



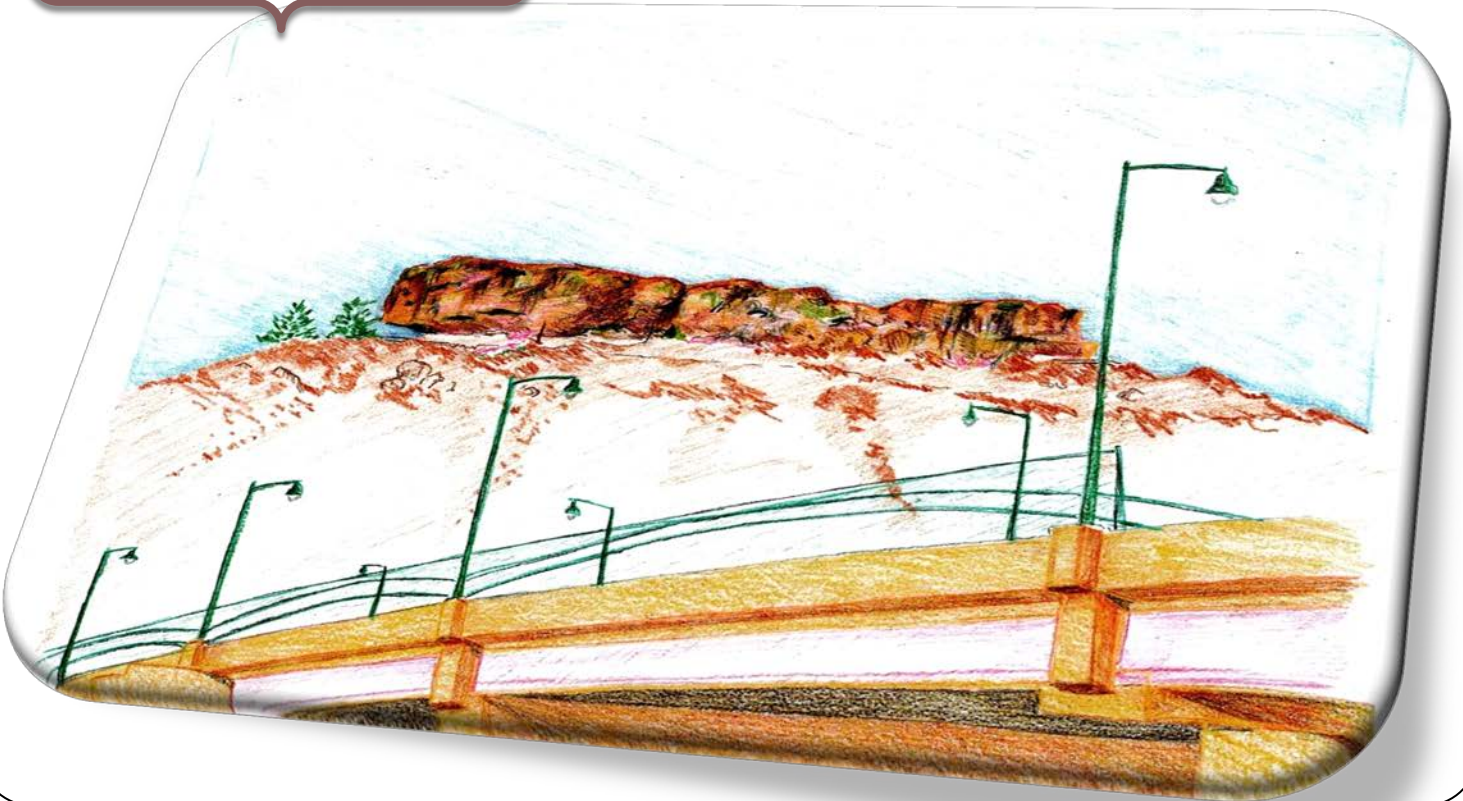
The Public Works Department operates under the CAN DO philosophy  
- We are committed to doing the job right with a positive attitude  
while staying dedicated to meeting the needs of our Town values  
and continually searching for new opportunities to improve.

# PUBLIC WORKS DEPARTMENT

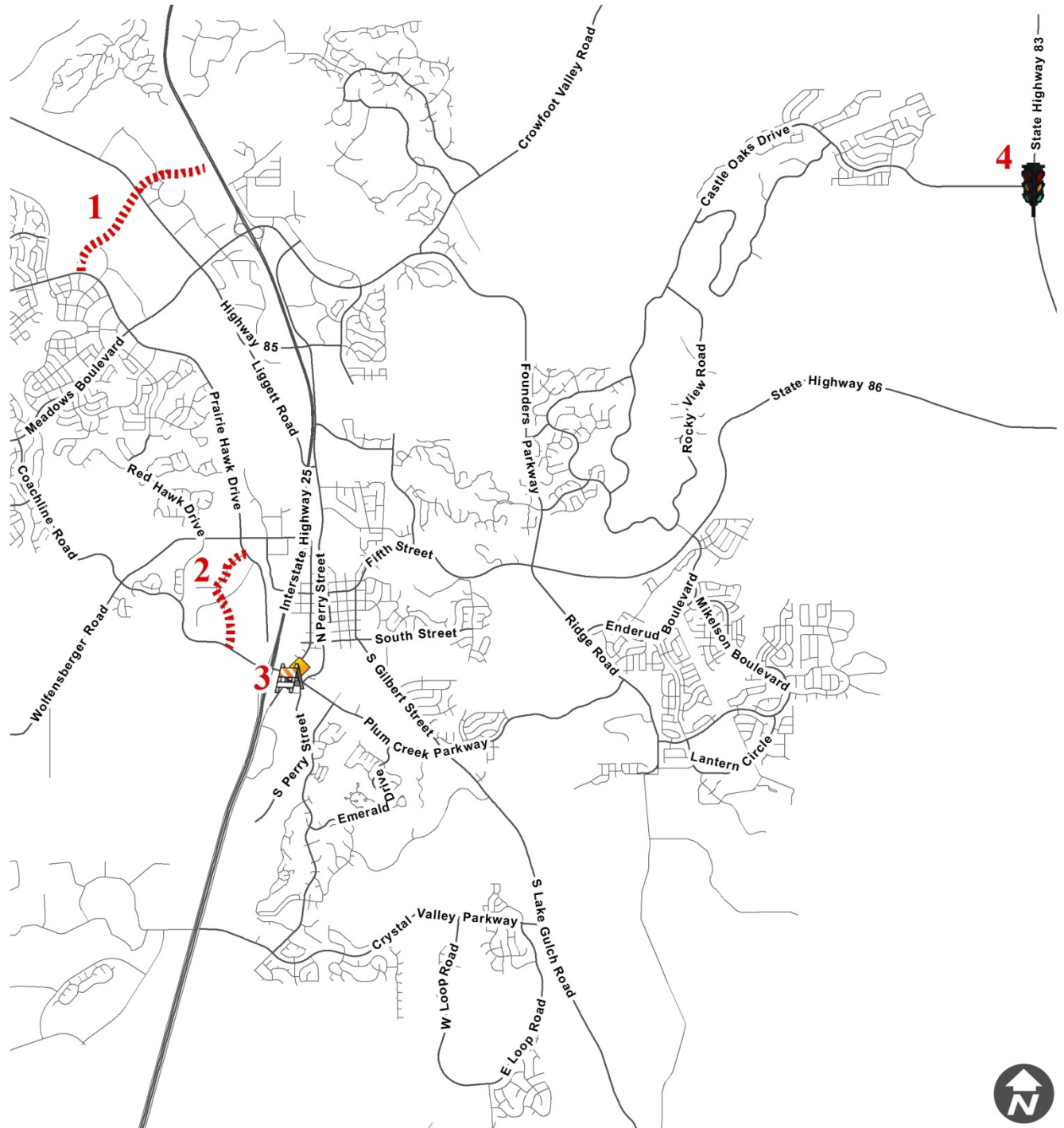
## *Monthly Report – June 2015*

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

**“CAN DO”**



# CAPITAL PROJECTS



PUBLIC WORKS DEPARTMENT

1. North Meadows Drive Extension Project
2. Prairie Hawk Extension – Industrial Tributary Trail & Drainage Way Improvements
3. Plum Creek Pkwy Intersection Improvements at Wilcox & Perry
4. Traffic Signal at Castle Oaks Drive/SH 83



**#1**

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

- Excavation of I-25 on and off ramps and roadway
- I-25 cast-in-place and precast panel wall construction
- NB I-25 Phase 2 bridge superstructure work
- US 85 girder placement completed
- US 85 bridge deck panel placement
- US 85 overhang installation
- Grading for US85 bridge construction
- Storm sewer improvements along US85 future on and off ramps
- Traffic impacts to the traveling public:
  - Flaggers will be present from 7am to 5pm, Monday through Friday along US85; please be prepared to stop.
  - Castlegate Drive North from US85 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 US85; 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: 2015 - \$34.6M Construction Completion Date: June 2016.**



**FINAL GIRDER PLACEMENT FOR THE NORTH MEADOWS EXTENSION**

(Picture courtesy of Tony Lane)

**2. Prairie Hawk Extension, Industrial Tributary Trail & Drainage Way Improvements** – This is a joint project with the Parks Department, Public Works Department, and the Utilities Stormwater Division. This project will include: a trail between East Plum Creek and Prairie Hawk Drive Extension along Industrial Tributary, Prairie Hawk Drive Extension between Wolfensberger Road and Plum Creek Parkway, and stream stabilization along Industrial Tributary between Prairie Hawk Drive and Atchison Way. **Phase:** Design - Design Staff continues to work on finalizing the 90% roadway plans. The lower reach of the Industrial Tributary drainage plans are near 90% complete. Once the plans have been approved, the Town's design consultant, Olsson Associates, will revise and provide the plans/profiles for the proposed project. **Budget:** The overall Public Works budget for this project was \$500,000. Balance from 2014 has been carried over to finalize design and right-of-way acquisition. Construction year has not been established.



**3. Plum Creek Parkway Intersection Improvements at Wilcox & Perry** – 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.
- Add a southbound right turn lane from Perry Street to Plum Creek Parkway.
- Add a westbound right turn lane from Plum Creek Parkway to northbound I-25.

**Phase:** Design - Staff has retained Hartwig and Associates to prepare the design to be completed by the end of 2015 with construction planned to follow in 2016. **Budget:** \$345,000

**4. State Highway 83 and Castle Oaks Drive Intersection Signalization** – This project will complete the installation of a new traffic signal at this intersection. In 2014, an engineering study was completed showing the need for a traffic signal at this intersection and the design was completed late in 2014. **Phase:** Construction – In June, staff held the pre-construction meeting for the project and construction began on June 22. To date, the underground conduit has been placed and the first caissons have been drilled and poured. The signal poles will be delivered in early July. **Budget:** \$225,000 **Construction Completion:** September 2015



**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:** Design – The project kick-off meeting was held in June. Muller Engineering Company, the consulting engineer assigned to the project, has begun initial design work and field data collection for the communications upgrade portion of the project. **Budget:** \$700,000 **Construction Completion:** End of 2015

## ENGINEERING DIVISION

**2015 Pavement Maintenance Program (PMP)** - Curb, gutter and sidewalk repairs continue throughout the central PMP area (Red Hawk, Meadows, Metzler Ranch and Woodlands). Asphalt patching continues in these areas in preparation for rejuvenating agent and slurry seal treatments.



Two of the three secondary street reconstructs (Sunset Court and Gigi Street) are complete. Progress continues to be made on the Canyon Drive reconstruct with the completion of the new storm sewer pipe and inlet installation at Oakwood Drive. Traffic has been shifted and pavement removals have begun on the northern half of Canyon Drive between Park View Place and Oakwood Drive.

The Plum Creek Boulevard Reconstruction Project is in full swing with the concrete pavement removals complete on the northbound lanes and the placement of base course progressing.

The Slurry Seal project began on June 15. The Castle North area is complete. The contractor is currently in the Red Hawk and Meadows areas and will be in the Metzler Ranch area by the first part of July.



Two large rain storms hit the Town in mid-June totaling just less than 5” in 48 hours. These storms have slowed the progress of the PMP. The program is 2.5 weeks behind the original schedule. The PMP team continues to work with each of the PMP contractors to revise timelines to ensure each project stays on schedule and does not interfere with other work being done in the area. Public notification planning and website updates are continuing with assistance from the Community Relations team.

**2016 Pavement Maintenance Program (PMP)** - Staff is working on developing the proposed 2016 PMP budget for the north PMP area and scheduled primary streets. Determining which streets will receive surface treatments, overlays or reconstructs to maintain the programs Overall Condition Index (OCI) average goal of 70 on secondary streets and 75 on primary streets.

The PMP team completed the OCI for the secondary streets within the south PMP area (scheduled for 2017) and the primary street network. Condition rating is an evaluation of asphalt or concrete pavement; this applies a score which is utilized by the Town’s pavement management software to help determine the proper pavement treatment along with staff recommendations.

**2015 Facilities Parking Lot Improvement Program** - The contract with Straight Line Sawcutting, Inc. has been approved and work is scheduled to begin August 31. This contract will see needed improvements to four (4) Town facility parking lots as follows:

- Police Station and Rhyolite Park parking lots will receive concrete repairs, asphalt patching, and a full asphalt seal coat.
- Centennial Park parking lot will receive concrete repairs, and concrete pavement joint sealing.
- Fire Station 151 (Perry Street) parking lot will receive concrete repairs, asphalt patching, and a full asphalt overlay.

**2015 Bridge Maintenance Program** – Activities for the 2015 Bridge Improvement Program are as follows:

**Bridge Painting**

- Castle Oaks Drive/Cherry Creek: Re-paint bridge rails and approach rails.
- Front Street Flyover: Re-paint bridge rails, approach rails and fencing.

The change order has been approved to have the Curb, Gutter, Sidewalk and Miscellaneous Concrete project contractor, Sabell's Enterprises, to perform needed concrete repairs on the Wilcox bridge over Sellers Gulch. Work is tentatively scheduled for mid-July.

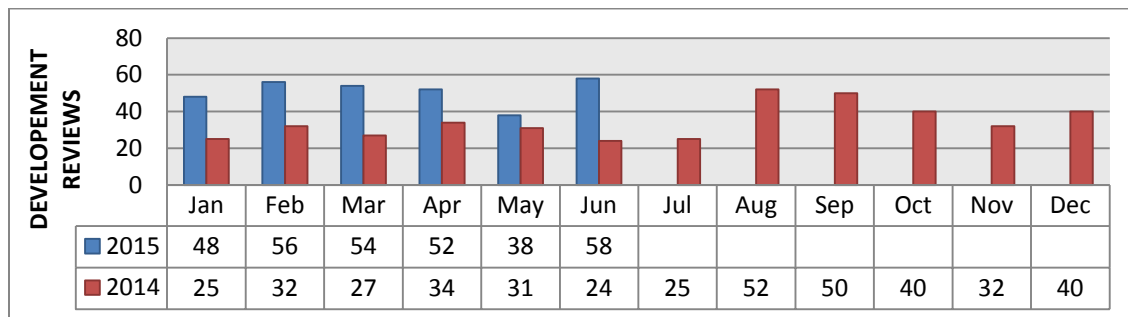
Staff is working on identifying structures, scope of work, and budget for the 2016 Bridge Maintenance Program.



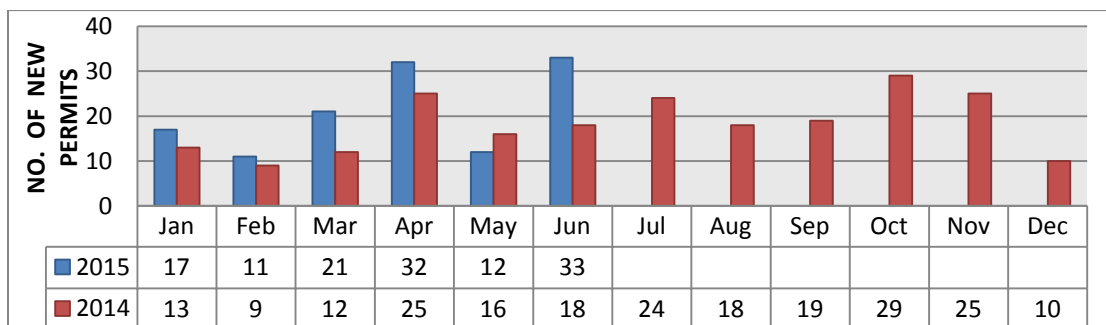
### **2015 Community Development Block Grant –**

**Downtown Alley Rehabilitation** - The Town has been awarded a grant of \$152,000 to improve public alleys in the downtown area. Depending on construction bids, this project will reconstruct four alley segments. Three of the alleys are located from 1<sup>st</sup> Street to Briscoe Street between Wilcox and Plum Creek Parkway; one alley is located north of 7<sup>th</sup> Street between Wilcox and Perry. The design services contract has been awarded to Bohannon Huston, Inc. (“BHI”). Public Works staff will advertise the project for bids in January 2016 and commence construction in Spring 2016. Budget: \$152,000

**Development Review** - Included in the 58 submittals are 25 first time applications and four pre-applications. All but one of the reviews were completed on or before the due date assigned by the Development Services Project Manager. The Town has a contract with Bohannon-Huston to assist with Development reviews.

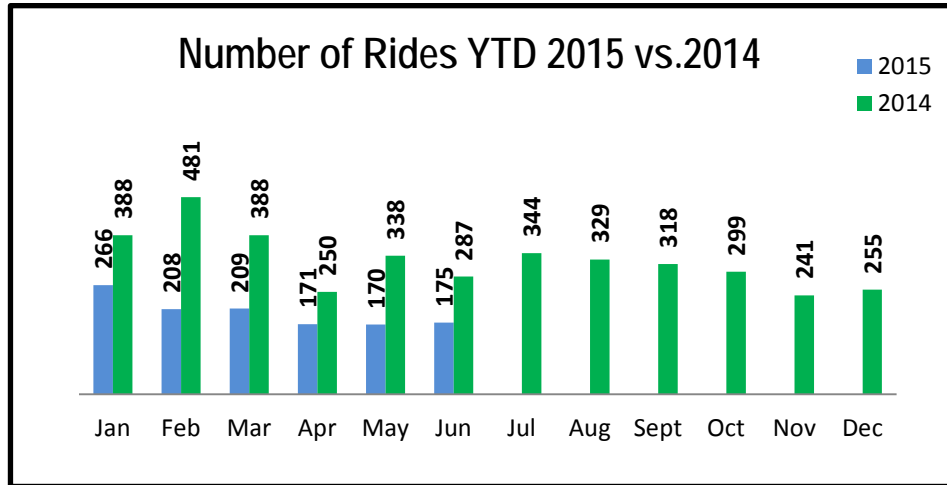


**Permitting** - Included in the 33 new permits are: 3 - Residential Development (Crystal Valley Ranch Filing 7 – Early Grading, Crystal Valley Ranch Filing 14 – Regional Pond, and Sawgrass at Plum Creek Fairway 13 – Storm Improvements), 2 - Town Project, and 28 - permits for work within the public right-of-way (eight of which were necessary due to current development).

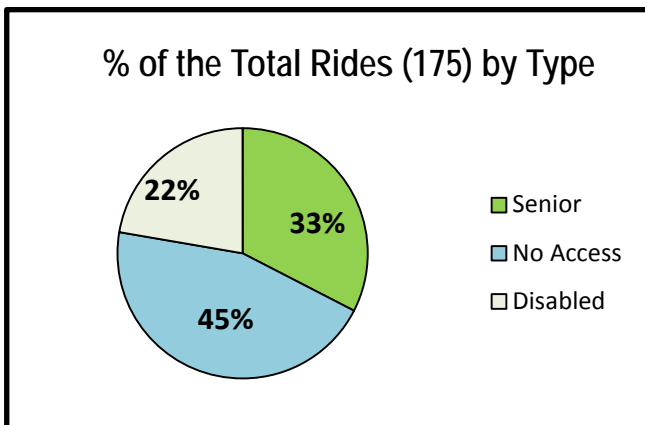
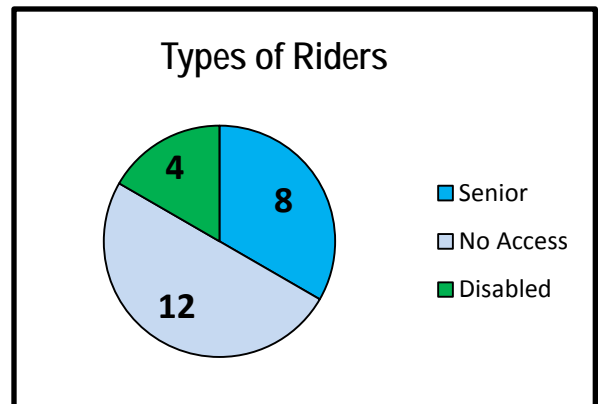


# TRANSPORTATION SERVICES

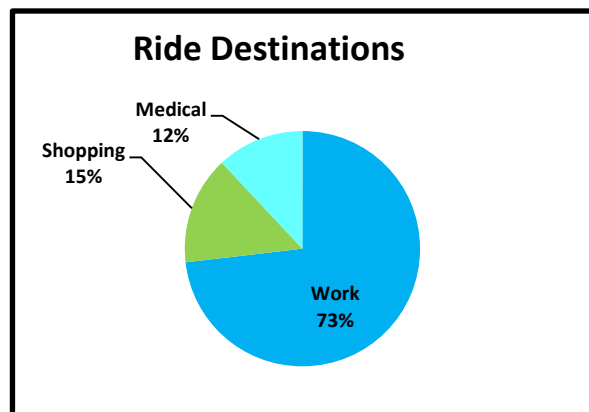
**Taxi Voucher** – For the month of June, the Taxi Voucher Program funded 175 rides. This was about a 39% decrease over last June’s total of 287 rides. Rides have stayed consistent since last month. Many of our riders have taken advantage of the nice weather in June and have utilized walking and biking methods for transportation.



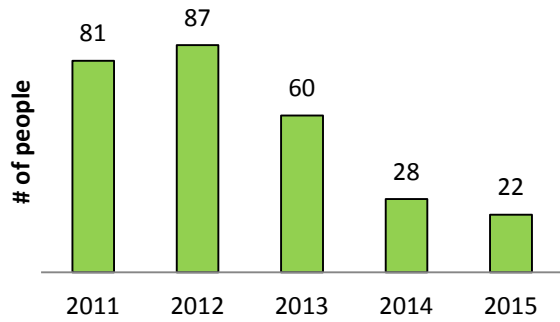
Transportation services are provided for Castle Rock residents who are senior citizens, have a disability that prevents them from driving, or do not have access to a vehicle. In June, there were 24 individuals who used the Town’s Taxi service.



Rides are available for work, shopping or medical trips.

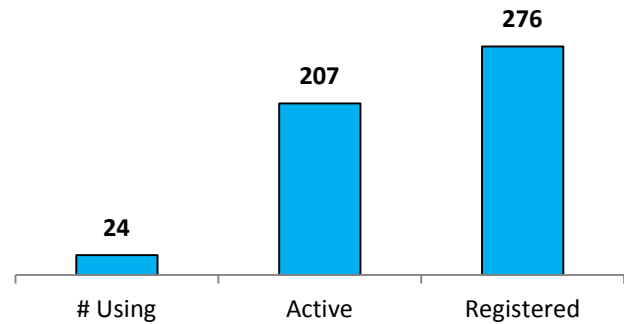


### Number of People Registering



Two people registered for the Taxi program this month. Since its inception, a total of 278 people have registered for this program. Currently 65 of these past registrants are inactive or have dropped out of the program.

### Number of Riders Using the Service vs. Registered



**Senior Center Shuttle** - The Senior Center provided 751 rides in the month of June. This was a decrease of 3% from last month's rides of 769. The volunteer driver program provides service Monday through Friday from 9 am to 3 pm.

**Town Trolley** - The Trolley had a busy month providing rides for a variety of events during the month of June. The events included the Downtown Merchants Association's Movie Night, the Grange's Music in the Meadows events, a wedding and a Broker Tour of Castle Rock Neighborhoods. The Trolley definitely provided a great classic view of Castle Rock to all riders this past month!





# TRAFFIC ENGINEERING & OPERATIONS

**Traffic Signal Operations and Maintenance** - The following provides a summary of the activities during the month of June with regard to the operation and maintenance of the traffic signal system.

- During June there were a total of twenty non-routine traffic signal maintenance visits completed by the Town Staff and/or the Town's signal maintenance contractor. This did not meet the goal of 13 or fewer non-routine visits per month. The majority of these visits, fifteen overall, were due to signal corridors or individual signals in flash due to either bad clock time or power outages. These types of problems are currently in the process of being addressed with the traffic signal system upgrade project that kicked-off in June. The other visits were due to bulb changes or vehicle detection repairs.

**Signs and Pavement Marking Maintenance** - In the month of June the Signs and Markings staff spent 189.5 hours painting 245 symbols to try and catch-up on our symbol painting. Staff also spent 33.5 hours and added 17 new symbols and is about 18% complete with the summer painting schedule which is a little behind where they usually are at this time of the year due to the wet weather in May and the assistance they have provided with traffic control for special events.



With regard to special events the crew spent 110 hours in setting out 760 traffic control devices for use at various special events. Staff also provided assistance in mapping out traffic control for one event and three construction work zones.

Finally, the Town's striping contracting company, Kolbe Striping, painted 155,284 linear feet of long line paint which completes the first round of long line painting throughout the Town.



## Transportation Planning

### Neighborhood Traffic Calming Program (NTCP)

Several new inquiries were received during the month of June as follows:

- The first inquiry was for Black Canyon Way in the Meadows subdivision. The second inquiry was for Scott Boulevard at Whispering Oak Drive. Since Scott Boulevard is a collector street and the primary concern is safety for people crossing Scott Boulevard, staff will explore possible safety improvements that are not part of the NCTP. The third request was for Brantly Avenue in Founders.
- Speed and volume data for Ashcroft and Parsons Avenue will be collected in July through our contractor, All Traffic Data.
- A resident in the Sapphire Point neighborhood has raised concerns regarding the existing traffic calming plan on Baguette Drive. Information regarding the modification process has been provided to the resident. Staff will wait and see if the resident decides to proceed with a modification request.
- The Saddleback Drive traffic calming project has moved into Phase 1 of the project. Yard signs have been installed throughout the study area on Saddleback Drive, Ridgetrail Drive, and Black Pine Drive. The postcard mailer has been sent to all the HOA members of the Woodlands and Escavera neighborhoods. The mailer informs the homeowners of the project and steps being taken to reduce speeds on Saddleback Drive. Additional passive measures are being explored,

such as signing and striping changes, high visibility enforcement, and the use of radar feedback signs will be used in the coming months. Staff will re-evaluate the roads in September to determine if the passive measures reduced the speed or volumes below the program thresholds.

The NTCP policy amendment is being completed and should be presented to the Public Works Commission in August. The policy is expected to be presented to Town Council before the end of the year for final adoption.

### **Front Street Parking Changes**

Town staff has completed the on-street parking plan along Front Street. Parking restrictions were put in place during the month of June.



### **DRCOG Transportation Improvement Program (TIP) Process and Applications**

Town staff attended a DRCOG de-briefing of the 2016-2021 DRCOG TIP process to discuss possible changes to the next TIP. The meeting discussed everything from what did not work to what worked and what could be tweaked to work better in the future.

The meeting notes will be shared with the Transportation Advisory Committee (TAC) at an upcoming meeting before the information is shared with the Metro Vision Issues Committee (MVIC) and DRCOG Board members.

### **Development Review Projects**

- Staff has provided CDOT the final access permit application for the proposed Promenade development. CDOT staff is currently reviewing the application and approval is expected in July for the Castleton Drive/ US85 access permit.
- Staff has also been working with CDOT and the developer on the sidewalk design along SH86. Town staff has been able to get CDOT to agree to allow the sidewalk within the outer edges of the future CDOT ROW. This will allow the developer to eliminate several retaining walls that would have been required if the sidewalk had to be placed outside future CDOT right-of-way.
- Public Works staff has reviewed and provided comments back to the Pine Canyon development team, including the TIA and transportation related comments. Additional analysis is required by the traffic consultant before the study can be approved. CDOT is in the process of reviewing the study and a meeting is scheduled to discuss the study and impacts to the street network, such as Founders Parkway. Once CDOT and Town staffs are in agreement with the additional analysis and needed improvements, a meeting will be held with the developer.



*Fleet Services*  
*"Keeping Castle Rock on the Move"*



*"We're Proud of Our Blue Seal Team"*

The Fleet Service Division had another busy month keeping the Town's vehicles and equipment up and running. The Fleet team billed out just over \$60,000 of labor and parts for the month and technicians worked on 96 Town vehicles or equipment and completed 104 work orders.



Fleet staff also completed a successful auction selling seven units at Roller Auctions.



The Fleet team was also busy accepting new vehicles into the fleet including a Ford Explorer and a Ford F150 for the Utilities Department.



Paul Colell and Tony Borzillo attended the Government Fleet Expo in Denver and Paul and the Town's Fleet Division were spotlighted as one of the top local fleets in the Denver metro area.



**Objective/Benchmark:** Complete at least 80% of our Work orders within 24-hours of coming into the shop.

**Outcome:** Fleet team completed 76% of the work orders within 24-hours of opening repair requests or service requests. Several unscheduled big repairs put us under this objective.

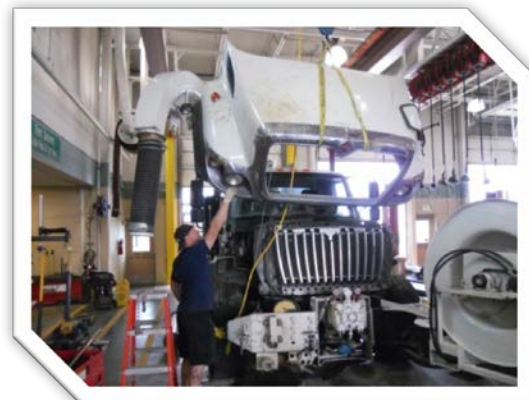
**Objective/Benchmark:** Town vehicles and equipment available for use 95% of time.

**Outcome:** Town vehicles and equipment were available 98% of the time.

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

**Outcome:** Technician productivity was 78% - well above our objective!

*Fleet Technician Chad Bednar using the crane to assist with repairs.*



## STREET OPERATIONS & MAINTENANCE DIVISION

In the month of June the Street Operations & Maintenance Division performed three (3) specific operations:

- Pothole Repairs
- Sweeping
- Crack Sealing



Staff patched 804 potholes on Plum Creek Parkway, Gordon Drive, South Street, Black Pine Drive, Wilcox Street, and Tabor Drive. The crew also completed thirteen full depth patches on Kinner Street, Perry Street, Black Pine Drive, and Lewis Street.

Staff has swept 208 lane miles in June and has completed 867 lane miles year-to-date. This now completes the Spring Sweeping Program for 2015.



Crack sealing program has continued ahead of The PMP (Pavement Maintenance Program). This is a joint effort with Public Works Engineering Division and Street Operations & Maintenance Division to keep our roads in good condition. Staff sealed 522,000 lineal feet on 40 lane miles in June.

July

During the month of July, staff will continue crack sealing, patching potholes and begin the Bridge Maintenance Program. Also, staff will continue our Road Shoulder Mowing Program, as weather permits.