



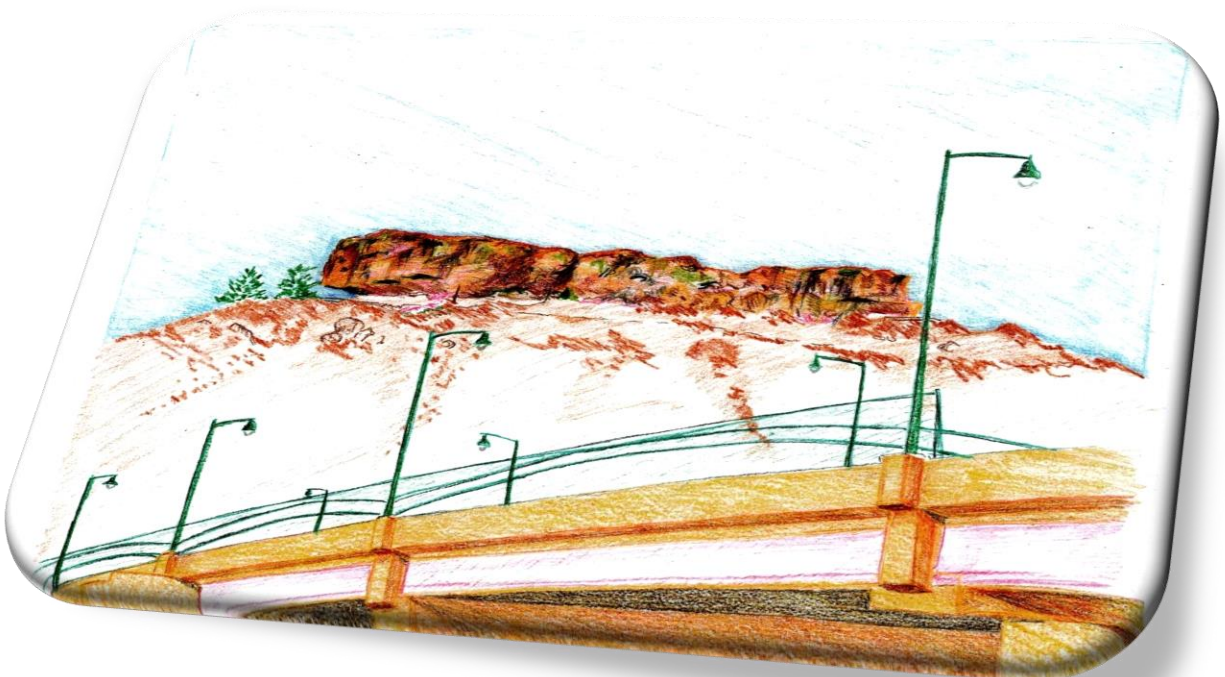
The Public Works Department operates under the CAN DO philosophy
- We are committed to doing the job right with a positive attitude
while staying dedicated to meeting the needs of our Town values
and continually searching for opportunities to improve.

PUBLIC WORKS DEPARTMENT

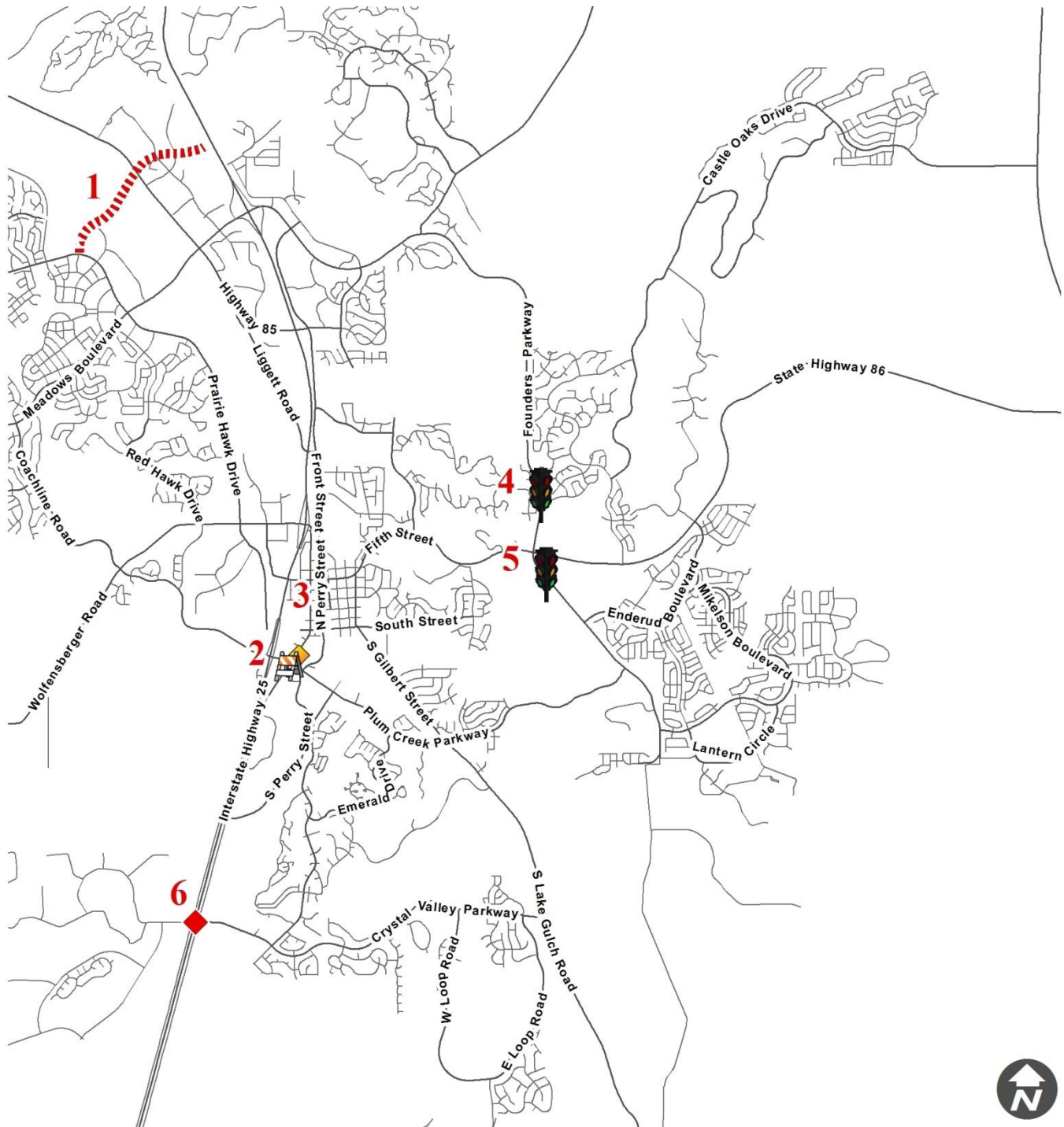


***Our Mission: To provide
outstanding service, safety
and support for
transportation infrastructure
and maintenance.***

MONTHLY REPORT – MAY 2016



CAPITAL PROJECTS



1. North Meadows Drive Extension Project
2. Plum Creek Pkwy Intersection Improvements
3. Downtown Alley Rehabilitation
4. Traffic Signal at Black Pine Drive/Copper Cloud Drive
5. Traffic Signal at Ridge Road/King Soopers Entrance
6. Crystal Valley Parkway/Dawson Ridge/I-25 Interchange

1. North Meadows Drive Extension Project - The Town's transportation project!! The following is a summary of the construction activities that took place during this month:

- Began roadway paving on the northbound off and on ramps to I-25
- Completed ramp tie-in to I-25 southbound on ramp
- Installed three cantilever signs structures on I-25 southbound
- Completed concrete barrier on US 85 bridge structure
- Installed Single Point Urban Interchange (SPUI) signal bridge over US 85
- US 85 seeding and mulching completed
- US 85 bridge and ramps structure coating continuing
- Installed chain link fence at US 85
- Continued concrete barrier on I-25
- Installed drop inlets for the 4-lane build out between US 85 and I-25

Traffic impacts to the traveling public:

- Castlegate Drive North from US 85 to Castlegate Drive West is closed and will remain closed until the summer 2016.
- Traffic alignment lane shifts are present in the current configuration on US 85; please use caution and follow the posted speed limits.
- The new Phase 2 traffic configuration on I-25 has no shoulders and narrower lanes; please use caution and follow the posted speed limits.

Phase: Construction: Budget: 2016 - \$9.5M Construction Completion Date: Summer 2016.



Installation of Signal Bridge– US 85

2. Plum Creek Parkway Intersection Improvements at Wilcox & Perry to I-25 – This improvement project will consist of the following components:

- Remove the dip at the intersection of Wilcox Street and Plum Creek Parkway (located on the east side of Wilcox Street).
- Reconfigure the above intersection to have two northbound left turn lanes from Wilcox Street to Plum Creek Parkway. In addition, the eastbound approach will have a free right turn lane onto southbound Wilcox and the westbound approach will have a dedicated right turn lane onto northbound Wilcox.
- Add a southbound free right turn lane from Perry Street to Plum Creek Parkway.
- Add a westbound right turn lane from Plum Creek Parkway to northbound I-25.

- Through the Pavement Maintenance Program, concrete restoration will occur on Plum Creek Parkway from Wilcox Street to the Douglas County Fairgrounds entrance.

Phase: Construction - PLM Asphalt and Concrete, Inc. (PLM) was awarded the contract by Town Council on May 3 and commenced with construction on May 31 with the improvements at the northwest corner of the Perry Street/Plum Creek Parkway intersection. These improvements are tentatively scheduled to be completed by the middle of June at which time the project will move to the Wilcox Street/Plum Creek Parkway intersection. **Budget:** Capital Fund: \$3,050,000; Pavement Maintenance Fund: \$553,850; Utilities Department: \$59,000
Projected Construction Completion: Summer 2016



Perry Street – Right Turn Lane

Downtown Alley Rehabilitation – The Town has been awarded two grants to improve accessibility in certain public alleys within the downtown area. Public Works and Development Services have received direction from Town Council and will plan for the reconstruction of four alley segments. Three of the alleys are located from 1st Street to Briscoe Street between Wilcox & East Plum Creek; one alley is located north of 7th Street between Wilcox & Perry. **Phase: Construction** – Technology Constructors, Inc. (TCI) was awarded the contract by Town Council on May 3. TCI is tentatively scheduled to commence construction of the 7th Street alley on June 6. **Budget:** Grants: \$202,000; Public Works: \$115,000; Utilities Department: \$71,835 - Total: \$389,442 **Projected Construction Completion:** Summer 2016



7th Street Alley

4& 5. Intersection Signalization Projects - This project will complete the installation of two new traffic signals; one at the intersection of Black Pine Drive/Copper Cloud Drive/Founders Parkway; and one at Ridge Road/King Soopers Entrance. **Phase: Construction** – A pre-construction meeting was held with the contractor during May. WL Contractors has submitted the necessary lane closure applications and traffic control plans to the Town. Work is slated to begin the first week in June. CDOT approved the access permits for Founders Parkway and Black Pine/Copper Cloud. As work begins to pick up, a Town inspector will be onsite monitoring construction activities. **Budget:** \$480,000 **Projected Construction Completion:** Late Summer 2016.



6. Crystal Valley Parkway/Dawson Ridge/I-25 (CVDR) Interchange – Environmental Assessment Update - An update of the CVDR Interchange Environmental Assessment (EA) will be necessary as part of the approval process to construct the interchange. The present EA was completed in 2004. Based on discussions with CDOT, all sections of the 2004 EA must be updated as necessary to meet current Federal requirements. **Phase: Planning** - The EA update for a phased interchange is presently on hold. FHWA representatives stated interchange phasing is not consistent with AASHTO policy and is not receptive to phasing the construction of the interchange. The Town may advance the project with acquisitions of right-of-way needed for the project. Public Works is also analyzing other improvement concepts that would provide alternate routes for the Heckendorf/Crystal Valley Ranch community. Public Works has received information from CDOT and the Public Utilities Commission to assist in planning the improvement projects for the interchange area. **Budget: \$250,000 (Development Escrow Account); Capital Fund: \$1,500,000**

Traffic Signal System Upgrades

Phase 1 – This project is the first step in implementing the system improvements that were initially identified as part of the October 2013 Signal System Evaluation study. The three main components of the Phase 1 project are a central communications upgrade, a central software upgrade that manages the signal system, and individual intersection traffic signal controller upgrades. **Phase: Construction** – All of the planning and hard work for the Phase 1 signal system upgrades has paid off. Centrac (the new central traffic signal management software) was installed on the Town's computer network in late May, and soon on three additional computers. The signal system, in association with the new communication network, has been running great! Staff can now communicate and operate signals from the Service Center that were once off of the communication network (i.e. Factory Shops Boulevard and New Memphis Court). Additionally, the new system allows for efficient operation of the Town's traffic signal system as a whole. This helps aid in the troubleshooting and allows staff to be more proactive in the management of the traffic signal system. **Phase 1 Budget: \$700,000 Construction Completion: Spring 2016**

Phase 2 - The project will be kicking off in June 2016. The project includes installing battery backups at the remaining signalized intersections excluding the two fire signals. Staff will be upgrading the vehicle detection so that video feeds can be brought back to the Traffic Operations Center, and a communication link to the CDOT signals in Town. **Phase 2 Budget: \$400,000 Construction Completion: Winter 2016**

ENGINEERING DIVISION

2016 Pavement Maintenance Program (PMP) - The 2016 PMP will focus its efforts in the north PMP area with additional work taking place on Mikelson Boulevard, Fifth Street, and the downtown area.



Curb, gutter, and sidewalk repairs continue throughout the north PMP area (Sapphire Pointe, Castle Oaks, and Cobblestone Ranch). Asphalt patching continues in these areas in preparation for the slurry seal, and overlays.

The secondary street reconstruct on Sunset Drive continues to progress with new curb being installed along the west side. Asphalt pavement is scheduled for June 1, weather permitting.

Mikelson Boulevard Reconstruction Project continues with the contractor completing the removal of existing concrete pavement on the northbound lanes. Asphalt pavement is scheduled to start in early June. A traffic shift to allow the southbound lanes to be closed to begin the removal of the existing pavement is tentatively scheduled for June 8.

With the completion of concrete work in the downtown area, night work activities started on Perry Street with asphalt patching, and crosswalk repairs. Night work in the downtown area includes a mill and overlay along Perry Street from 5th Street to Plum Creek Parkway. These activities are scheduled to start the night of June 12. Other night work activities include mill and overlays on Castleton Drive, Allen Street, Genoa Way, Ridge Road, and Castleton Way which began May 31.



Mastic crack seal operations were completed on Front Street and Scott Boulevard. Mastic crack seal material is flexible polymer modified asphaltic sealant with fine aggregate. This allows the material to have limited load bearing capabilities which will help smooth out the cracks, improving the ride ability and sealing the crack keeping water out.

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

2016 Facilities Parking Lot Improvement Program – The construction contract with PLM Asphalt & Concrete, Inc. has been approved and staff is working with the contractor to develop the project schedule. This contract will see needed improvements to eight (8) Town facility parking lots as follows:

- Founders Village Fire Station will receive asphalt patching, a full asphalt seal coat, and concrete pavement joint sealing.
- Crowfoot Valley Fire Station will receive asphalt patching, a full asphalt seal coat, concrete repairs, and concrete pavement joint sealing.
- Butterfield Park will receive asphalt patching, a full asphalt seal coat, concrete repair, and concrete pavement joint sealing.
- Coachline Trail Head Parking lot will receive a full asphalt seal coat.
- Matney Park Parking lot will receive asphalt patching, and a full asphalt seal coat.
- Meadows Water Treatment Plant will receive concrete repairs, asphalt patching, and a full asphalt overlay.
- Diamond Ridge Pump Station will receive a full asphalt seal coat.
- Police Station Parking lot will receive a full asphalt seal coat.

This project is tentatively scheduled to begin in late August.

2016 Bridge Maintenance Program – The contract for the Castle Oaks Drive Bridge over Cherry Creek - Approach Slab Leveling Project has been approved and staff is working with the contractor, KECI Colorado, Inc., to develop a project schedule.

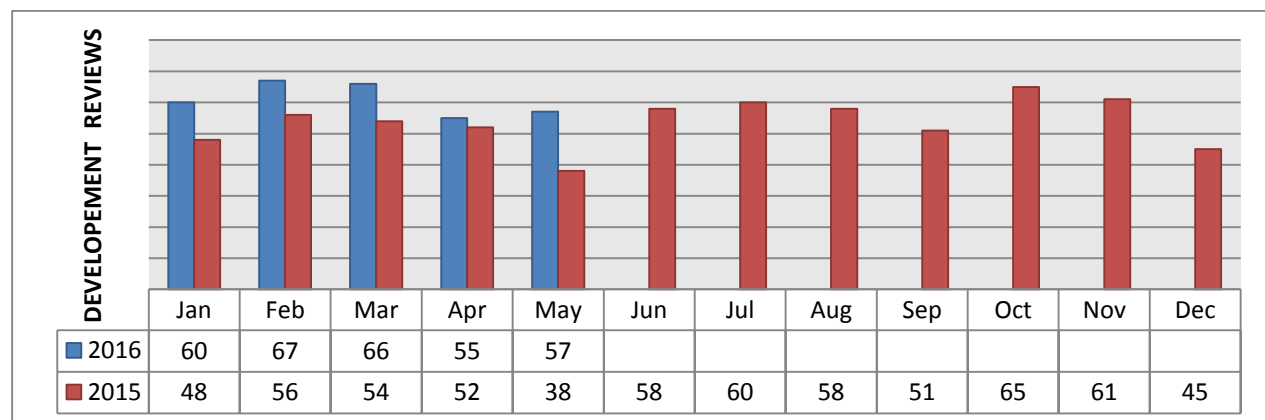
The Wilcox Bridge over Sellers Gulch repair has also been approved as part of the 2016 Asphalt Patching, Overlay and Reconstruction project. The approach slabs have been repaired and the bridge deck mill and overlay will be completed in June during the night work operations.

The following locations are proposed for painting maintenance and will be performed by the Street Operations and Maintenance Division:

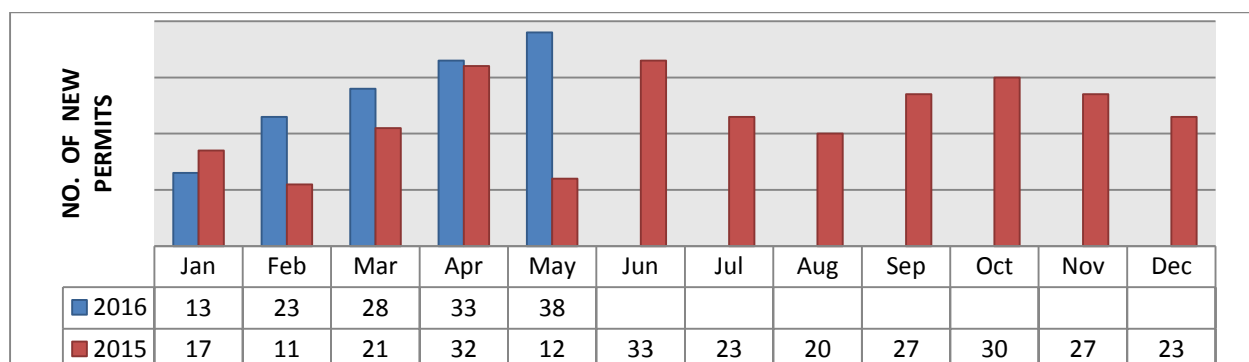
- Wilcox Bridge over Sellers Gulch
- Perry Street Bridge over Sellers Gulch
- Plum Creek Parkway Bridge over BNSF Railroad

Development Review and Permitting

Development Review - Included in the 57 submittals are 36 first time applications with two pre-applications. All reviews were completed on or before the due date assigned by the Development Services Project Manager.



Permitting - Public Works approved and began inspections of 38 new permits in the month of May 2016. Included in the 38 permits are: two Commercial Developments (Meadows F17, Area 4 – Vet Clinic and Meadows F17 Hilltop); five Residential Developments (Liberty Village PA5; Meadows F20, KB Homes early grading; Meadows F16, Parcel 5; Meadows F20, Amendment 6-1A, Lokal; and Crystal Valley Ranch F7, Phase 1); five Town projects; and 26 permits for work within the public right-of-way, 11 of which were necessary due to current development, and ten were pavement cuts.



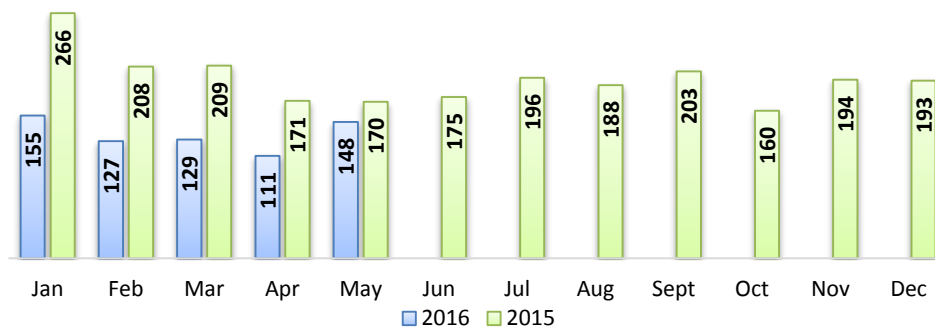
TRANSPORTATION SERVICES

Taxi Voucher – This month the Taxi Voucher Program funded 148 rides, this was about a 13% decrease over last May's total of 170 rides. However, the rides have increased since last month due to six newly registered riders and the taxi operation hours returning to the 11pm timeframe with the newly implemented contract with Yellow Cab. Riders will now have a new driver named James Kilbane.

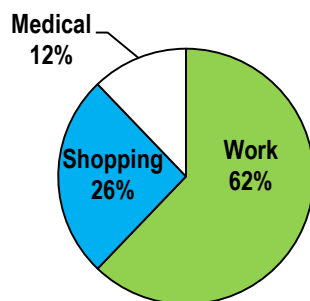
**WELCOME TO CASTLE ROCK
YELLOW CAB AND JAMES!**



Number of Rides YTD 2016 vs.2015

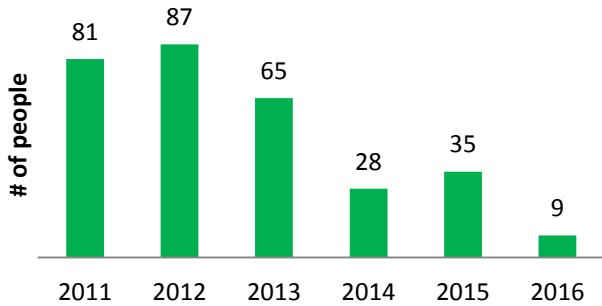


Ride Destinations

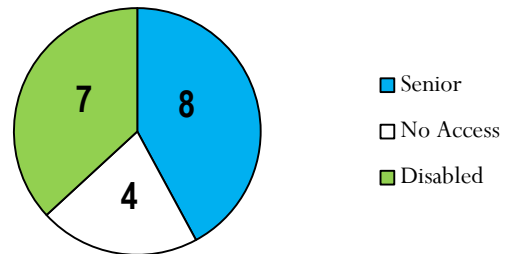


Rides are available for work, shopping or medical trips. Transportation services are provided for Castle Rock residents who are senior citizens, have a disability that prevents them from driving, or do not have access to a vehicle.

Number of People Registering

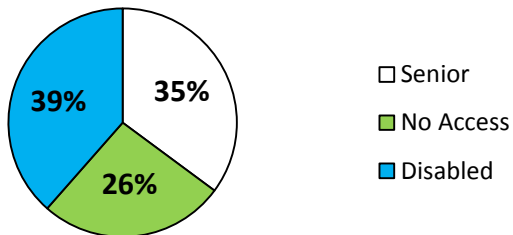


Types of Riders

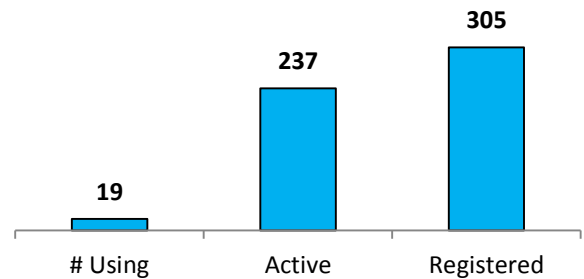


There were six new registrants for the Taxi program this month. Since its inception, a total of 305 people have registered for this program. Currently 68 of these past registrants are inactive or have dropped out of the program. There were 19 individuals who used the Town's Taxi Service this month.

Percentage of the Total Rides (148) by each Rider Type



Number of Riders Using the Service vs. Registered



Senior Center Shuttle - The Senior Center provided 740 rides in the month of May which was an increase of 10% from last month's rides of 673. The volunteer driver program provides service Monday through Friday from 9 am to 3 pm.



Town Trolley

The Trolley provided rides for three different events for the month of May, which included a field trip for Rock Ridge Elementary School, Spring Up the Creek, and the Annual Castle Rock Museum History Tours. The Trolley enjoyed carrying the variety of riders throughout Town as they got to experience Castle Rock's culture and history.

Traffic Engineering & Operations

Traffic Signal Operations and Maintenance - For the month of May there were a total of eighteen non-routine traffic signal maintenance visits completed by either Town staff or the Town's signal maintenance contractor. This is a higher number of visits that typically expected. Due to the inclement weather, there were a few signals that were in flash or had other issues due to power problems. The signal contractor also changed out a green LED that was out at Front Street and Scott Boulevard.



Street Signs and Pavement Marking Maintenance - With May the beginning of our paint season, our two paint crews consisting of one sign tech and one seasonal per crew, repainted 42 symbols. Our contract pavement striping crew Kolbe Striping, Inc., striped 230,603 linear feet of striping throughout Town and is nearing completion of their first round of painting all of the long lines in Town.

Staff also worked on 29 signs by repairing or replacing them. The crew also cut and fabricated 63 signs for various projects. As for our special events, the team used 44 hours in providing support to events in Town.

Transportation Planning

Neighborhood Traffic Calming Program (NTCP) - NTCP inquiry updates:

- One new inquiry was received for Heritage Avenue in the Founders neighborhood. The stretch of roadway is directly west of Enderud. The homeowner has already returned the initial support petition. A speed and volume study has been scheduled for June.
- Elk Run Drive: The speed/volume study for Elk Run Drive was completed in May. According to the data, the street does not meet the minimum 85th percentile speed to qualify for the program. The homeowner has been sent a letter informing them of the results of the study. Passive traffic calming options were shared with the homeowner should they decide they want to pursue the concern further with the neighborhood.
- Saddleback Drive: Town staff continues to work on the Working Group's proposed traffic calming plan. Staff is continuing to work on the estimate of the cost of the mail kiosk pull-out area along Saddleback Drive. Once the proposed traffic plan is estimated, it will be shared with the Working Group for final approval. If the Working Group approves the plan, Town staff will prepare the plan to be mailed to all homeowners along Saddleback, Ridgetrail, and Black Pine for final approval. As part of the Working Group meetings, it was decided to seek a uniform speed of 25 mph on all residential streets in both Escavera and Woodlands neighborhoods. The Town has received the formal requests from both HOA Boards and will proceed to enact the change during June.



Transportation Master Plan (TMP) Update

After completing the review of the proposals received, the Town selected Felsburg, Holt, and Ullevig to conduct the Town's Transportation Master Plan update. The kick-off meeting for the study is scheduled for June 2. In the meantime, staff has been pulling together various data for the consultant.

DRCOG Transportation Improvement Program (TIP) / CDOT FASTER Projects

Public Works staff continues to work on the CDOT forms for the three transportation projects awarded federal and state funds. Staff has also been informed by DRCOG that additional funding is available in Fiscal Year (FY) 17 through FY19 if the Town wants to move up funding years to



complete the project earlier. This information only impacts the Founders/Allen Way intersection project since all the funding for the Meadows Reconstruction has been awarded in FY17 and the Founders/Crowfoot Valley funding is FASTER Safety funds from the State. CDOT has also set up project numbers and control numbers for the Castle Rock projects.

Development Review

- Staff continues to meet with the Canyons South development team on traffic and DA issues. The Town has reviewed the revised transportation study and provided comments back to the applicant. A meeting has been scheduled for early June to discuss the comments and the revised study.
- Staff had several meetings with the Pine Canyon development team. They are hiring a new traffic consultant to complete the transportation impact analysis. Staff and the applicant's traffic engineer have scoped some of the previous concerns from older studies and agreed on some changes to the scope of work and baseline data for the study.



Fleet Services

"Keeping Castle Rock on the Move"



The month of May was a transition month for the Fleet Services Division. We moved away from work on the snow removal equipment to getting the summer equipment; mostly Parks Department mowers and equipment.

Fleet Services staff met with all the Town's Departments to review all replacement vehicles for the coming budget cycle and worked closely with the Finance Department to input all the changes into the 3-year budget look ahead.



Staff was also proud to host the May Monthly Manager's meeting in the Fleet bay area. The event was well attended and Fleet staff presented ways to save money on vehicle operations and many of our *"green"* fleet initiatives. Fleet staff would like to thank the Public Works Admin team of Linda Angus and Monica Cammeralli for all their help in making the meeting possible.



The Fleet Services Division is continuing work on receiving and putting into service new vehicles for the Town's departments and keeping Castle Rock on the move. Including a Elgin Eagle street sweeper for the Street Operations & Maintenance Division and a Bobcat skid steer loader for the Parks Department.

The Fleet Services team billed out \$48,000 of labor and parts. Fleet technicians completed 102 work orders.



GOVERNMENT FLEET

The Fleet Services Division was also honored to receive honorable mention in the Government Fleet Magazine for being a leading fleet organization in 2016.



Objective/Benchmark: Complete at least 80% of our work orders within 24-hours of coming to shop.

Outcome: Fleet Services team completed 74.5% of the work orders within 24-hours of opening repair requests or service requests. This number is slightly below our benchmark but still a good result.

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

Outcome: Town vehicles and equipment were available 97.2% of the time. This demonstrates a very low percentage of downtime and shows how well we are keeping Castle Rock on the move even with major repairs needed on several vehicles.

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

Outcome: Technician productivity was 73.3% which is above our benchmark.

Street Operations & Maintenance Division

In the month of **May** the Streets Division performed work in the following operations:

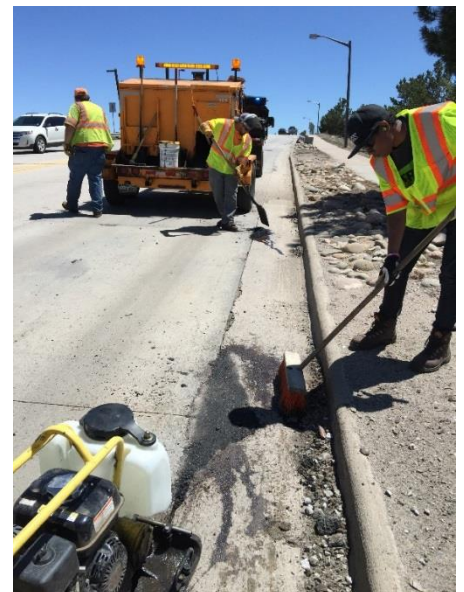
- Asphalt and Concrete Pothole Patching
- Utility Cut Repairs
- Crack Sealing
- Street Sweeping
- Gravel Road Maintenance
- Equipment Maintenance
- Employee Training
- Other Miscellaneous Operations

Asphalt and Concrete Pothole Patching -

During the month of May, the Streets crew performed pothole patching on the following asphalt roadways; Ridge Road, Mikelson Boulevard, Turnstone Avenue, and on a few other various streets in the Founders and Meadows areas. During these operations, the crew repaired **87** potholes.

Concrete roadway pothole patching was also performed on Plum Creek Parkway, Meadows Parkway, Meadows Boulevard, Butterflied Crossing, North Meadows Drive, and West Prestwick Way. During these operations the crews patched **1524** potholes.

During the month of May the division received **13** requests for pothole repairs and made sure that some of our roadways were in good shape for the Tri the Rock Race held on May 21 and the upcoming



Elephant Rock Cycling Festival to be held June 4. In total the crews patched 1611 potholes compared to our previous month's total of 1550 potholes. Due to the wet weather we have been receiving recently we are seeing a lot of new potholes popping up around town.

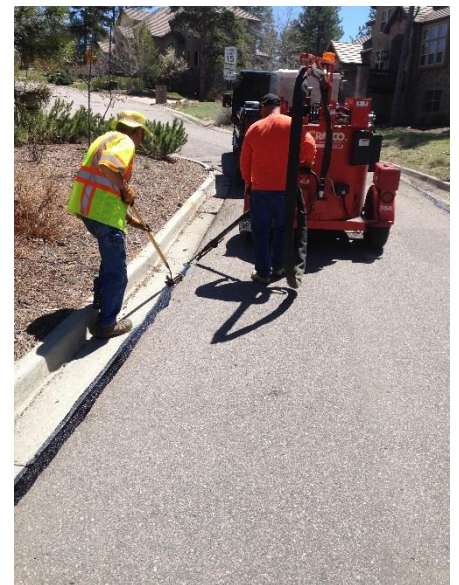
Utility Cut Repair

During the month of May, the crew was able to complete three full-depth asphalt repairs following water line breaks and manhole lid repairs performed by the Utilities Department. These operations were completed on Cedar Avenue, Hill Court, and Loop Road. In all of these instances the asphalt repairs were completed within three working days or less which greatly helped to minimize the disruption to the residents and local traffic in each area.



Crack Seal Operations -

During the month of May, the crew was able to complete **14.2** lane miles of crack sealing work in Sapphire Point, Timber Canyon, and Terrain subdivisions in preparation for the upcoming Pavement Maintenance Program (PMP) work later this year. The remaining crack sealing that need to be completed for the PMP work is in the Cobblestone Ranch subdivision which consists of approximately 5.3 lane miles. After this is complete, we will reach our goal of sealing **55.5** lane miles for the Pavement Maintenance Program this year.



Street Sweeping Operations -

During the month of May, staff completed routine sweeping operations once in the Downtown business area as well as in the areas where the crack sealing and utility cut repair operations took place. Additionally, the crew performed sweeping operations in preparations for three town events; Phillip S. Miller Park - Phase 2 Grand Opening, the Tri the Rock Race, and the upcoming Elephant Rock Cycling



Festival event. Crews also started our annual "Spring" sweeping schedule and working into the next month at sweeping the entire Town to clean up everything from this past winter's debris buildup. On another note, the Division received our new Elgin Eagle street sweeper to replace an old unit, and quickly put it to work. In total, the crews removed **36** yards of materials from our roadways, helping to keep our storm sewer systems and environment a little cleaner.

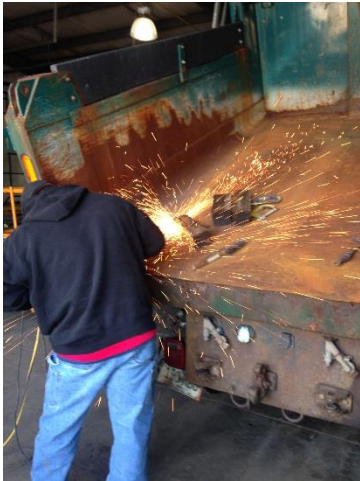
Gravel Road Maintenance -

Grading operations on the gravel road section of Jerry Street just west and off of Briscoe Street was completed. These operations were in preparation for the **Downtown Alley Rehabilitation Project** that will be taking place in-between First Street and Briscoe Street later this year.



Equipment Maintenance –

Staff dismounted all of the snow plows and truck mounted sanding units and made any needed repairs to them before putting them into storage. The crew also performed a scaling removal operation on the crack sealing machine. This job is only necessary every few years when the build-up of crystalized sealant slows down the efficiency of the machine. Additionally, the crew performed equipment maintenance operations on the crack seal heat lance unit, the asphalt hot box, and our portable welder.



Employee Training -

We had six crew members receive their Work Zone Flagger certification training.



Miscellaneous Operations -

During the month of May, Street Operations & Maintenance Division assisted the Parks Department with the Grand Opening of the Phillip S. Miller Park by grading out an overflow parking area. They also repaired some landscaping damage at the intersection of Black Pine and Founders Parkway that was caused by a Town snowplow during the last snow storm. Additionally, the crews picked up Road Ranger trash bags on Plum creek Parkway and Meadows Parkway, hauled off over 13,700 pounds of scrap metal to the recycling plant, and responded to an emergency paint spill on Factory Shops Boulevard.

Looking Ahead -

During the month of June, crews will continue with crack sealing, street sweeping, and pothole repair operations, as well as start our road shoulder maintenance mowing and bridge maintenance operations.