



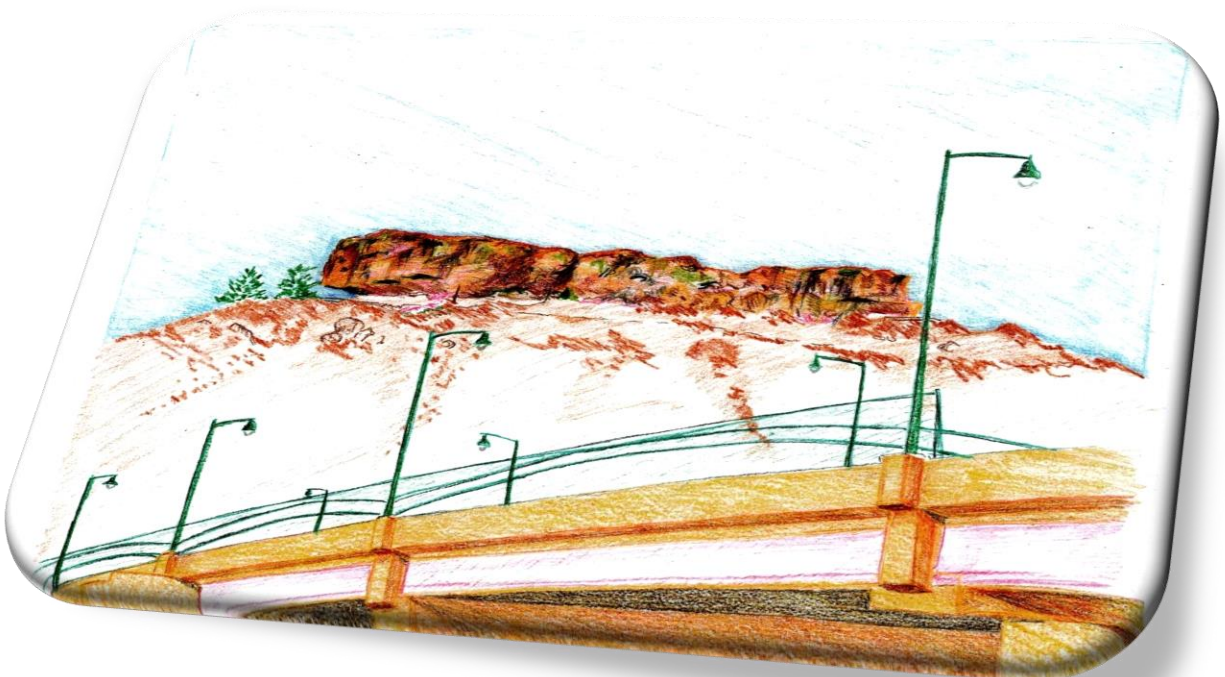
The Public Works Department operates under the CAN DO philosophy
- We are committed to doing the job right with a positive attitude
while staying dedicated to meeting the needs of our Town values
and continually searching for opportunities to improve.

PUBLIC WORKS DEPARTMENT

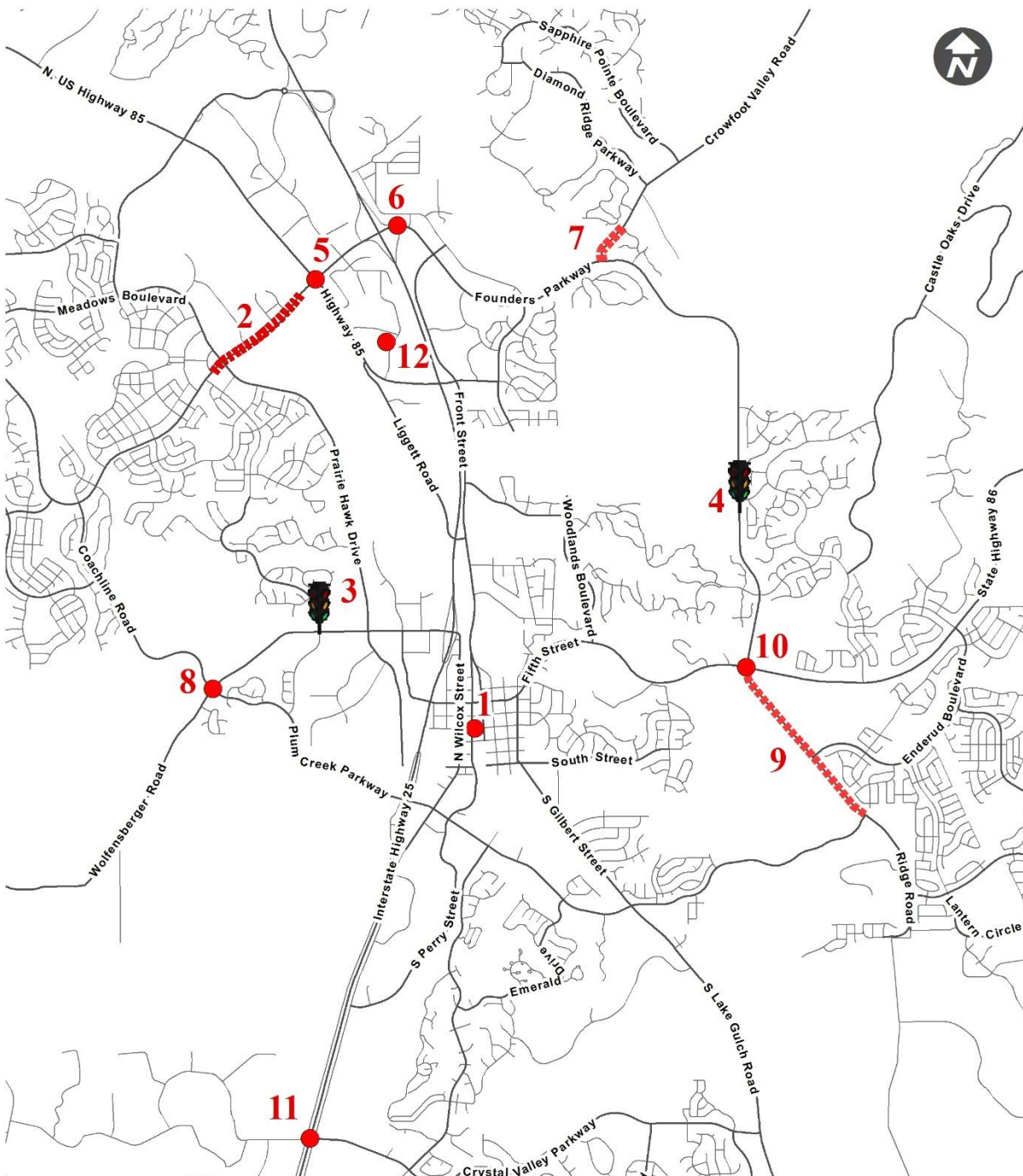


***Our Mission: To provide
outstanding service, safety
and support for
transportation infrastructure
and maintenance.***

MONTHLY REPORT – MAY 2017



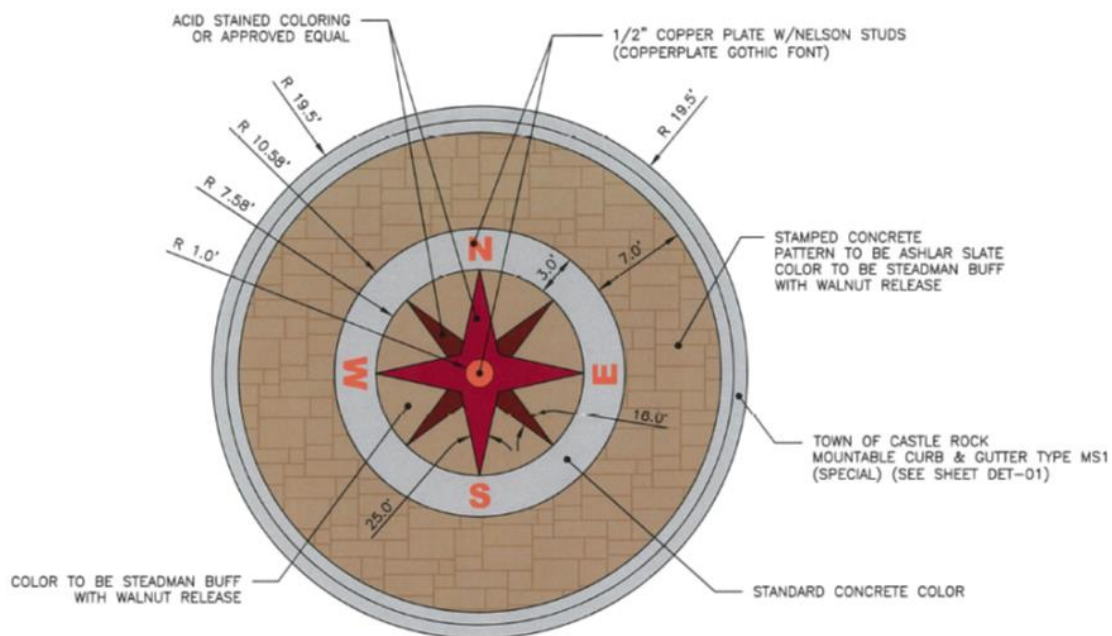
CAPITAL PROJECTS



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** – *Staff opened bids on May 16 in which only one bid was received from K.E.C.I. Colorado Inc. Staff is requesting approval of a construction contract and contingency of \$694,040 which includes the K.E.C.I. bid total of \$631,040, and a Town managed contingency of \$63,000 (10%) for unanticipated construction expenses. A portion of the remainder of the 2017 budget amount of \$332,687 will be available for landscaping. The Parks Department has taken the lead on the landscaping design by utilizing their landscape architect, Design Work Shop, who designed the new Festival Park expansion which is now under construction. The current plan is estimated to cost \$50,000 and be completed toward the end of construction. This will be presented to Public Works Commission on June 5 and Town Council on June 20. Budget: Construction: \$877,000 Projected Construction: Summer 2017*

ROUNDAABOUT CENTRAL ISLAND AESTHETIC



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 also 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** – The construction contract with Sturgeon Electric Company, Inc. has been approved with construction slated to occur over the summer. Final approvals from CDOT on the permits at Rising Sun Drive are needed before construction of that signal can begin. **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** - The project has been bid with the lowest qualified bidder submitting a price under \$250,000. Staff will seek Town Manager approval and is working with CDOT for a confirmed Notice to Proceed. **Construction Budget: \$212,000 Construction Completion: Fall 2017**

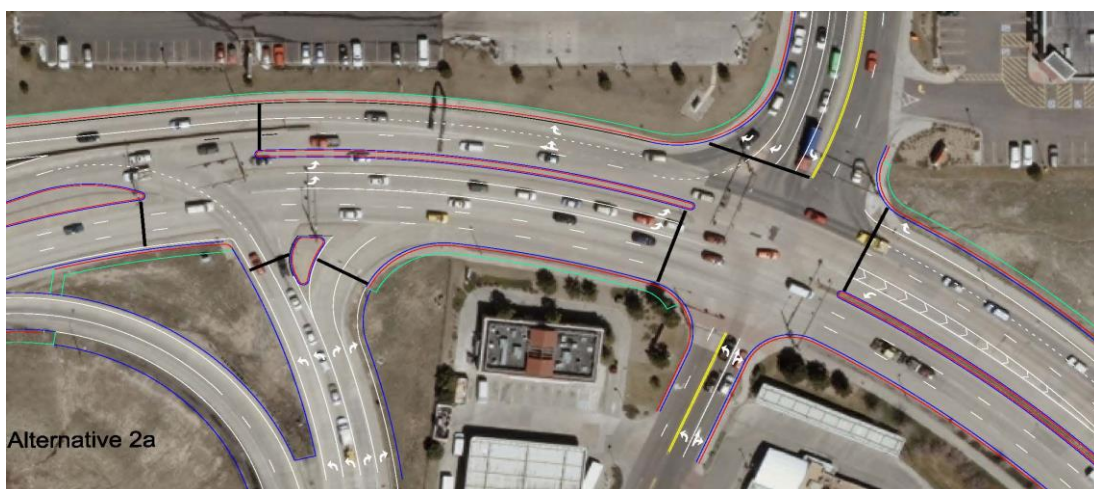
6. Founders Pkwy/Allen Way Intersection Improvement Project – This project will address the need for the following improvements:

- 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 is preparing preliminary design to determine right-of-way needs. Completion of preliminary design layout was refined based upon decisions made at the May 1st meeting with the Town (to discuss traffic operations).
- Presentation of the preliminary alignments was made to the Town on May 22. Final adjustments are underway for presentation to CDOT on June 5.
- Environmental clearance documentation is underway. Field trips have occurred and resource reports are being sent to CDOT as completed to assist with clearance which in turn allows ROW to be reviewed for acquisition.

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:

- Continued preliminary design for a standard intersection widening and widening of Crowfoot from Founders Parkway to Knobcone Drive.
- Met with property owner to discuss access to land where ROW acquisition will be needed.
- Open House scheduled for June 1.

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 – Services Agreement was approved with Short Elliott Hendrickson Inc. (SEH) for design services. Kick-off meeting was held between the Town and SEH May 15, to discuss the appropriate roundabout geometry at Wolfensberger / Plum Creek Parkway intersection. Site survey was also started. **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:

- Surveying sub-consultant sent out right-of-entry requests to property owners and began surveying the project.
- Geotechnical sub-consultant began potholing and boring for utility and soil verifications.

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) has been awarded the design contract for this project. The following is a summary of the design activities performed this month:

- Began conceptual design of intersection improvement alternatives including – standard intersection widening, roundabout, and continuous flow intersection.
- Right-of-entry requests have been sent to neighboring property owners.

- Access Permits have been requested of CDOT for access onto SH86.
- Met with Town staff and Stanley Consultants, Inc. to determine tie-in point for the intersection project and the Ridge Road Widening Project.

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 to allow for 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.

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
- Met with staff to review and discuss three floor plan concepts

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

Traffic Signal System Upgrades - Phase 2 - Town staff, with assistance from the Town's maintenance contractor and vehicle detection vendors, continued work to install new equipment that will allow the observation of video detection feeds from the Town's traffic signals. This will allow staff to observe and address vehicle detection problems as they arise. In addition, staff continued with the deployment of radios to the remaining Town traffic signals yet to be installed on the Town's Ethernet based traffic signal communication network. **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).



Sidewalk, curb and gutter repairs continue throughout the south PMP area. In general, work will progress through this area in a south to north manner, starting in the Crystal Valley area, then Plum Creek, Baldwin Park, Glovers, and neighborhoods off of South Street. These repairs are expected to run through June.





Traffic remains shifted on Mikelson Boulevard to the southwest-bound lanes. Asphalt patching, sidewalk, curb and gutter repairs continue along the northeast-bound lanes of Mikelson Boulevard and the milling and paving operations have begun.

Concrete pavement, crosswalk, sidewalk, curb and gutter repairs are complete on Wilcox. The contractor began concrete repairs on Mount Royal Drive on May 30.



Work on the Emerald Drive Reconstruction Project is progressing nicely. The contractor has shifted the closure to the second section (between McCracken Lane and Stafford Circle). The future development waterline and sanitary sewer connections are completed, as well as Castle Rock Water's waterline abandonment. The contractor is scheduled to shift the closure to the third section (between Kahala Circle and Stafford Circle) the week of June 2.



The Coachline Road Concrete Pavement Restoration bid opening was May 4. Eight bids were received, low bid was Villalobos Concrete Inc. and was under budget. Staff is scheduled to present this contract to Public Works Commission on June 5 and to Town Council on June 6 for their approval.

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

2017 Facilities Parking Lot Improvements Program – A contract has been approved with Rocky Mountain Excavating, Inc. for this project with a tentative start date in August. 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.

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

Bridge Repair

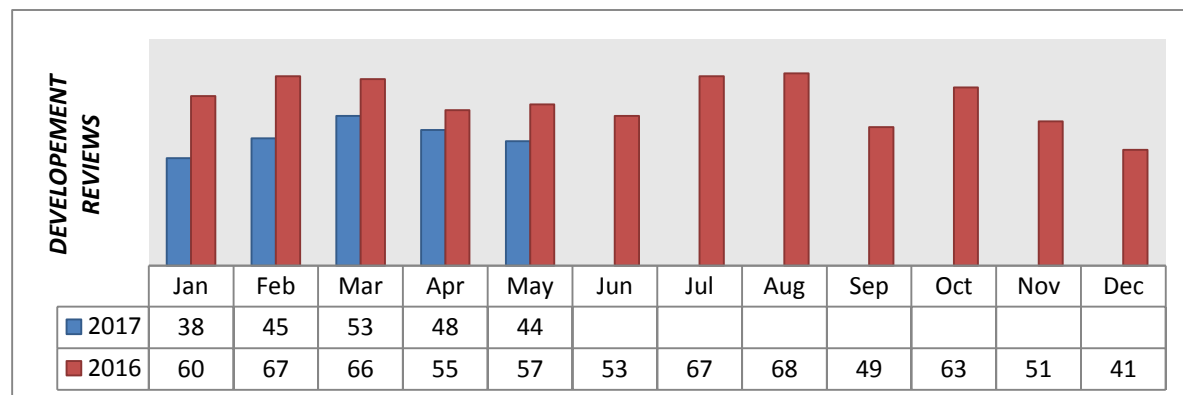
- Meadows Parkway Bridges over Plum Creek – Upgrade interior bridge railing
- Plum Creek Parkway Bridge over the Union Pacific Railroad – Repair bridge deck, and girders
- ✓ Notice to Proceed was issued to Kraemer North America on May 30. Many components of the project have long lead times for fabrication, therefore, construction is tentatively scheduled to begin late August.

Bridge Surface Treatment

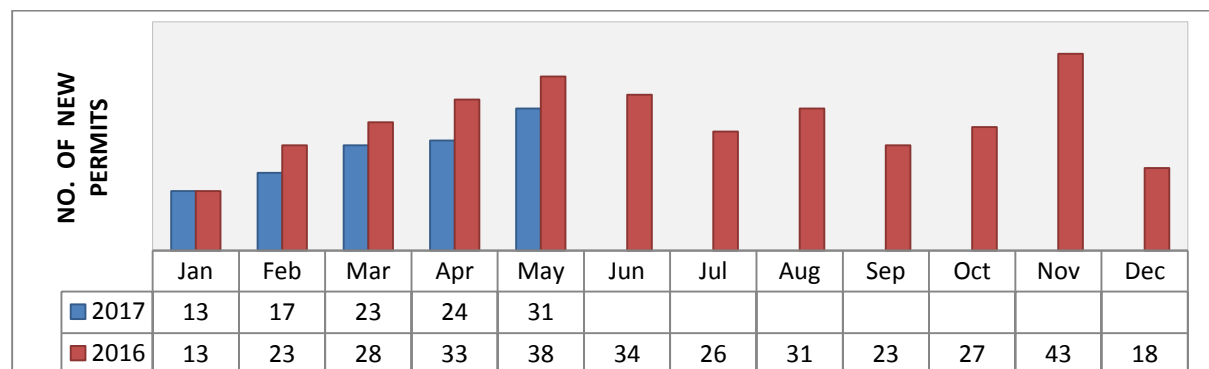
- Meadows Parkway Bridges over Plum Creek – Mill and overlay of wearing surface
- ✓ Work is tentatively scheduled for June 11-13 and is to be performed as night work.

Development Review and Permitting

Development Review - Included in the 44 submittals are 27 first time applications with five pre-applications. All reviews were completed on or before the due date assigned by the Development Services Project Manager.

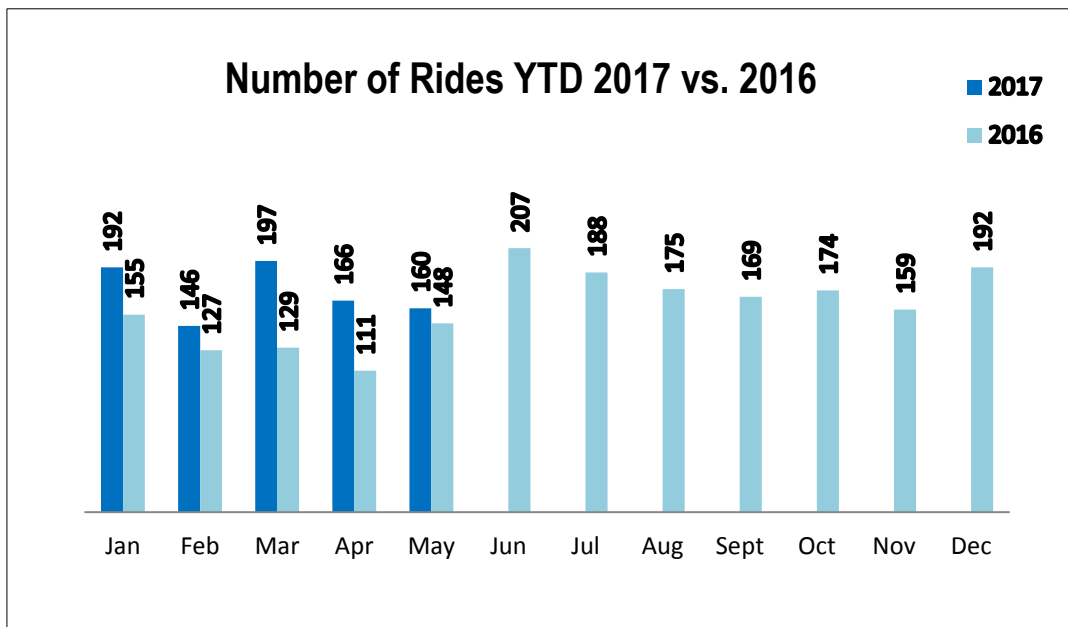


Permitting - Included in the 31 permits are: 2 - Residential Developments (Meadows F20 Amendment 6, Lokal Homes, Phases 2A and 2B); 2 - Commercial (iMotion site improvements at Burt property; Promenade Block 6, Lot 5); and 27 permits for work within the public right-of-way, 16 of which were necessary due to current development, and one was a pavement cut.

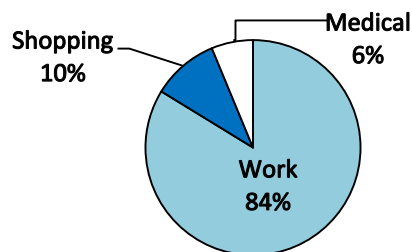


Transportation Division

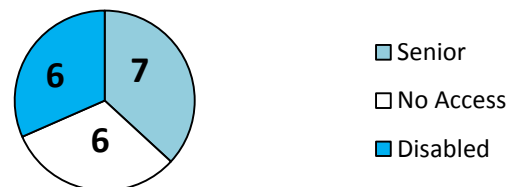
Taxi Voucher – For the month of May, the Taxi Voucher Program funded 160 rides, this was an 8% increase from last May's total of 148 rides. The increase in rides is a result of taking more riders using the program to get to their jobs on a weekly basis and more grocery shopping related rides.



Ride Destinations

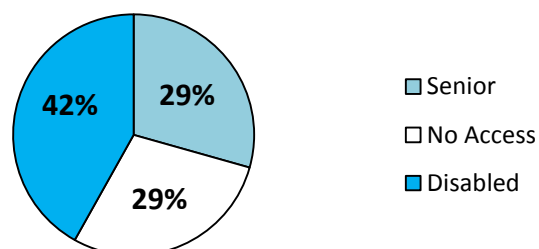


Types of Riders Using the Service

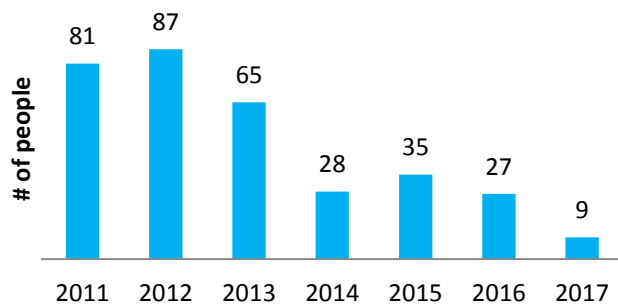


Rides are available for work, shopping or medical trips. Transportation services are provided for Castle Rock residents who are senior citizens, have a disability that prevents them from driving, or do not have access to a vehicle.

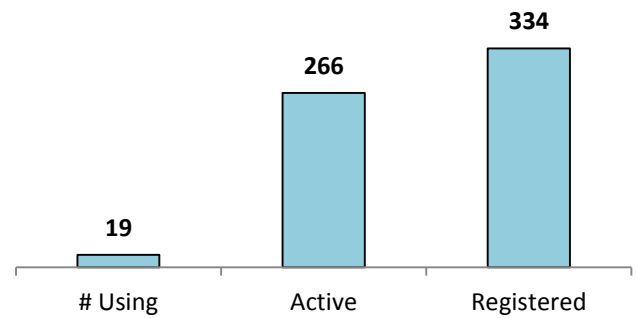
Percentage of the Total Rides (160) by Each Rider Type



Number of People Registering for Program Each Year



Number of Riders Using the Service vs. Registered



There were no new registrants for the Taxi program this month. Since its inception, a total of 334 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 703 rides in the month of May which was a 10% increase from last month's rides of 780. The volunteer driver program provides service Monday through Friday from 9 am to 3 pm.



Town Trolley - The Trolley provided rides for two events in the month of May, which included Spring Up the Creek and the annual Castle Rock History Museum History Tours. The Trolley had fun getting its wheels to the ground going around Town and kicking off the event season.



Traffic Engineering & Operations

Traffic Signal Operations and Maintenance - For the month of May there were a total of sixteen 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 or pedestrian push button change outs. Other repairs completed were associated with LED change outs for pedestrian signal heads or vehicle signal heads.



In addition, the 2nd quarter preventative maintenance checks were started during May. Each intersection receives a full inspection to assure that all of the equipment is in good working order.

Street Signs and Pavement Marking Maintenance - During the month of May, our two sign technicians plus their seasonal staff supplied traffic control devices for two events. They also accomplished replacing 42 signs while also installing seven new signs around Town. This brings the total number of signs owned and maintained by the Town to 13,765. Also, the signs and markings seasonal staff completed the fabrication of 100 signs that will be installed later this summer.

Finally, the Town's striping contractor, Colorado Barricade, completed the first round of long line painting and applying nearly 326,900 square feet of paint.

Transportation Planning

Neighborhood Traffic Calming Program (NTCP)

- No new inquiries were received in May, but a resident along Elk Run Drive would like the Town to install radar feedback signs along the street and Foothills Drive.



Updates:

- **Woodlands and Escavera:** Staff is planning to begin construction Phase 1 and 2 of the neighborhood traffic calming plan the week of June 19. It will take approximately 8 weeks to complete these two phases of the project, weather permitting. Residents will be notified as the start of construction nears. Phase 3 of the project will be completed in 2018.

Transportation Master Plan (TMP) Update - The draft Transportation Master Plan has been released for comment by the stakeholders. Once the draft report has been amended the draft plan will be released for public review and comments. Presentations to the Public Works Commission and Town Council is expected during the month of July. The Town Council will be asked to adopt the plan in their July 18th meeting.

Development Review -

- Staff reviewed and commented on six (6) transportation impact studies during the month. All reports were completed by the due date. Two of the studies involved two proposed charter schools – Apex Charter School (K-8) in the Meadows, and Milestone Character School (K-12) along Ridge Road.
- The Founders Marketplace proposal also submitted a 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 development plan for Culver's restaurant discussion continues. The applicant was asked to provide additional traffic analysis to determine the proposed restaurant impact to the Genoa Way and Castleton intersection. The study will be reviewed in June.



Fleet Services

"Keeping Castle Rock on the Move"



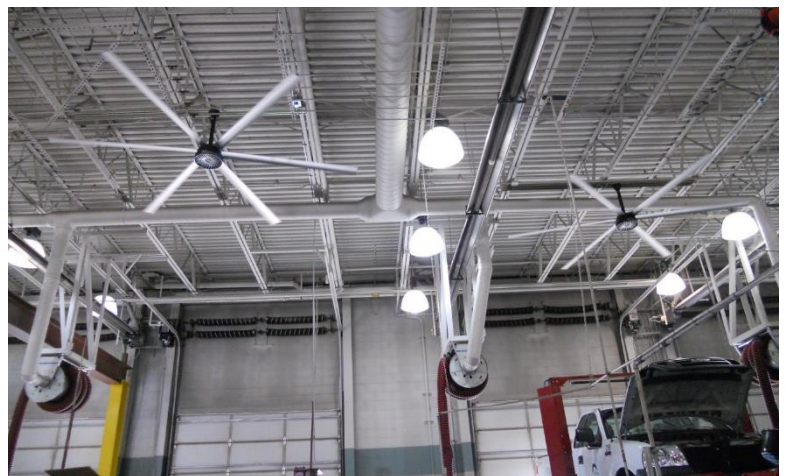
The Fleet Services Division stayed very busy "Keeping Castle Rock on the Move" this past month. The Fleet Division worked on 125 Town vehicles and equipment and billed out \$70,000 worth of parts and service for the month.

The Fleet Division is continuing to receive new vehicles that were ordered for 2017. Equipment and vehicles placed into service were; one 2017 Crafcro crack seal machine for the Streets Division; two Ford F150 trucks for two new Public Works inspectors; and new 2017 GMC 2500HD truck for the Fire Department's new Emergency Vehicle Technician.



Fleet Services Technician, Chris Selheim, who is also the Public Works Department's Safety Representative, did a great job of setting up and documenting all the training requirements for our CIRSA audit coming up in June.

Also, with the help of Ken Schuck, Facilities Division, the installation of our new overhead ceiling fans were completed. This will definitely help to keep the shop a little cooler in the coming hot summer months.





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

Outcome: Fleet team completed 81.6% of the work orders within 24-hours of opening repair requests or service requests. This goal was achieved while working on some very big repairs. 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 97.7% of the time. This demonstrates a very low percentage of downtime and shows how well we are keeping Castle Rock “On the Move”.

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

Outcome: Technician productivity was 75.5%. This was well above our benchmark and shows the Fleet Services Division is providing the most cost effective service to Town customers as possible.

Street Operations & Maintenance Division

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

- Street Sweeping
- Pavement Maintenance
- Pothole Patching
- Snow & Ice Control
- Crack Sealing
- Road Shoulder Maintenance
- Equipment Maintenance
- Training



Street Sweeping

During the month of May, staff continued our annual Spring Street Sweeping activities that were started in April. During the month, staff was able to blow off the ADA ramps and sweep 100% of the Town’s roadways. 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 the staff removed 120 yards of materials from the roadways.



Pavement Maintenance

During the month of May the staff performed seven (7) full depth pavement repairs; four (4) full depth repairs on concrete roadways; and three (3) full depth repairs on asphalt roadways. Once again, several of the repairs were made on Butterfield Crossing Drive because the pavement had deteriorated to the point where simple pothole operations would not suffice. On one of the other repairs, staff completed a huge patch on Tanglevine Drive. In all, the staff completed the repairs on Butterfield Crossing Drive, Beacham Drive, South Meadow Lark Drive, and Trail Boss Lane.

Pothole Patching

During the month of May, SO&MD received only seven requests for pothole repairs. Staff completed the requests within two days of the notice, and continued to proactively work on other known potholes around the town. In all, the staff completed **774** pothole repairs during the month.



Snow & Ice Control

During the month of May, the Town received one last little surprise when staff responded to one 6" snow event! Due to the warm pavement temperatures before the event, snow did not accumulate on the roads, and what did stick melted quickly. Operations were completed in just five hours after the snow stopped, once again ahead of our eight hour service goal.

Crack Sealing Program

Crack sealing maintenance operations continue; this time focusing in the central PMP area of Town. The staff diligently worked in the Red Hawk Subdivision completing **11 lane miles** of roadway in between the rain and snow storms. During these operations, staff revisits the area that received a pavement maintenance treatment two years prior. These operations greatly improve the life of the roadway by minimizing the deteriorating effects of any new cracks that have appeared.



Road Shoulder Maintenance

Staff responded to requests for trash and debris removal and picked up **22 bags** of trash off of the South Frontage Road, Fifth Street, Ridge Road, Brewer Court, and Front Street.

Equipment Maintenance

Staff completed **45 work requests** for equipment maintenance on various pieces of equipment in our fleet and also the dump trucks.



Training

During the month of May the entire staff completed our annual CIRSA training in Back Safety, Ergonomics, Confined Space, CDL Drivers Training, and completed the Flagger certification class for the employees who were up for renewal. Additionally, staff completed a "Leading Through Generations" training. The staff really enjoyed all of the classes and received a lot of positive feedback afterwards from staff members who recognized how these classes will help them in their workplace.

Looking Ahead

During the month of **June**, the SO&MD staff will continuing the crack sealing in the central part of town which covers Red Hawk, Metzler Ranch, Castle North, Woodlands, and Escavera. Additionally, staff will continue working on the road shoulder maintenance vegetation control and more pavement maintenance activities.