

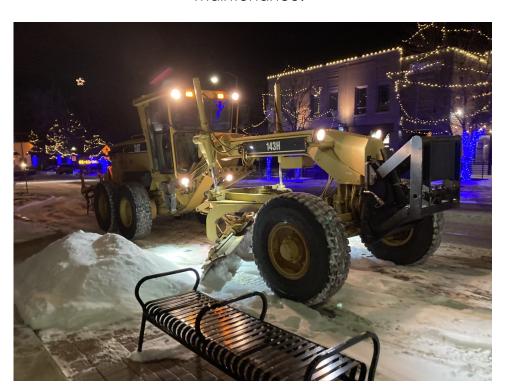


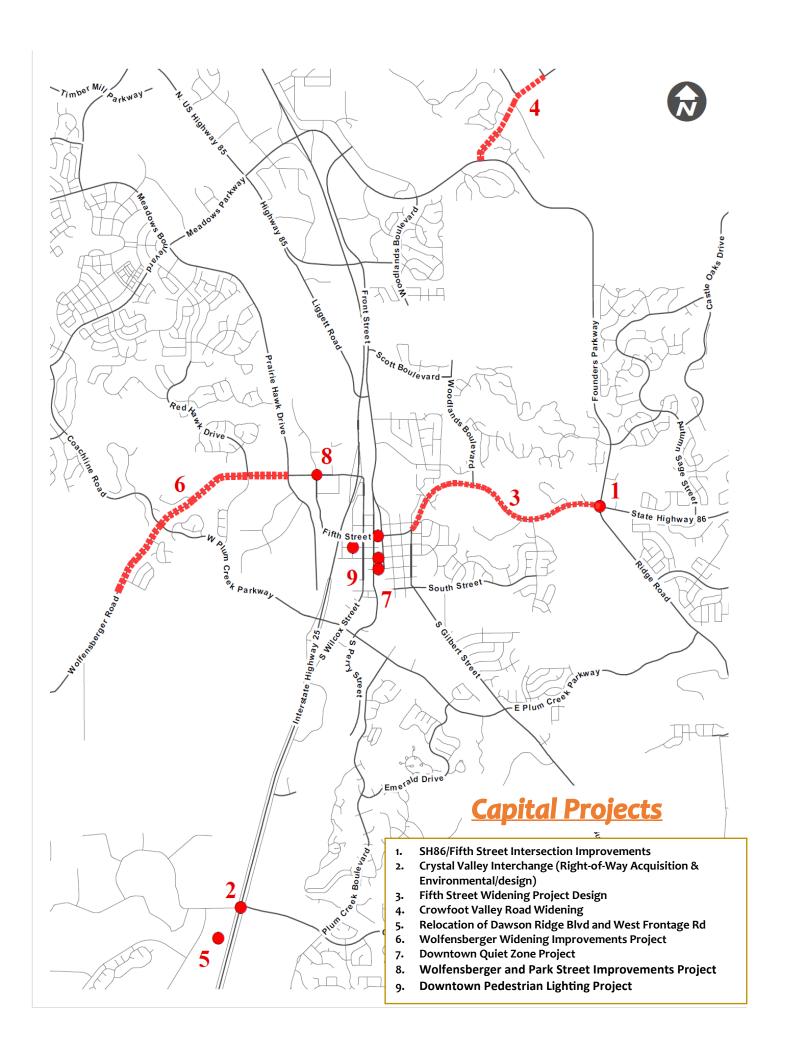
## **Monthly Report**

January 2024

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.

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





- 1. Founders Parkway (SH86)/Fifth Street Intersection "Four <u>Corners" Improvements</u> – This project will enhance one of the primary intersections in Town. Founders Parkway, SH-86, Ridge Road and Fifth Street intersect at the project location. Each leg of the intersection is classified as a major arterial facility and the intersection is currently operating above its capacity. The improvements this project will implement include:
  - Intersection will remain a full movement four-way intersection. Additional turn lanes and acceleration lanes will be added.
  - Traffic signal improvements will be made to incorporate the larger intersection.
  - Pedestrian and bicycle improvements will be constructed on all four sides of the project.
  - Stormwater detention and water quality improvements will be constructed to capture the additional surface volume from the new intersection.

#### **Phase: Construction**

- the intersection.
- Soil Nail Wall Construction has begun in the SW quadrant. Proof tests and verification nails have been completed and have passed within specifications
- Clearing and grubbing of oak brush and trees on north side of Fifth Street has started
- Signal construction on the south side of the intersection has begun. Caissons and electrical are being installed for the southernmost poles. Signal poles and mast arms have been delivered and are on site.
- Phases 2B and 2C are underway with removals and clearing and grubbing
- Excavation for MSE wall will begin in February

Budget: \$12,400,000 total funding

\*Targeted Construction Completion: Q4 2024

2. Crystal Valley Interchange - Pre-construction Activities -The purpose of this project is to achieve acquisition of remaining right-of-way, complete design, and set aside future project funding allowing potential funding partnerships to assist with advancing construction.

Phase: Right-of Way Acquisition

- West side of I-25 An ordinance to authorize the ROW swap with Westside Investments for a portion of the existing Territorial Road was approved by Town Council on November 7. Staff anticipates closing on the parcels prior to start of construction on CVI Package 2 in March
- East side of I-25 The Town's Legal staff and Counsel is working towards the valuation trial on the Hyperion parcel. The Town's has received the Final Rule and Order from the Court on the Boone parcel settlement. Staff is working to deposit final payment.

Budget: \$3,130,000 total funding Acquisition Completion: End of 2023

Phase—Design: - Interchange Access Request and Environmental Assessment Reevaluation, and Design

#### Package 1

- Re-eval was submitted to CDOT/FHWA for approval on January 12. Team is anticipating approval during Febru-
- Anticipating issuing NTP on February 19, 2024

#### Package 2

- Construction contractor and ICE contractor are scheduled to submit initial Construction Agreed Price (CAP) after FHWA approves the re-evaluation for Package 1.
- Anticipating approaching Public Works Commission on the March 5th meeting, and Town Council during March with a construction contract for Package 2.
- Maintenance IGA is being revised to include TDM strategies, and is anticipated to be submitted to the Town for review on January 30.

**Budget:** \$7,580,000 total funding **Design Completion:** Spring of 2024

**Targeted Construction Completion:** Spring 2027

Construction continues in the SW and SE quadrants of 3. Fifth Street Widening Project Design – Fifth Street is a major arterial connecting local and regional travel between the easterly portions of Town and I-25. Roadway and pedestrian improvements for Fifth Street have been identified within the 2017 Transportation Master Plan (TMP) that will maintain adequate capacity and ensure efficient road network connections for future development.

> The Fifth Street Widening Project will complete all design elements for implementation of the full build-out transportation network from South Gilbert Street to Ridge Road as identified in the TMP. The improvements include:

- Widen to 4-lanes from Woodlands Boulevard to Ridge
- Add on-street bike lanes between Gilbert Street and Ridge Road
- Add sidewalks from Sixth Street to Ridge Road
- Roundabout and signal light construction at Woodlands Boulevard and Valley Drive respectively.

#### Phase: Design & ROW

- Continued appraisal research related to property acquisitions
- Held meetings with a number of land owners along the project corridor to discuss property acquisitions

Budget: \$2,700,000 total funding **Design Completion:** Spring 2024 Right-of-way acquisition: 2024

\*Targeted Construction Completion: 2027

- 4. Crowfoot Valley Road Widening This project involves the widening of Crowfoot Valley Road from the intersection of Knobcone Drive to the Town boundary. The objective of this project is to reduce congestion due to current and forecasted traffic volumes, as well as safety improvements for both vehicles and pedestrians alike. The project will include:
  - Roadway widening to four through lanes
  - Right and left turn auxiliary lanes where warranted
  - Signal at Sapphire Pointe intersection
  - Complete sidewalks throughout the project corridor

#### Phase: Design

Progressed design from 30% to 40% completion

 Executed purchase agreement to manufacture Sapphire Pointe intersection signal poles

Continued development of CORE Electric designs

**Budget:** \$810,000 total funding **ROW Acquisition:** 2024 **Design Completion:** 2024

\*Targeted Construction Completion: Mid 2025

#### 5. Relocation of Dawson Ridge Blvd and West Frontage Rd –

The purpose of this project is to relocate the I-25 West Frontage Rd to the west of the BNSF Railroad tracks to provide access to the surrounding neighborhoods and residents after the Crystal Valley Interchange is complete.

**Phase: Design** – CORE Consultants is the design consultant for this project. The following is a summary of the activities performed this month:

- Plans and bid package are being finalized
- Town continues to explore coordinating management of the Town's portion of Dawson Trails Blvd construction with Westside Investments to gain efficiencies and cost savings

**Budget:** \$299,000 total funding **Design Completion:** Spring 2024

Targeted Construction Completion: Summer of 2025 in con-

junction with Crystal Valley Interchange

6. Wolfensberger Widening Improvements Project- Wolfensberger Road is a major arterial connection for local and regional travel between the westerly portions of Town and I-25. Roadway and pedestrian improvements for Wolfensberger have been identified within the 2017 Transportation Master Plan (TMP) that will maintain adequate capacity and ensure efficient road network connections for future development.

The Wolfensberger Widening Improvements Project will complete all design elements for the implementation of the full buildout transportation network from the western Town limits to Prairie Hawk Drive.

- Widening roadway to a full 4-lane arterial section
- Addition of sidewalk along both sides of Wolfensberger
- Roundabout construction at Red Hawk/Auburn and Wolfensberger Intersection
- Removal of existing traffic signal
- Stormwater drainage improvements
- Implementation of on street bike lanes West/East bound

#### Phase: Planning/Design

- Right of Way acquisition will commence in 2024.
- Acquisition of Permanent Right of Way only
- Easements will be acquired once project design is picked back up
- Task order being processed for acquisition services with Western States
- Task order being processed for survey services with Bohannan Huston Inc.

 Sole source request has been submitted for appraisal services with Kilty and Company.

Budget: \$2,500,000 total funding

Right of Way Acquisition: 2024

Design Completion: TBD

\*Targeted Construction Completion: TBD

7. <u>Downtown Quiet Zone Project</u> - This project is to implement a quiet zone through the downtown Castle Rock area. In order to implement the quiet zone, improvements must be constructed at three railway crossings: Second Street, Third Street and Fifth Street. The scope of the improvements to be constructed with this project include: additional crossing gates, pedestrian crossing improvements, ADA improvements, sign and marking improvements, curb and gutter additions and general railroad (Union Pacific or UP) coordination. The benefits of this project will be improved safety for vehicles and pedestrians and improved quality of life for downtown businesses, residents and patrons.

**Phase: Construction** - The following is a summary of activities performed this month:

- Materials for new gates were collected at regional Union Pacific facilities, preparing for construction
- Planning and coordination with Union Pacific for January 2024 gate installations

Budget: \$1,800,000 total funding

**Targeted Construction Completion:** Mid 2024

8. Wolfensberger and Park Street Improvements Project-Wolfensberger Road is a major arterial connection for local and regional travel between the westerly portions of Town and I-25. Roadway and pedestrian improvements for Wolfensberger and Park Street have been identified to increase intersection operations and provide better pedestrian ac-

The Wolfensberger and Park Street Improvements Project will complete all design elements for the implementation of pedestrian and transportation improvements.

- Relocate traffic signal pole
- Increase sidewalk width

cess to the Downtown area.

- Replace existing ADA ramps
- Construct additional turn lane on Park Street

#### **Phase-Construction**

- Performed bidding for to obtain contractor pricing
- Held pre-bid conference to discuss project with contractors

Budget: \$937,000

Anticipated Construction: May-July 2024

- 9. <u>Downtown Pedestrian Lighting Project</u>—This is a project to install pedestrian lights within the Downtown area as budget allows. This project plans to improve public safety, visibility, mobility, and access to destinations Downtown by installing new pedestrian light fixtures to increase lighting levels.
  - Final plans, specifications, & cost estimate received from consultant and sent to CDOT. CDOT submitted comment to include survey tabulations, which will be

addressed by consultant before sending to FHWA.

Budget: \$600,000

Construction Completion: End of year 2024

\*These are subject to change based on adjusted revenue forecasts and results of bids received for CVI and the Four Corners Intersection projects.

<u>Traffic Signal System Upgrades</u> – This project is a multi-year signal system upgrade project that began in 2015 and is ongoing as funds are available. The project has included proven technology advances at signalized intersections, for our daily operations, and for communications between the center and each intersection.

- Staff is a part of the CDOT managed, adaptive signal system project that has implemented adaptive signal timing on Founders Parkway, and Meadows Parkway, and Factory Shops Boulevard. Eight abutting Town signals are included in the system. There is no new update on this project. CDOT has had staff turnover that has paused this project. The Kadence system is continuing to be monitored and inquiries now sent to CDOT for adjustments.
- Phase II of the Town's ATSPM project includes software development and signal timing. ATSPM Dashboard training was completed with the consultant and CDOT staff. Final draft of the Traffic Signal Management Plan has been reviewed by the Town and sent to the consultant with final comments. Additionally, the final acceptance plan, ATSPM configuration plan, and Traction Metrics documentation has been reviewed by the Town and comments sent to the consultant before the final drafts are accepted.
- The Town is awaiting a draft IGA from CDOT for Connected Vehicle hardware. The project is delayed due to year end priorities at CDOT. Once executed this two-year project will kickoff in earnest. The Town's project scope focuses on messaging intersection safety and driver awareness of operations and maintenance at high crash locations using connected vehicle technology. CDOT sent an updated Scope of Work for Town review. The current project timeline is April 1, 2024 to April 1, 2026.

**Budget:** \$868,700

Targeted Construction Completion: End of year 2024

<u>2023 Safety Projects</u> – This project includes concrete safety devices in conjunction with the Pavement Maintenance Program, installation of pedestrian crossing beacons at six locations, Intelligent Transportation System (ITS) on Meadows Blvd to warn drivers of signal changes and queue awareness, intersection safety improvements, and missing sidewalk connections.

- Quotes have been received for the Limelight ITS system.
   Once final design details are completed, a PO will be requested for the queue warning system construction.
- Staff is working on project quantities and bid documents to solicit bids in February

Budget: \$410,000

Construction Completion: Spring 2024

<u>Illuminated Street Name Signs</u> – All the 2023 illuminated street name signs have been received by the Town; staff is currently awaiting additional mounting hardware that is delayed in manufacturing. Hardware is estimated to be delivered in February. Installation of signs cannot proceed without the necessary mounting hardware at Founders Pkwy and Rising Sun, Founders Pkwy and Ridge Road (Four Corners), Wolfensberger and Park St, and Wolfensberger and Caprice. The project will be paused in 2024 due to Town budget constraints.

**Budget:** \$73,582

**Construction Completion: Spring 2024** 

Rectangular Rapid Flashing Beacons (RRFB) – Town staff has completed the install of the 2023 RRFBs at six locations. Locations have been identified for the 2024 project, including three existing roundabouts with pedestrian crossings. In January, hardware was quoted and the procurement process begun.

**Budget:** \$216,000

Construction Completion: Fall 2024

<u>Downtown Pedestrian Lighting Project</u> – This is a project to install pedestrian lights within the Downtown area as budget allows. This project plans to improve public safety, visibility, mobility, and access to destinations Downtown by installing new pedestrian light fixtures to increase lighting levels.

 Consultant (Olsson) is finishing updating final plans per CDOT's comments. Once complete, the plans will be submitted for final CDOT approval, then FHWA approval. Anticipated advertisement in March 2024 with summer construction. Project must be bid by July and completed by December.

**Budget:** \$600,000

Construction Completion: End of year 2024



#### **2024 PMP**

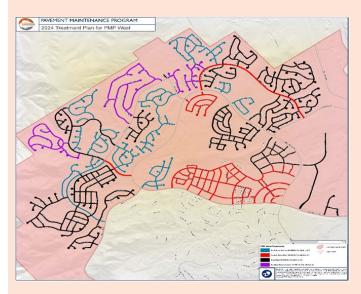
Five (5) project bid packages were opened January 19. Staff is in the process of evaluating the bids submitted, checking and verifying all bid proposals as well as doing follow up on contractor references. Staff will also begin the process of contract award recommendations.



#### 2024 PMP Contracts under consideration are:

- Asphalt Overlay
- Full Depth Reclamation
- Curb, Gutter and Sidewalk Replacement
- Slurry Seal
- Town Facilities Parking Lot Improvements

The PMP map (shown below) indicates the proposed scheduled treatments for street within the West PMP area and Primary Streets. This map may change based on budget, maintenance treatments and resources available.



#### 2024 Facilities Parking Lot Improvements Program

The project's bid opening was completed on January 17. Staff is in the process of evaluating bids submitted, prior to contract award recommendations. This process includes checking and verifying all bid proposals and contractor references.

Facilities under recommendation for 2024 are:

Crystal Valley Fire Station #152 Bison Park Parking Lot

4<sup>th</sup> & Perry Parking Lot East Plum Creek Trail Parking Lot
Seventy Street Parking Lot (Flyover) Wrangler Park Parking Lot
Castle Rock Water Headquarters (Front Lot & Yard Pavement)

#### **2024 BMP**

The bridge identified for necessary repairs in 2024, is the Plum Creek Parkway over Sellar's Gulch. Staff is working with BASIS Partners to complete documents and plans needed for the pro-

ject bid packet to be advertised in Q1 2024. Location of this bridge is indicated in the map.



## **Development Division**

#### **Review and Permitting**

**Development Review** - All 38 reviews were completed. No late reviews this month.

Permitting & Inspection – 18 right-of-way permits were issued.

# Transportation Planning & Traffic Engineering Division

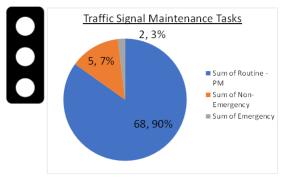
#### **Taxi Voucher Program**

For the month of January, the Taxi Voucher Program funded 161 rides; which is a 13% increase to last year's January total of 142, but a decrease of 2% from last month's total rides (165). Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do not have access to a vehicle. In January, 25 individuals used the Taxi service. Of those individuals, 95% of the rides were for work, 2.5% for shopping trips, and 2.5% for medical appointments. Ninety-three rides were provided for people without access to a vehicle, 22 rides to seniors, and 46 rides to disabled riders

The Castle Rock Senior Center provided a total of 1000 rides in January.

#### **Traffic Engineering and Operations**

#### **Traffic Signal Operations and Maintenance**

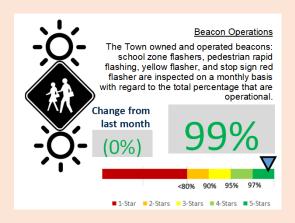


Most frequently visited signal Allen Way/Allen St

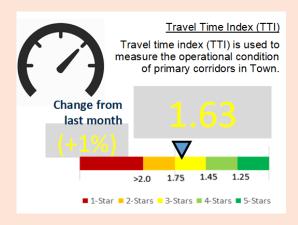
#### Street Light Operations



#### **Beacon**



#### **Operations**



#### **Street Signs and Pavement Marking Maintenance**

For the month of January, the team completed 4,103 tasks. Of these tasks, 3,704 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. We had 348 beacon related tasks, including windshield inspections, and repairs. Other tasks included 44 misc. projects, two locates, one liquor license posting, two special events, one delineator repair, and one work zone task. We also supported two snow storms with snow plowing.

#### **Transportation Planning**

#### **Castle Rock Downtown Wayfinding Sign Plan:**

The final plan was received from AECOM in January. Town Council will be informed the plan is available to review in either February or March. The project will be closed out once the last invoice is received and paid.

#### **Neighborhood Traffic Calming Program (NTCP):**

The NTCP exists to verify and address quality of life items associated with vehicular traffic on local neighborhood streets and certain residential collector roadways. No new inquiries were received in January. The resident living on Foursome Drive was sent all the documentation to regarding the program and how to begin the process. Town staff is awaiting the support petition before the speed study can be conducted. A new speed study for Villageview Lane was scheduled for January but will be rescheduled for February due to bad weather. The resident will be informed once the results or the new study are received. The N. Meadows Drive traffic calming plan is still on track to be completed in spring when asphalt is available and the overnight temperatures allow for proper construction.

#### <u>DRCOG Transportation Improvement Program (TIP) & Federal Grant Applications:</u>

Town staff was informed that the Crystal Valley Interchange project was not selected for funding from the 2023 MPDG program. This includes the INFRA and RURAL grant opportunities.

### Fleet Services

As you drive around Castle Rock and see the different departments providing first-class service throughout the community, you will notice how they rely on their Town vehicles. The Fleet Division takes pride in knowing that those vehicles are reliable and safe to operate and that they are providing a service for our community and our residents. Our services support the Police and Fire Departments, Public Works, Parks and Recreation and Castle Rock Water. We also support the important functions of Development Services, Engineering, Traffic, Signs and Markings, the Recreation and Activity Center and Town Hall.

The Fleet Services Division had a busy start to the new year. Our technicians continue to perform at a high level and we appreciate their efforts in maintaining reliable and safe fleet. Below is a snap shot of the Fleet Division activities this past month .

#### KPI's

delineator repair, and one work zone task. We also supported two snow storms with snow plowing.

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

doing a great job keeping our fleet available for our custom-

Objective/Benchmark: Complete at least 75% of our work orders within 48-hours of coming to shop.

quests. With high number of crashes and the time it takes to make these repairs and parts delays we were not able meet this benchmark.

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

Outcome: Technician productivity was 69%. Our technicians had more than 5000 direct labor hours in 2023.

#### **Productivity**

The Fleet Division completed 143 work orders in January. About half of our repairs were Preventative Maintenance (PM) and the rest were unscheduled repairs. Recent weather events are causing major repairs for some of our snow plows. This is affecting our turnaround times but it's important to get these critical assets up and running. Our technicians continue to work hard to



maintain the fleet and we appreciate what they do. We have completed the up fitting of several new Police Department vehicles and are currently building patrol cars. We are extremely fortunate to have the skilled technicians that can perform this specialized work. Our outsourced vendors schedule to perform the same work is backed up until October of 2024. Thank you to the Parts staff for their efforts during January. They were very busy ordering parts for the work in the shop and sourcing for up fit equipment. They processed \$50k in expenses in January.

#### **Shop Operations and Management**

Fleet is fully staffed, finally. Fleet hired Caleb Wood to be our 5<sup>th</sup> technician. We are excited to get help in the shop that will have an immediate impact on our levels of service. New vehicle or-

Outcome: Fleet availability was 98%. Our technicians are dering and purchases for 2024 has begun. The major manufactures are still unsure of build dates and will not provide solid delivery dates. The order banks for Ford police vehicles for 2025 opens in February. International trucks continue to have major delays and we do not know when we may receive critical replacements. We had several major failures starting out the new year. The most significant is that we blew an engine for one of Outcome: Fleet team completed 61% of the work orders the snowplow trucks and a Facilities vehicle transmission went within 48-hours of opening repair requests or service re- out. Purchase orders have been established for about 60% of 2024 orders. We have several training events through Ford and International scheduled for 2024 to help our technicians obtain certifications and to stay up to date with their skills. Thanks to them for finding the time to complete these training courses.

## **enance Divis**

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

\*Snow and Ice Control

\*Street Sweeping

\*Asphalt Repair

\*Training

\*Equipment Maintenance

\*Ice Mitigation

#### **Snow and Ice Control**

January had five snowstorms affect the region. These storms brought 11.9 inches of snow to Castle Rock. Streets crews, supported by personnel from Traffic, Development Services, Water Dept., Parks Dept., and Engineering Division dedicated 674 hours to keeping the roadways passable throughout Town. In all 470 tons of ice slicer were put down to mitigate slick spots.

#### **Asphalt Repair**

Potholes and asphalt damage are an inevitable part of winter with the freeze thaw cycle the area experiences. The crew worked diligently to repair as many defects in the roadways as possible, working 246 hours to fill 228 potholes as well as a 2 ton asphalt patch. The team used 3,420 pounds of cold mix asphalt and 2 tons of hot mix asphalt to carry out these repairs.

#### **Equipment Maintenance**

January's snowstorms had the division working in tandem with Fleet to carry out as many repairs on plow trucks and equipment as possible. These operations take a heavy toll and the crew stepped up to keep their equipment operational. In total the division dedicated 451.5 hours to fixing everything from wiper blades to broken plow bits and sanders.

#### **Training**

The entire division undertook CPR/First Aid certification training hosted by Castle Rock Fire Department. The team values this course because seconds count in the field. When the entire team knows what to do, the outcome has a better chance of being a positive one.

#### **Ice Mitigation**

It's ice season again! The crews were out in force, mitigating ice concerns all over Town. The crew spent 393.5 hours to complete 86 ice-breaking tasks, and ended up clearing 11,598 linear feet of ice from the roadways to help enhance the drivability of the roads.

#### **Street Sweeping**

In January, the team worked 202.4 hours to clean up 451.7 lane miles to clean up the roadways of the salt and sand placed to enhance traction during snow and ice control. The crews removed 105 cubic yards of material from the roadways. One of the primary reasons these operations are needed is to prevent PM10 particulates from causing air pollution.

#### **Looking ahead**

In February, the team will concentrate on maintaining vigilance for snowstorms as well as focusing on ice breaking. Pothole repair and equipment maintenance will also be at the forefront of operations.