

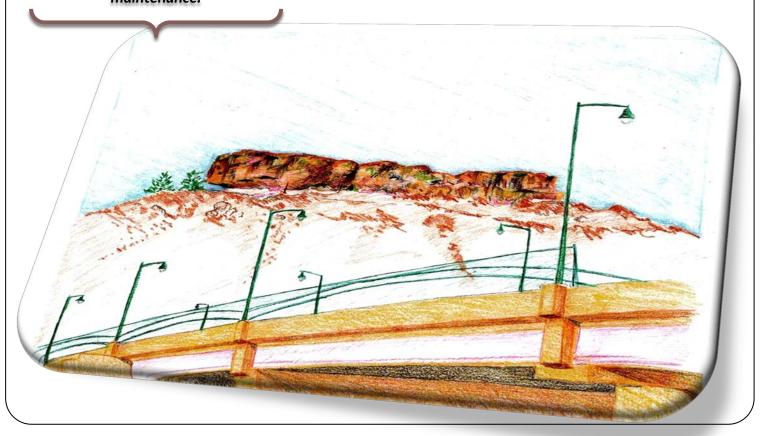
The Public Works Department operates under the CAN DO philosophy
- We are committed to doing the job right with a positive attitude
while staying dedicated to meeting the needs of our Town values
and continually searching for new opportunities to improve.

# PUBLIC WORKS DEPARTMENT

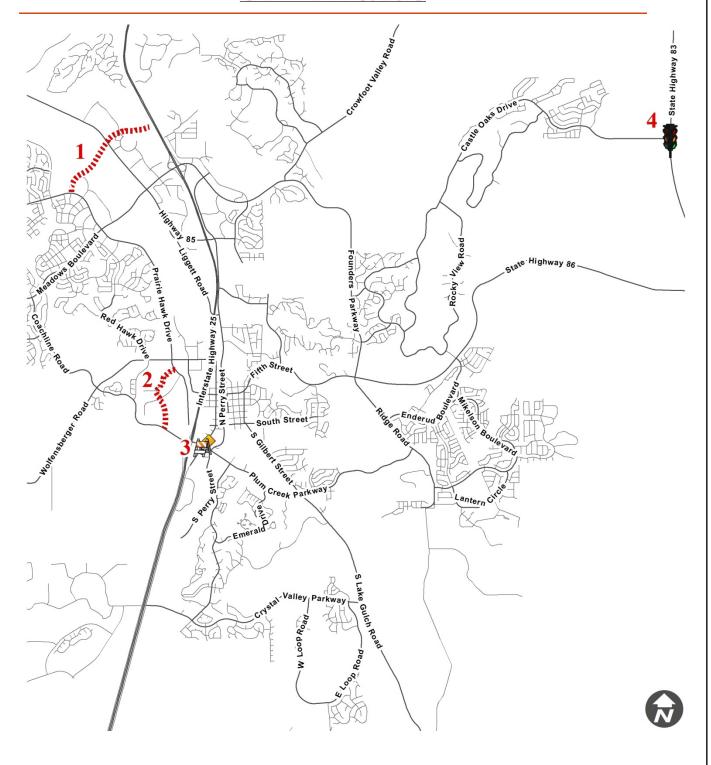
Monthly Report – May 2015

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





# CAPITAL PROJECTS



- 1. North Meadows Drive Extension Project
- 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. 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 May:
  - Installed final girders on the I-25 northbound bridge
  - Installed deck rebar for the southbound off ramp US 85
  - Concrete deck placement southbound off ramp US 85
  - Work continues on the northbound off ramp US 85 earth wall
  - Work continues on the storm sewer improvements along US 85 and on Castlegate Drive North
  - All pier caps are now complete on US 85
  - Traffic impacts to the traveling public:
    - Castlegate Drive North from US 85 to Castlegate Drive West is closed. This closure will exist until summer 2016.
    - Traffic alignment lane shifts are present in the current configurations on both I-25 and US 85. Please use caution and follow the posted speed limits.

Phase: Construction Budget: 2015 - \$34.6M Construction Completion Date: June 2016.



US 85 and Plum Creek Bridges as of May 26th

2. <u>Prairie Hawk Extension, Industrial Tributary Trail & Drainage Way Improvements</u> – 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-ofway acquisition. Construction year has not been established.



- 3. <u>Plum Creek Parkway Intersection Improvements at Wilcox & Perry</u> 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 continues to work on retaining a consultant to complete the design and have the design 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 May, staff finalized the contract with WL Contractors, the lowest bidder. The signal poles are expected to be delivered by mid-to-late June. The pre-construction meeting will be occurring in June and the construction will start shortly thereafter. 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 will be held in June and the schedule is to have all components of Phase 1 complete by the end of 2015. Budget: \$700,000 Construction Completion: End of 2015

### **ADMINISTRATION DIVISION**



### **CONGRATULATIONS DAN!**

Congratulations to Dan Sailer, Assistant Public Works
Director. Dan was appointed to the APWA Small
Cities/Rural Communities Committee for the American Public
Works Association (APWA). This is a volunteer opportunity that
Dan will undertake in addition to his normal responsibilities
here. APWA came to Dan requesting his participation, and he is
one of six national representatives on this Committee. The goals
of the Committee are to:

- Promote effective operation of public works functions of small cities/rural communities and to assist in planning for the future of APWA,
- Provide information on current topics of interest to, or potential regulations which might impact, small cities/rural communities,
- Promote outreach from the Chapters to the members from small cities/rural communities.

Sharing information and learning from other organizations about challenges and innovative solutions will not only help us be the best we can be, but will also provide a resource of information that can be shared on the national level. "Together, we are better".

# PUBLIC WORKS DEPARTMENT

## **ENGINEERING DIVISION**

2015 Pavement Maintenance Program (PMP) - Curb, gutter and sidewalk

repairs continue throughout the central PMP area (Red Hawk, Castle North, and Metzler Ranch).



Asphalt patching continues in these areas in preparation for the rejuvenating agent, slurry seal, and overlays.

The secondary street reconstructs (Sunset Court, Canyon Drive, and Gigi Street) continue to progress with the bottom asphalt mat placed on Gigi Street and Sunset Court, and portions of Canyon Drive. Plum Creek

Boulevard Reconstruction Project has begun. The traffic shift to allow the northbound lanes to be closed for removal of the existing pavement went into effect on May 18<sup>th</sup>.

Heavy rains and snow during the month of May has slowed the progress of the PMP. Staff is requesting revised schedules to ensure projects meet completion dates. Public notification and website updates are continuing with assistance from the Community Relations team.



2016 Pavement Maintenance Program (PMP) - The PMP team completed the

Overall Condition Index (OCI) for the secondary streets within the south PMP area. The team continues to work on the OCI for the primary street network which should be completed by first part of June. Condition rating is the 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 31st. 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** 

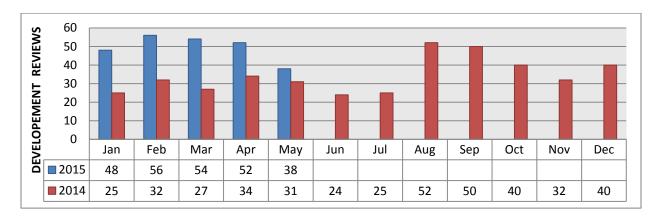
- Castle Oaks Drive/Cherry Creek: Re-paint bridge rails and approach rails.
- Front Street Flyover: Re-paint bridge rails, approach rails and fencing.

Staff is in the process of completing change order documents to have Sabell's Enterprises, the Curb, Gutter, Sidewalk & Miscellaneous Project contractor, perform the needed concrete repairs on the Wilcox Street bridge over Sellers Gulch. After reviewing the bids for the asphalt mill and overlay for this bridge, it was found that this would not be economically feasible to do this work at this time. Staff will budget and plan to re-bid in 2016.

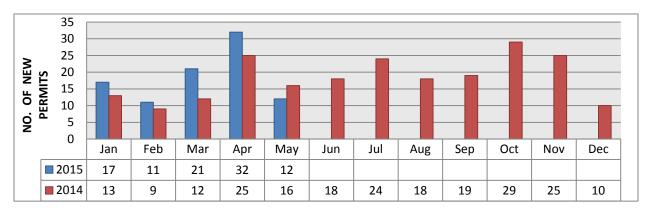
### 2015 Community Development Block Grant – Downtown Alley

**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 1st Street to Briscoe Street between Wilcox and Plum Creek Parkway; one alley is located north of 7th Street between Wilcox and Perry. The design services contract has been awarded to Bohannon Huston, Inc. ("BHI"). BHI has submitted 60% plans for review. In addition, BHI has submitted draft copies of the bid documents. Once the plans are final, staff will advertise this project for bids. Construction is projected to begin in July 2015.

**Development Review** - Included in the 38 submittals are 19 first time applications and no 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.

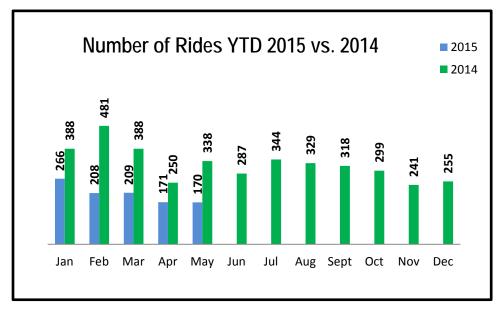


**Permitting** - Included in the 12 new permits are: 5 - Residential Development (Meadows Filing 20 Oakwood Phase 4; Meadows F20, Oakwood Phase 4 – Sidewalk; Meadows Filing 20, Phase 1, Amendment 4 – Ryland; Castle Oaks PA33; and Castle Oaks PA30), 1 - Town Project, and 6 - permits for work within the public right-of-way. In addition to reviewing and approving 12 new permits, Public Works reviewed 16 existing permits and/or surety related documents.

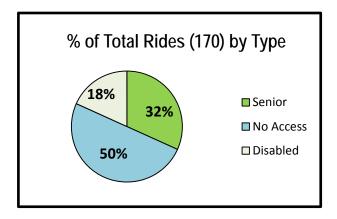


# **TRANSPORTATION SERVICES**

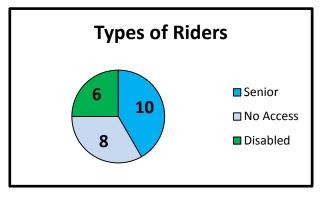
**Taxi Voucher** — For the month of May, the Taxi Voucher Program funded 170 rides. This was about a 43% decrease over last May's total of 388 rides. Rides have stayed consistent since last month.

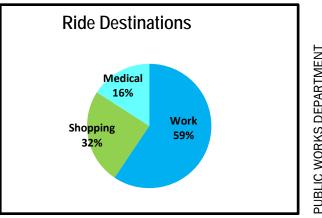


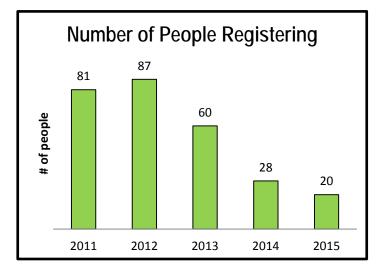
Transportation services are provided for Castle Rock residents who are senior citizens, have a disability that prevents them from driving, or do not have access to a vehicle. In May, there were 24 individuals who used the Town's Taxi service.



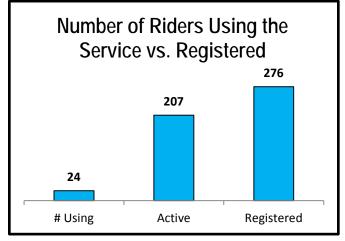
Rides are available for work, shopping or medical trips.







Four people registered for the Taxi program this month. Since its inception, a total of 276 people have registered for this program. Currently 65 of these past registrants are inactive or have dropped out of the program.





**Senior Center Shuttle** - The Senior Center provided 769 rides in the month of May. This was an increase of 4% from last month's rides of 742. 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 May. The events included Spring Up the Creek, Rock Ridge Elementary School's Historic Tours of Downtown Castle Rock, a family reunion, the Denver Broncos Signing Event, and the Castle Rock Historic Society's Annual Historic Tours. Needless to say, many residents and visitors to the Town were able to experience the fun and excitement of riding the Town's Trolley this past month!







# **TRAFFIC ENGINEERING & OPERATIONS**

<u>Traffic Signal Operations and Maintenance</u> - The following provides a summary of the activities during the month of May with regard to the operation and maintenance of the traffic signal system:

- There were a total of four non-routine traffic signal maintenance visits completed by the
  Town Staff and/or the Town's signal maintenance contractor. This met the goal of 13 or
  fewer non-routine visits per month. Of the four overall visits, two visits were to traffic signals
  in flash mode when they should not have been. The other two traffic signal visits were at
  intersections with vehicle detection problems.
- In addition, the incandescent traffic signal indications were changed out as part of the annual bulb change. The intersections impacted include 3<sup>rd</sup> Street at Wilcox, 6<sup>th</sup> Street at Wilcox, Wolfensberger Road at Park Street and Wolfensberger Road at Caprice.
- Finally, starting on May 20, Public Works staff, in cooperation with the Town's Police Department, manually controlled the traffic signal at the north I-25 off-ramp/Founders Parkway intersection. Staff operated the signal during the weekday afternoon rush hour as well as from 11AM to 5PM on the weekends, including Memorial Day. The goal of this effort is to help reduce vehicle delay and congestion along Meadows/Founders Parkway as CDOT works to reconstruct the roadway in the vicinity of I-25.



<u>Signs and Pavement Marking Maintenance</u> - In the month of May, in addition to assisting with the manual control of the traffic signal at north I-25 off-ramp/Founders Parkway intersection, the Signs & Markings crew helped the Police Department close Castleton Road

south of Meadows Parkway to help with the flow of traffic on Meadows Parkway as the CDOT construction project on Founders Parkway continues. It is expected that this closure will remain in place until the lane closures on Founders Parkway are removed.

In addition, two team members spent about 22 hours at the recent LTAP School and are one step closer to completing the LTAP Road Scholar Program.

The summer painting season got underway in May with the Town's striping contractor striping approximately 400,000 linear feet of roadway lines during the month of May. This is approximately half of all of the long lines within the Town.



ROAD

CLOSED

Finally, special events are gearing up for another year so the crew spent over 120 hours on special events preparing for the Castle Rock Half Marathon, the Elephant Rock bike race and the movie nights.

# **Transportation Planning**

### Neighborhood Traffic Calming Program (NTCP)

- No new inquiries were received during the month of May.
- Staff has verified the initial support petitions for Ashcroft and Parsons Avenue. However, due to the weather the speed and volume studies were not able to be conducted. The studies will be scheduled for June, weather permitting.
- Town staff attended the Escavera HOA meeting to discuss the upcoming traffic calming project on Saddleback Drive. Staff shared with the Board and HOA members how the project started and where it is in the process. A postcard mailer has been created to send to all the HOA



members of the Woodlands and Escavera neighborhoods. The mailer is intended to alert homeowners of the project and steps being taken to reduce speeds on Saddleback, such as yard signs, radar speed feedback signs and targeted enforcement. In September, staff will conduct another speed/volume study to determine if the measures reduced the speed or volumes below the program thresholds, or if physical improvements, such as speed humps may be needed.

### **Front Street Parking Changes**

Town staff held an open house on May 13<sup>th</sup> to discuss the parking changes on Front Street (5<sup>th</sup> to 2<sup>nd</sup>) with the downtown businesses along Perry Street. Businesses were concerned that all parking on Front Street would be eliminated. Staff informed them that there will still be on-street parking allowed, but certain areas will be restricted in order to provide access for the Fire Department. The issue then expanded to the lack of overall parking downtown. Staff acknowledged the concerns and informed them they hope to address the issue in the future.

### **Douglas County Transit Demand Study**

Town staff attended a workshop with the project team and other stakeholders throughout Douglas County. The working groups developed plans to address commuter transit options for regional mobility, down to local issues



and how to provide local circulators and to making the last mile connections. The workshop also looked at potential costs depending on the amount of service being proposed and the type of transit technology. The final stakeholder meeting is scheduled to take place within the next few months.



### DRCOG Regional Transportation Plan (RTP) Bike Facilities Update

Town staff met with other County jurisdictions and DRCOG in May to update the regional bike facilities map in the Regional Transportation Plan (RTP). This new map will replace the current map in the RTP. It is anticipated that this new map will be utilized in future TIP programs.

### **Development Review Projects**

Staff has provided the Canyons South development team with anticipated transportation improvements required with the proposed development should it annex into the Town. The improvements identified in the traffic impact study and by Town staff is currently being identified as development agreement items.





### Fleet Services

"Keeping Castle Rock on the Move"



The rains of May did not slow down the Fleet Services Division. Fleet staff was busy keeping "Castle Rock on the Move" The team billed out \$68,570 of parts and service this past month which is \$10,000 higher than our average. Technicians worked on 93 Town vehicles or equipment and completed 108 work orders.





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

Fleet technicans also worked on some new projects like putting new tracks on the Utilities Department excavator and some body work on a Police Department patrol unit. This work enabled us to get those units back into service much faster than outscoureing that labor. The Fleet staff is also busy preparing for an upcoming auction in June.





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

**Outcome:** Fleet team completed 83.3% of the work orders within 24-hours of opening repair requests or service requests.

**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:** Technican productivity was 64.3%. Productivity was below our benchmark this month due to several technicans being on vacation.

# **STREET OPERATIONS & MAINTENANCE DIVISION**

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

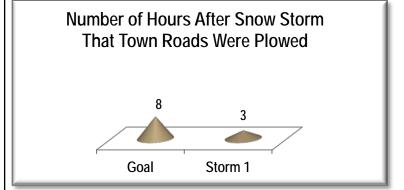
- Pothole Repairs
- Snow & Ice Control
- Sweeping
- Crack Sealing



Staff patched 1979 pot holes on Plum Creek Boulevard, Prestwick, Butterfield Crossing, Wilcox Street, Perry Street, Liggett Road, Fifth Street, Prairie Hawk Drive and Turnstone. The crew also did a full depth patch on Third and Anderson. To get to all the potholes, staff is prioritizing the repairs based on hazard and the type of roadway.







One snow storm occurred within the month of May totaling 6" of snow. Personnel from the Street Operations & Maintenance Division plowed all the Priority 1's and 2's for a total of 1,216 miles. Per current guidelines, residential streets get plowed when eight inches of snow or more is in the street after March 15th. With this storm we only had about two inches in the street at any giving time.

Staff swept 137 lane miles during the spring cleanup of all roads in Town. Say hi to Rob Daniels if you see him around town; he's one of our great crew that helps keep this Town clean.









Staff has begun crack sealing ahead of the PMP. This is a joint effort with the Engineering Division and the Street Operations & Maintenance Division to keep our roads in good condition. Staff has sealed 91,000 lineal feet on 8.73 lane miles in May.







During the month of June, staff will continue crack sealing, patching pot holes and finish up the spring sweeping of all the roads in Town. Also, staff will begin our Road Shoulder Mowing Program, as weather permits.