

ENGINEERING AND PUBLIC WORKS DEPARTMENT MONTHLY REPORT

APRIL 2020



VILLAGE OF SCHAUMBURG

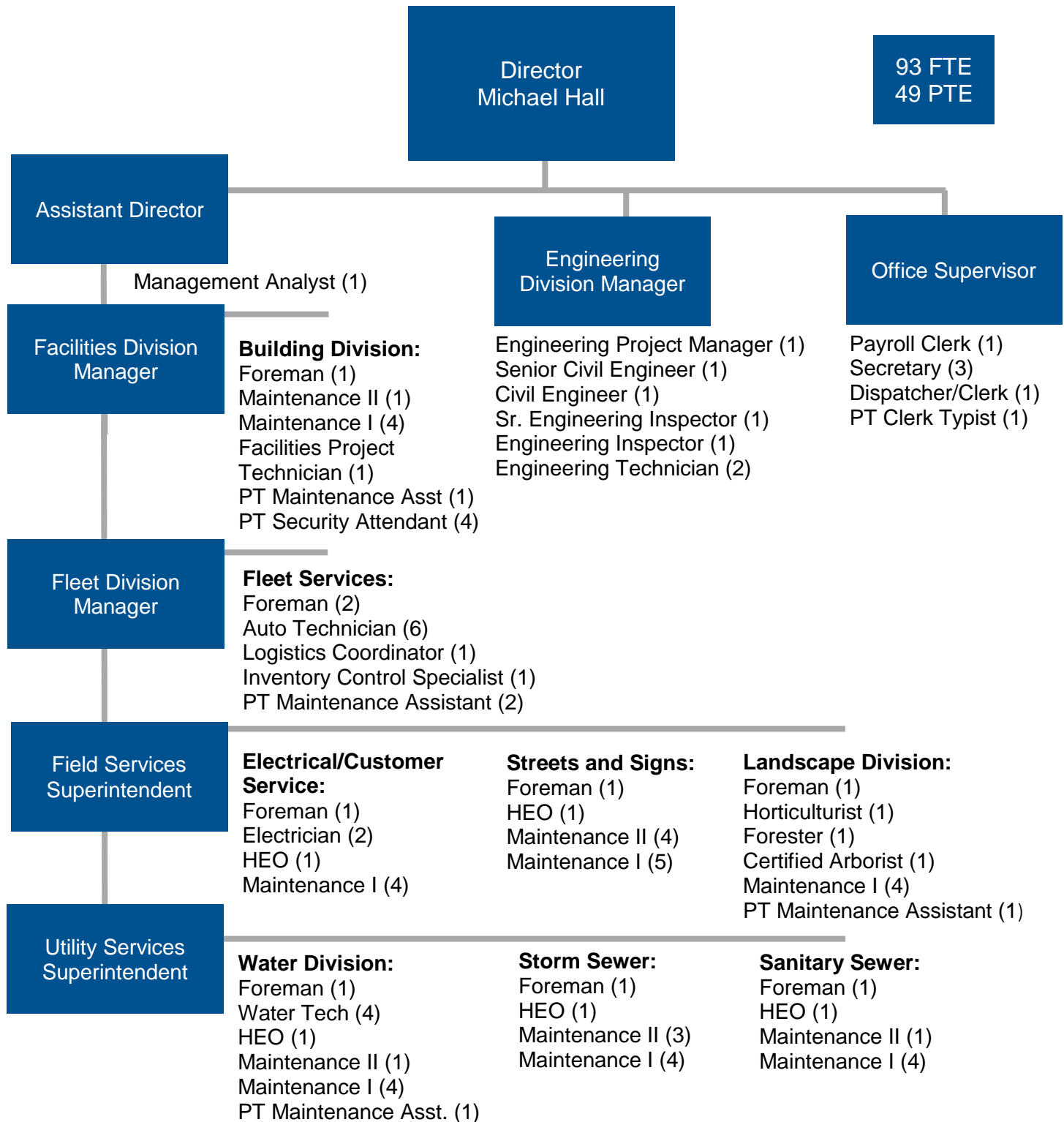
PROGRESS THROUGH THOUGHTFUL PLANNING



TABLE OF CONTENTS

Organization Chart.....	<u>1</u>
Department Overview	<u>2</u>
Key Activities.....	<u>3</u>
Engineering Division	<u>3</u>
Capital Improvement Project Updates.....	<u>3</u>
Facilities Division	<u>3</u>
Fleet Services Division	<u>3</u>
Electrical/Customer Service Division	<u>4</u>
Landscape Division	<u>4</u>
Streets and Signs Division	<u>5</u>
Sanitary Sewer Division.....	<u>6</u>
Storm Sewer Division	<u>6</u>
Water Division	<u>7</u>
Key Performance Indicators (KPIs)	<u>8</u>
KPI 1- Snow Removal.....	<u>8</u>
KPI 2- Capital Projects	<u>9</u>
KPI 3- Safety Program	<u>10</u>
KPI 4- Vehicle Idle Time.....	<u>11</u>
KPI 5- Customer Service Request (CSR) Response Rates	<u>11</u>
KPI 6- Storm Water Program Efficiency.....	<u>12</u>
KPI 7- Water Time Off for Repairs	<u>12</u>

ORGANIZATION CHART





DEPARTMENT OVERVIEW

The Department of Engineering & Public Works was created by the Village of Schaumburg in 1974 and is administered by the Director of Engineering & Public Works who is appointed by the Village Manager. It is the responsibility of the department to successfully manage the village-owned infrastructure systems, village-owned facilities, and equipment. The department's mission and primary function is to provide high quality, cost-effective service to both our internal and external customers. In order to meet this goal, operating function responsibilities of the department are assigned to five groups. Each group is under the direction of a superintendent or manager whose responsibilities include quality inspection, workload scheduling, contract management, and PR/customer service. Each group supervisor is responsible for coordinating the personnel and equipment resources of their respective divisions.

Engineering Division: Under the direction of the Engineering Division Manager, this division is responsible for planning and directing the implementation of public improvement projects including the village's annual street resurfacing and reconstruction program.

Facilities Division: Under the direction of the Facilities Division Manager, this division oversees all repair and maintenance services to all village owned buildings including, but not limited to Village Hall, five fire stations, Public Safety Building, Engineering and Public Works, Prairie Center for the Art, Schaumburg Regional Airport, the ballpark, and numerous utility buildings. The division also manages the implementation of a variety of capital and operational projects related to village facilities.

Fleet Division: Under the direction of the Fleet Division Manager, this division ensures that operating departments receive vehicular, equipment and material support essential for the performance of responsibilities. Fleet Services oversees all maintenance and repair on all village owned vehicles, and manages the vehicle replacement process.

Field Services: Under the direction of the Field Services Superintendent, consisting of the landscape, streets & signs, and electrical/customer service divisions.

-Electrical/Customer Service Division, directed by the Electrical/Customer Service Foreman, this division provides service to the community by maintaining the street lights and traffic signals, street banner maintenance, plus extended hours of customer service until 11:00 p.m.

-Landscape Division, directed by the Landscape Foreman, this division provides services to the community by maintaining the village's urban forest, managing the EAB plan, mulch program and brush collection, and conducting preservation and beautification of the village's open spaces.

-Streets & Signs Division, directed by the Streets & Signs Foreman, this division provides street maintenance services to the community by pothole patching, grinding, and paving village roadways. The sign maintenance services provided include the installation, repair, and maintenance of roadway signs and the repair and maintenance of roadway markings within the village's right-of-ways.

Utility Services: Under the direction of the Utilities Superintendent, consists of the sanitary sewer, storm sewer, and water divisions.

-Sanitary Sewer Division, directed by the Sanitary Foreman, this division is responsible for all maintenance and repairs to the village's sanitary sewer collections system. The Division's responsibilities include cleaning, televising, and repairing manholes, sanitary force main, and sanitary sewer main.

-Storm Sewer Division, directed by the Storm Sewer Foreman, this division is responsible for all repairs and maintenance to the village's storm water collection system. The division is also responsible for managing the Joint Utility Locating Information for Excavators (JULIE) program for the village. Throughout the year, priorities change between these functions and others such as creek clearing, flooding prevention, illicit discharge inspections, and various other tasks.

-Water Division, directed by the Water Foreman, this division is responsible for providing residential and commercial users a supply of safe, clean water that is of the highest quality. The division's responsibilities include repair and maintaining water meters, water main, mainline valves, fire hydrants, reservoirs, pumping stations, and Sanitary Lift Stations.

KEY ACTIVITIES

Engineering Division

Under the direction of the Engineering Division Manager, this division is responsible for planning and directing the implementation of public improvement projects including the village's annual street resurfacing and reconstruction program.

Capital Improvement Project Updates

[Link to explanation of the village's current construction projects.](#)

Facilities Division

Under the direction of the Facilities Division Manager, this division oversees all repair and maintenance services to all village owned buildings including, but not limited to Village Hall, five fire stations, Public Safety Building, Engineering and Public Works, Prairie Center for the Arts, Schaumburg Regional Airport, the ballpark, and numerous utility buildings. The division also manages the implementation of a variety of capital and operational projects related to village facilities.

Key Division Highlights This Month:

1. Replaced damaged exterior window at Atcher Municipal Center
2. Completed multiple repairs, replacements and upgrades to a variety of components in the wash bay of the Vehicle Maintenance Facility that serves the Village's fleet
3. Completed masonry repairs at Fire Station 53
4. Replaced flooring throughout a majority of public space at the Schaumburg Regional Airport
5. Continued cleaning and sanitizing all touchpoints within Village facilities, twice per day, to aid in the efforts against COVID-19

Fleet Services Division

Under the direction of the Fleet Division Manager, this division ensures that operating departments receive vehicular, equipment and material support essential for the performance of responsibilities. Fleet Services oversees all maintenance and repair on all village owned vehicles, and manages the vehicle replacement process.

Top 3-5 Activities This Month Based on Hours and/or Units:

1. EPW - 76 Repair Orders with 235 tasks, Police - 20 Repair Orders with 61 tasks, Fire - 12 Repair Orders with 20 tasks
2. Top 3 group assemblies: Preventative Maintenance (57), Lighting (27), Battery (23)



Electrical/Customer Service Division

Under the direction of the Field Services Superintendent, and directed by the Electrical/Customer Service Foreman, this division provides service to the community by maintaining the street lights and traffic signals, street banner maintenance, plus extended hours of customer service till 11:00 p.m.

Electrical Division Summary (Day Shift 7:00 AM - 3:30 PM)

Top 3-5 Activities This Month Based on Hours and/or Units:

1. Street Light Maintenance - 54.50 hours
2. Electrical Repair/Maintenance - 40.50 hours
3. Field Electric - 34.50 hours

Key Division Highlights This Month:

- Converted approximately 30 can lights at the Metra Station to LED
- Installed a new 23 foot pole from car accident
- Started a new street light numbering system that will be used along with ESRI
- Completed a final inspection for Walnut Lane project

Customer Service Division Summary (Night Shift 2:30 PM - 11:00 PM)

Top 3-5 Activities This Month Based on Hours and/or Units:

1. Banners - 59.75 hours
2. Sidewalk Trip Hazards - 39.50 hours
3. Dead Animal Removals - 24.50 hours

Key Division Highlights This Month:

- Power washing, priming, two coats of black paint on the Sternberg poles along Schaumburg Road and Roselle Road
- Installed the Farmers Market banners at the intersection of Schaumburg and Roselle Roads
- Inspection of street light cabinets to determine which need complete painting or touch up

Landscape Division

Under the direction of the Field Services Superintendent, and directed by the Landscape Foreman, this division provides services to the community by maintaining the village's urban forest, managing the EAB plan, mulch program and brush collection, and conducting preservation and beautification of the village's open spaces.

Top 3-5 Activities This Month Based on Hours and/or Units:

1. Grounds Maintenance – 217 hours
2. Chip Delivery – 206 hours
3. Brush Pick Up Program – 110 hours
4. VOS Grounds Tree Trimming – 105 hours

Key Division Highlights This Month:

- Began the Spring brush pick up program, along with the annual mulch delivery program
- Took advantage of the lack of vehicles at the village lots, which allowed staff to trim trees in these parking lots
- Continued the refinishing of numerous wooden sign located on village grounds

Emerald Ash Borer (EAB) Program

<u>Removals:</u>	Completed for 19/20
<u>Reforestation:</u>	Spring Planting has been cancelled due to COVID-19
<u>Treatments:</u>	Treatments scheduled for later this Summer
<u>Restorations:</u>	No restoration scheduled

Streets & Signs Division

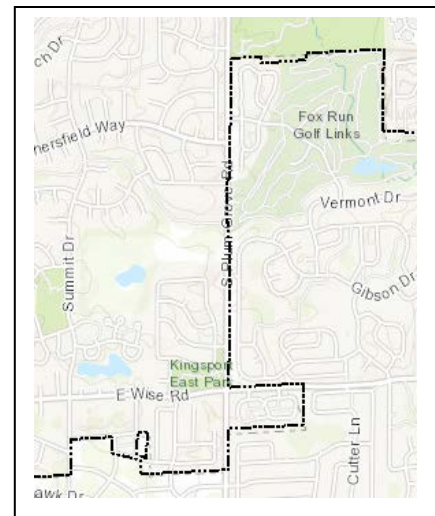
Under the direction of the Field Services Superintendent, and directed by the Streets & Signs Foreman, this division provides street maintenance services to the community by pothole patching, grinding and paving village roadways. The sign maintenance services provided include the installation, repair, and maintenance of roadway signs and the repair and maintenance of roadway markings within the village's right-of-ways.

Top 3-5 Activities This Month Based on Hours and/or Units:

1. Sign Manufacture - 148.25 hours
2. Sign Repair/Replace - 117 hours
3. Miscellaneous - 55 hours
4. Snow and Ice Vehicle Equipment Clean/Service - 44.50 hours
5. Saw Cut Pavement - 24.50 hours

Key Division Highlights This Month:

- Late in the month, began work on the in-house Street Identification Sign Replacement Program. Crews manufactured and installed 12 signs at three intersections in Work Area "O". This program will continue monthly until all street identifications have been replaced.
- Began repair the green and yellow crowd control barricades for the Farmers Market. These barricades were scheduled to be disposed of, but because of additional needs due to COVID-19 they have been repaired.





Sanitary Sewer Division

Under the direction of the Utilities Superintendent, and directed by the Sanitary Foreman, this division is responsible for all maintenance and repairs to the village's sanitary sewer collections system. The Division's responsibilities include cleaning, televising and repairing of manholes, sanitary force main, and sanitary sewer main.

Top 3-5 Activities This Month Based on Hours and/or Units:

1. Sanitary Manhole Repairs - 174.8 hours
2. Sanitary Service Line Repair - 110 hours
3. Check Sewer Backup - 90 hours
4. Root X - 64.8 hours
5. Sanitary Main Line Repair - 57.5 hours

Key Division Highlights This Month:

- Assisted the Water Division with a fire hydrant replacement on Meacham Road and assisted the Landscape Division with Brush Pickup
- Contractually, the service line at 1428 Arlington was replaced
- Repaired 36 manholes

Storm Sewer Division

Under the direction of the Utilities Superintendent, and directed by the Storm Sewer Foreman, this division is responsible for all repairs and maintenance to the village's storm water collection system. The division is also responsible for managing the Joint Utility Locating Information for Excavators (JULIE) program for the village. Throughout the year, priorities change between these functions and others such as creek clearing, flooding prevention, illicit discharge inspections, and various other tasks.

Top 3-5 Activities This Month Based on Hours and/or Units:

1. JULIE Locates - 345.50 hours
2. Inlet Repairs -176 hours
3. Catch Basin Cleaning - 71 hours
4. Hot Spot Inspections - 70.50 hours

Key Division Highlights This Month:

- Began catch basin cleaning program with new Vactor



Water Division

Under the direction of the Utilities Superintendent, and directed by the Water Foreman, this division is responsible for providing residential and commercial users a supply of safe, clean water that is of the highest quality. The division's responsibilities include repair and maintaining water meters, water main, mainline valves, fire hydrants, reservoirs, pumping stations, and Sanitary Lift Stations.

Top 3-5 Activities This Month Based on Hours and/or Units:

- 1) Hydrant Flushing - 368 hours
- 2) Well and Booster Station Maintenance and Repairs - 114.5 hours
- 3) Hydrant Repairs - 96 hours
- 4) Water Service Line Repairs - 76 hours
- 5) Fire Hydrant Replace - 48 hours

Key Division Highlights This Month:

- Sanitary main line repairs - 28.5 hours
- Bac T water samples - 41 hours
- Daily SCADA Operations Pumping down tanks - 30.5 hours
- Assisted the Sanitary Division on Daily Rapid Response
- Lift Station Mechanical Repairs - 58.5 hours
- Snow and Ice - 42.5 hours

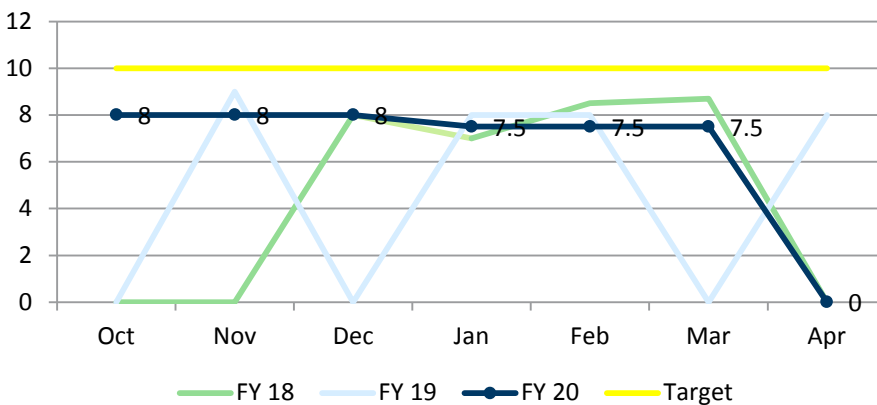


KEY PERFORMANCE INDICATORS

KPI 1: Provide an effective and efficient response to snow events.

The Engineering and Public Works Department has a policy which outlines its Snow and Ice procedures (Policy Statement 7.16- Snow and Ice Control Policy). In this policy, the department allocates 12 hours to clear all primary routes such as Knollwood, Walnut, and Bode; and 18 hours to cut the center line on all secondary routes, clear courts, and cul-de-sacs. With this KPI, the department aims to identify process improvements regarding these events and reduce the average number of hours it takes to clear all Village roadways. The department is setting its new benchmark at 10 hours to clear all primary routes and 12 hours to cut the center line on all secondary routes, clear courts, and cul-de-sacs.

Clear all primary routes within an average of less than 10 hours.



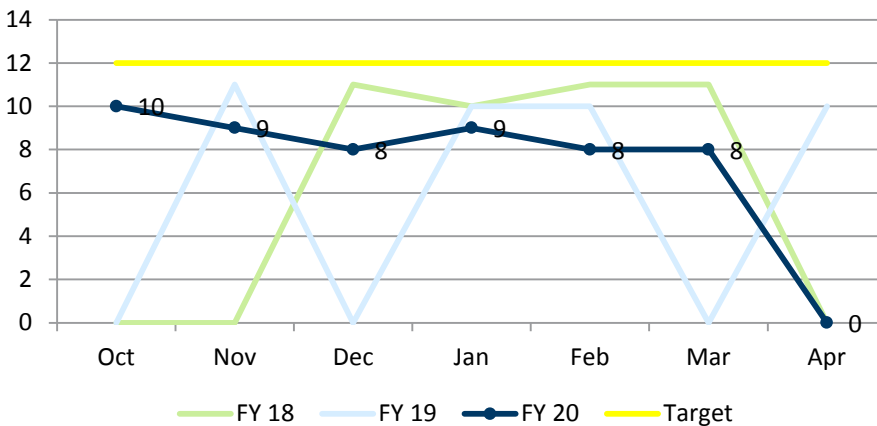
Status: Exceeds Target

FY 20 YTD: 6.6 Hours

FY 19 Total: 8 Hours
FY 18 Total: 7.5 Hours
FY 17 Total: 7 Hours

**Source: Snow and Ice Supervisor*

Cut the center line on all secondary routes, clear courts, and cul-de-sacs within an average of less than 12 hours.



Status: Exceeds Target

FY 20 YTD: 7.4 Hours

FY 19 Total: 10 Hours
FY 18 Total: 10.5 Hours
FY 17 Total: 10 Hours

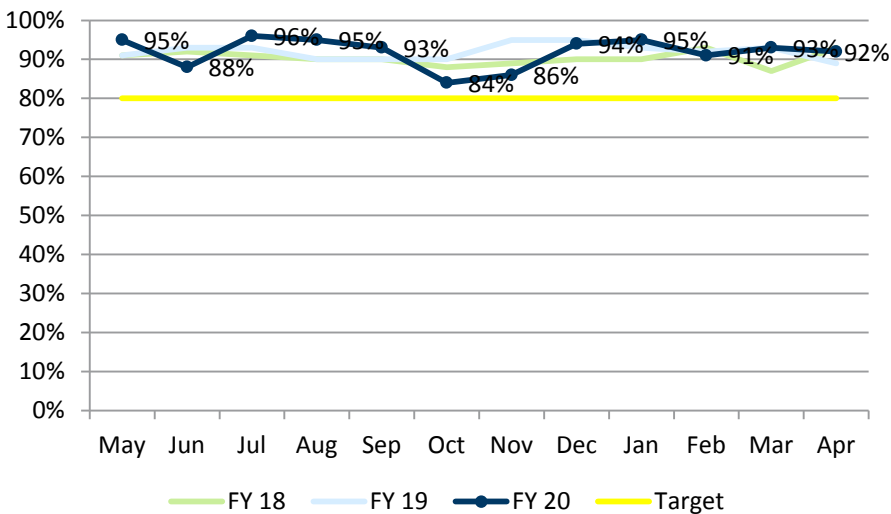
**Source: Snow and Ice Supervisor*



KPI 2: Ensure that CIP projects continue to come in on schedule and within budget.

The department currently holds monthly CIP Meetings where projections, timelines, milestones, and schedules are discussed and updated. With this KPI, the department aims to establish a better tracking system for CIP projects to ensure they meet both time and budget commitments. Due to a number of factors that affect these projects including but not limited to weather, grant funding, agency coordination, and construction costs, the Engineering and Public Works Department is establishing a benchmark of 80% of projects completed both on time and within budget.

Maintain at least 80% of CIP projects on schedule and within budget.



Status: On Target

FY 20 YTD: 92%

FY 19 Total: 92%

FY 18 Total: 90%

FY 17 Total: 77%

FY 16 Total: 65%

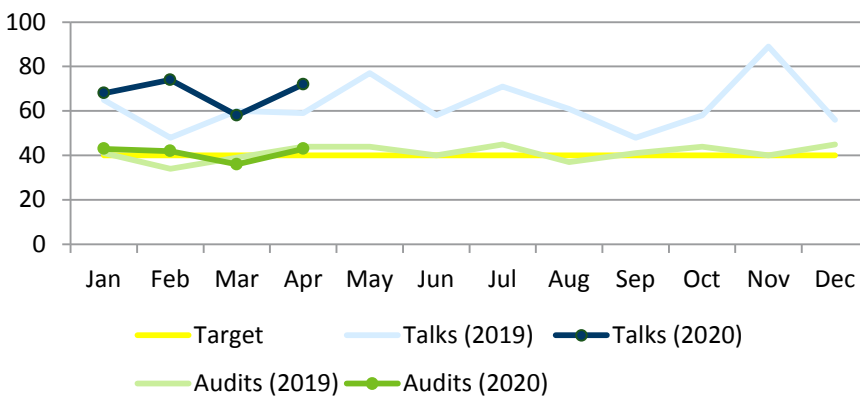
**Source: CIP Monthly Status Meetings*



KPI 3: Provide an effective risk management program that ensures the safety of employees.

In an effort to drive compliance and increase safe work environments, the Engineering and Public Works Department contracts with an on-site safety consultant who administers the safety program for EPW labor staff. This consultant oversees and monitors all safety procedures, accidents, and required safety training. With this KPI, the department will be analyzing the success of its consultant and safety program by measuring leading indicators – (number of toolbox talks and safety audits completed) and lagging indicators – (the OSHA Recordable Rate and DART Rate). This KPI will be measured on a calendar year basis to allow for comparison with the BLS Industry data.

Provide at least 480 Toolbox Talks and Safety Audits each year.



Status: On Target

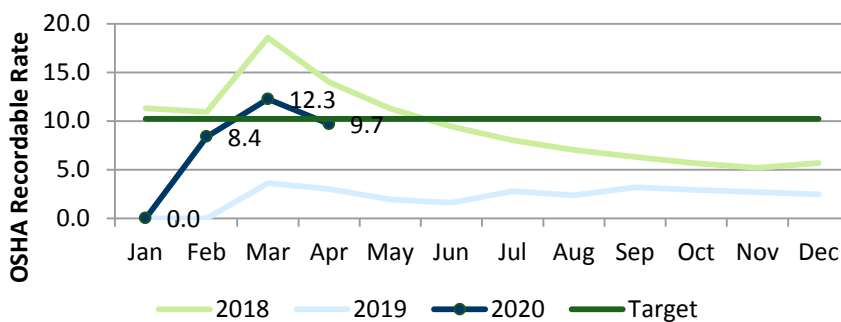
2020 Talks: 272
2020 Audits: 164

2019 Talks: 367
2019 Audits: 242

2018 Talks: 840
2018 Audits: 477

*Source: Workers Compensation Reports

Maintain an OSHA Recordable Rate below the BLS industry rate of 10.20.



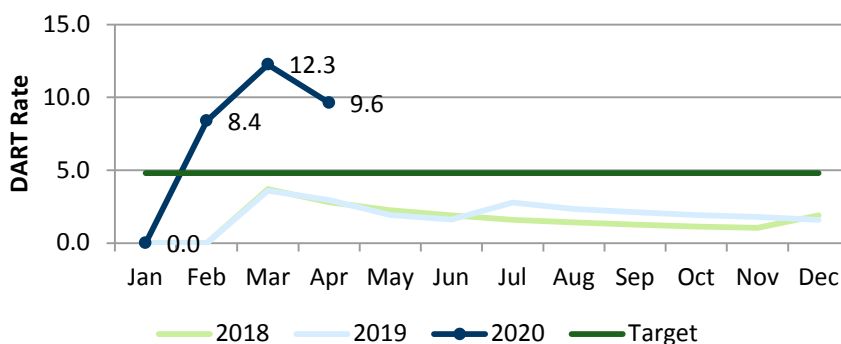
Status: Exceeds Target

2020 YTD: 9.7

2019 Total: 1.6
2018 Total: 5.7

*Source: Workers Compensation Reports

Maintain a DART Rate below the BLS industry rate of 4.80



Status: Below Target

2020 YTD: 12.3

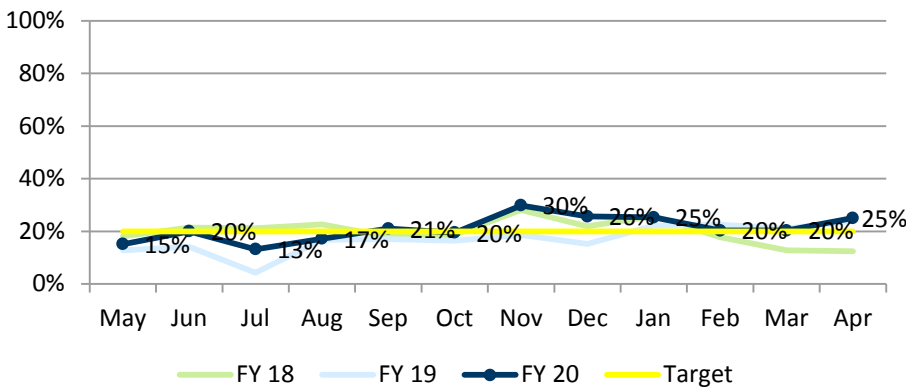
2019 YTD: 1.6
2018 Total: 1.9

*Source: Workers Compensation Reports

KPI 4: Reduce the average idle time for EPW vehicles.

The proper management of vehicle idle time as a key performance indicator is recommended. Properly managing idle time is essential for optimal use and longevity of maintenance vehicles. Many vehicles and/or situations require proper warm-up, adequate power of attached machinery, or protection from weather elements. However, the department is managing toward the optimal amount of vehicle idle time to provide these benefits while reducing fuel consumption and unnecessary vehicle wear. The measurement of this KPI is the amount of violation idle time (> 5 min) as a percentage of engine on-time. The benchmark is the rolling average of the last two years and is represented by a goal of 21%.

Reduce the percent of idle time as a percent of engine on-time to 20% or less.



Status: On Target

FY 20 YTD: 21%

FY 19 Total: 17.0%

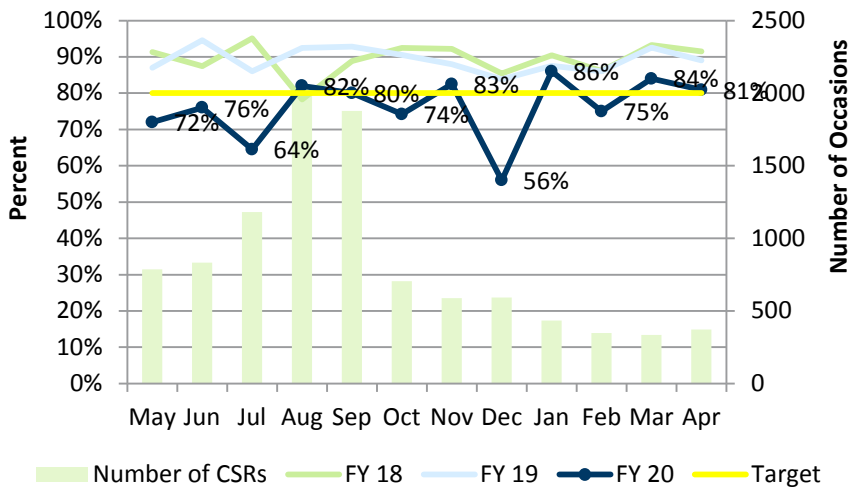
FY 18 Total: 13.5%

*Source: DriveCam Idle-Time Report Summary

KPI 5: Provide an effective and efficient response to customer service requests.

Engineering & Public Works receives roughly 60% of all village CSRs on an annual basis. These requests cover all divisions within EPW and range from daily or immediate tasks to long-term requests. Timely and effective responses to these CSRs are necessary to maintain and improve productivity for village employees and provide acceptable responses to our customers.

Complete 80% of CSR's on time.



Status: On Target

FY 20 YTD: 76%

FY 19 Total: 89%

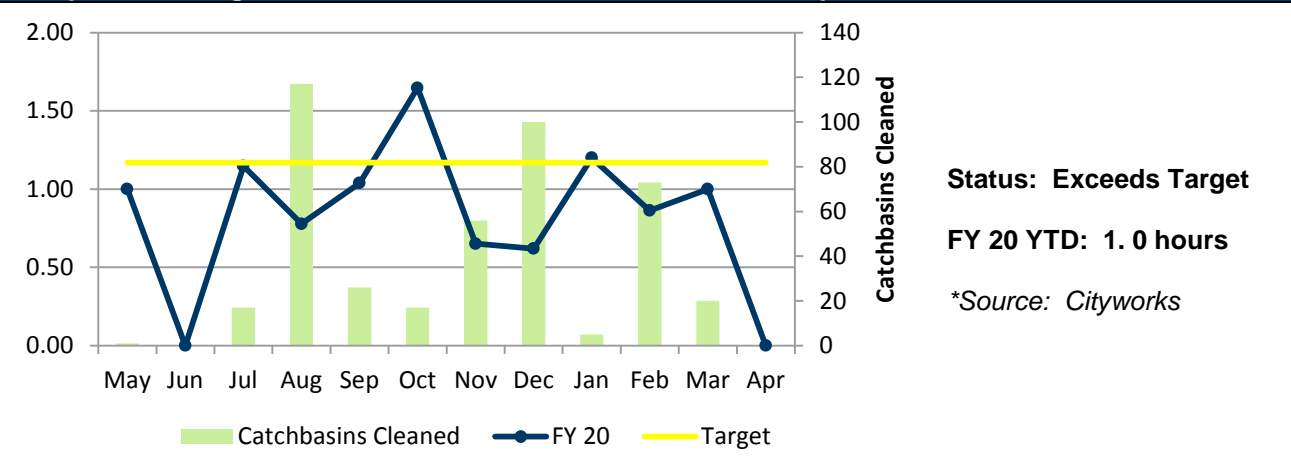
FY 18 Total: 89%

*Source: CSR Dashboard

KPI 6: Provide an efficient response to storm events.

This measure will be better storm water management through an efficient maintenance program. Catch basin cleaning is a requirement under our MS4 permit through the IEPA. Catch basin cleaning has impacts on water quality by removing debris and contaminated water from our storm system. There are also flood management benefits to the cleanliness of our overall storm sewers. The village expects to see more internal catch basin cleaning to help our internal inspection and preventive maintenance program.

Complete cleaning of catch basins in at least 1.17 hours or less per catch basin.



KPI 7: Reduce the amount of time water is off for main break repairs.

Water main breaks occur throughout the year, at all hours of the day. Reducing service disruption and mitigating health and safety concerns is of high importance to the village. The Water Division has primary responsibility for making repairs to the water main breaks during regular business hours. Through tracking and managing this KPI, the department hopes to continually improve its water main repair process to restore water service to impacted residents.

Provide water service within 3 hours for all main break repairs.

