America, has performed the surveying needed to start the fabrication of the Meadows Parkway Bridge rail. Staff has been reviewing submittals for construction material on Plum Creek Parkway Bridge. Rehabilitation work on this bridge is scheduled to start on July 10. Work will be suspended July 29 – August 6 for the Douglas County Fair.

Bridge Surface Treatment

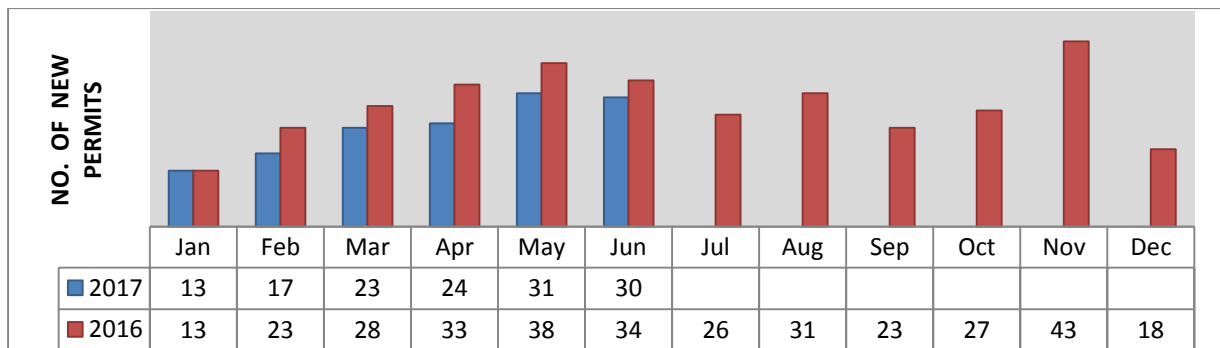
- Meadows Parkway Bridges over Plum Creek – Mill and overlay of wearing surface
 - ✓Work is tentatively scheduled for September when the bridge railing installation is complete. This work will be performed at night.

Development Review and Permitting

Development Review - Included in the 53 submittals are 34 first time applications with three pre-applications. All reviews were completed on or before the due date assigned by the Development Services Project Manager.

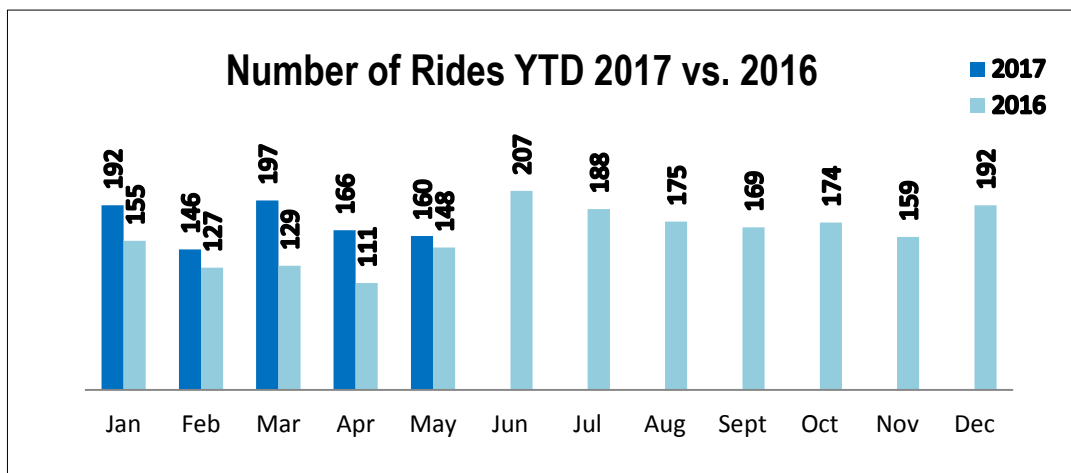


Permitting - Included in the 30 permits are: 1 - Residential Developments (Meadows Filing 20 Richmond Cityscapes); 1 - Commercial (Riverwalk South – sanitary sewer only); 1 – Multifamily (Auburn Ridge Lot 3); and 27 permits for work within the public right-of-way, 17 of which were necessary due to current development, and one was a pavement cut.

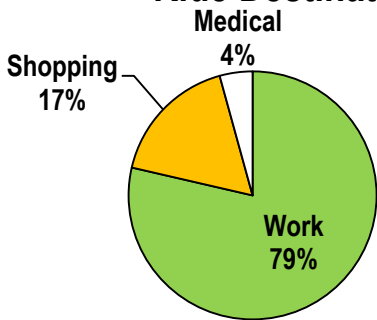


Transportation Division

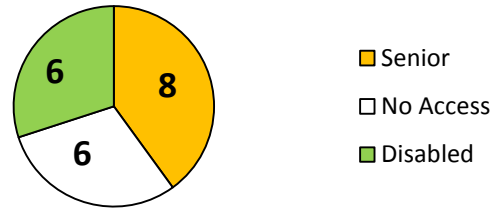
Taxi Voucher – For the month of June, the Taxi Voucher Program funded 187 rides. This was a 10% decrease from last June’s total of 207 rides. The decrease in rides is a result of good weather and riders taking advantage of walking to work and grocery stores.



Ride Destinations



Types of Riders Using the Service

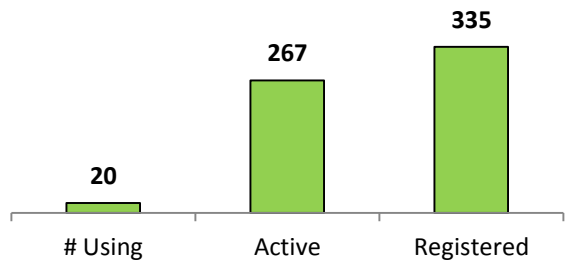


Rides are available for work, shopping or medical trips. Transportation services are provided for Castle Rock residents who are senior citizens, have a disability that prevents them from driving, or do not have access to a vehicle.

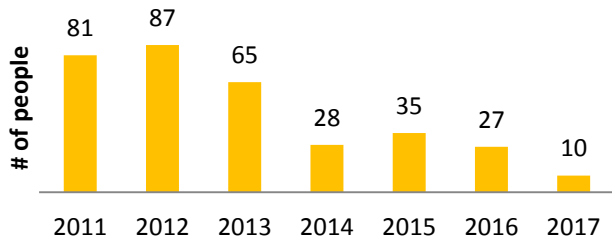
Percentage of the Total Rides (187) by Each Rider Type



Number of Riders Using the Service vs. Registered



Number of People Registering for Program Each Year



There was one new registrants for the Taxi program this month. Since its inception, a total of 335 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 662 rides in the month of June, which was a 6% increase from last month's rides of 703. The volunteer driver program provides service Monday through Friday from 9 am to 3 pm.





Town Trolley - The Trolley provided rides for three events in the month of June, which included the Grange's Music in the Meadows Events and the DMA's Annual Car Show. Riders enjoyed the classic and small town feel while riding the trolley during these events.

Traffic Engineering & Operations

Traffic Signal Operations and Maintenance - For the month of June there were eight 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 -

In the Month of June the two Sign Tech's and there two seasonal employees straightened 13 posts, along with replacing eight signs. There were eight special events that staff supplied signage and/or set up. The two crews replaced 364 symbols and installed 91 new markings and signs. The striping contractor, Colorado Barricade, finished their first round of striping and all of the symbols at the signalized intersections.



Transportation Planning

Neighborhood Traffic Calming Program (NTCP)

Inquiry Updates:

- There were two new inquiries received in June. Initial support petitions were sent out to homeowners along Eastview Drive, between Lantern Circle and Killen Avenue; and Clear Sky Way near the Clear Sky Elementary School.

Updates:

- **Woodlands and Escavera:** Installation of the traffic calming devices in the Woodlands and Escavera neighborhoods have begun. The curbing for the speed cushions and the pedestrian center median were poured the week of June 19. The speed cushion on Black Pine Drive was relocated at the request of homeowners. The asphalt is expected to be placed the week of July 17. The final phase of installing the rock cobble is expected to be completed by the end of the July, weather permitting.





Transportation Master Plan (TMP) Update - The draft Transportation Master Plan has been revised based on comments by Town staff and the stakeholders. The TMP Executive Summary will be shared with Town Council in July. It will also be released for public comment prior to going to the commissions and Town Council for adoption. Presentations to the Public Works Commission is scheduled for August and Town Council in September for formal adoption.

Development Review -

- Staff reviewed and commented on three (3) transportation impact/signal warrant studies during the month. All reports were completed by the due date. One of the studies involved Meadows Filing 20. It was determined that as the Meadows Filing 20 nears build-out, Castle Rock Development Company will update the access plan and traffic conditions for the area to ensure the street network can accommodate the projected traffic volumes. The updated study is expected to be completed by the end of summer.
- The Founders Marketplace also submitted a revised traffic signal warrant study to identify when a new traffic signal would be needed along Founders Parkway to support their proposed development in the northeast corner of Founders Parkway and 5th Street. The study was forwarded to CDOT for review and comment. Ultimately CDOT will need to approve the signal on the State Highway.
- The development plan for Culver’s restaurant discussion continues. Staff met with the applicant and discussed existing traffic conditions at the Genoa Way and Castleton intersection.



Downtown Striping Plan

Final revisions on the downtown striping plan were provided to the consultant. The final plan set is scheduled to be completed by the first week of July.



Fleet Services
“Keeping Castle Rock on the Move”



Another exciting month for the Fleet Services Division as we keep the Town of Castle Rock “on the move”. The Fleet Services team worked on 134 Town vehicles and equipment and billed out \$66,000 worth of parts and service for the month. The amount that we bill out to other Departments for parts and labor is 30% lower than any outside vendor. This ensures that the Town gets vehicles that are safe and efficient at the lowest possible cost.



Fleet Services technicians Mac McKelvy, Chris Selheim, and Eric Dena attended an advanced air conditioning training this past month. Angie Williams, Fleet Services Support Technician, continues to work through the parts inventory to return to vendors older parts that are obsolete or no longer needed.

The Fleet Services Division is continuing to receive new vehicles that were ordered for 2017. Fleet Services put into service a 2017 Police Interceptor for the Police Department and a 2017 Chevrolet Colorado for the Parks Department.



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

Outcome: Fleet team completed 81.5% of the work orders within 24-hours of opening repair requests or service requests. This number shows the quick turnaround of vehicles that come into our shop for repairs.

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

Outcome: Town vehicles and equipment were available 97.5% 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 **84.2%**. This was well above our benchmark and was the best productivity number so far this year. This means that our Fleet Services technicians are working on Town vehicles 84% of the time they are here at work. A phenomenal number compared to the APWA standard!



Street Operations & Maintenance Division

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

- Crack Sealing
- Road Shoulder Maintenance
- Pothole Patching
- Street Sweeping
- Pavement Maintenance
- Equipment Maintenance
- Special Operations

Crack Sealing

During the month of June, staff continued our crack sealing maintenance operations in the Central PMP area of Town. Two crews have worked hard over the entire month and completed **56 lane miles** of roadway. During these operations, staff completed the roadways in the Red Hawk area and started in the Castle North and Metzler Ranch subdivisions. These operations revisits the areas that received a pavement maintenance treatment two years prior and improves the life of the roadway by minimizing the deteriorating effects of any new cracks that have appeared.



Road Shoulder Maintenance

Staff responded to a few requests for trash and debris removal as well as performed roadside vegetation control by mowing and trimming. In total, staff picked up six bags of trash, mowed and trimmed **58 edge line miles** of roadway during the month. (See the highlighted map of the roads where these operations occurred.)

Pothole Patching

SO&MD received only **three requests** for pothole repairs. Staff completed these within two days of the request, and continued to proactively work on other known potholes around Town. In all, the staff completed **181 pothole repairs** during the month.

Street Sweeping

Staff performed street sweeping activities following the crack sealing and the roadside maintenance mowing operations. 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 removed **14 yards** of materials from the roadways.



Pavement Maintenance

During the month of June, staff performed three (3) full depth pavement repairs. The roadways that received this work were Butterfield Crossing Drive, Tanglevine Drive and Liggett Road using 20 tons of asphalt.



Equipment Maintenance

Regular equipment maintenance is essential to keep equipment safe and reliable, which helps to eliminate workplace hazards. Staff completed 35 work requests this month that varied from changing wear items to rebuilding the blower motor on an air compressor machine.

Special Operations

Staff performed operations that were either assisting other departments or working on items in-house to protect our environment. One of the operations was to install a “speed table” at the crosswalk located at the Philip S. Miller Park challenge hill for the Parks Department. The purpose of this is to slow down the traveling public and to increase the visibility of the pedestrians using the course on a daily basis. Also, the Service Center, staff built a debris catch basin in the lower equipment yard, to help stop dirt and debris from entering the storm water system.

Looking Ahead

During the month of **July**, the SO&MD staff will continue crack sealing, road shoulder maintenance operations and vegetation control, and perform pavement maintenance where needed.

