

Village of Schaumburg

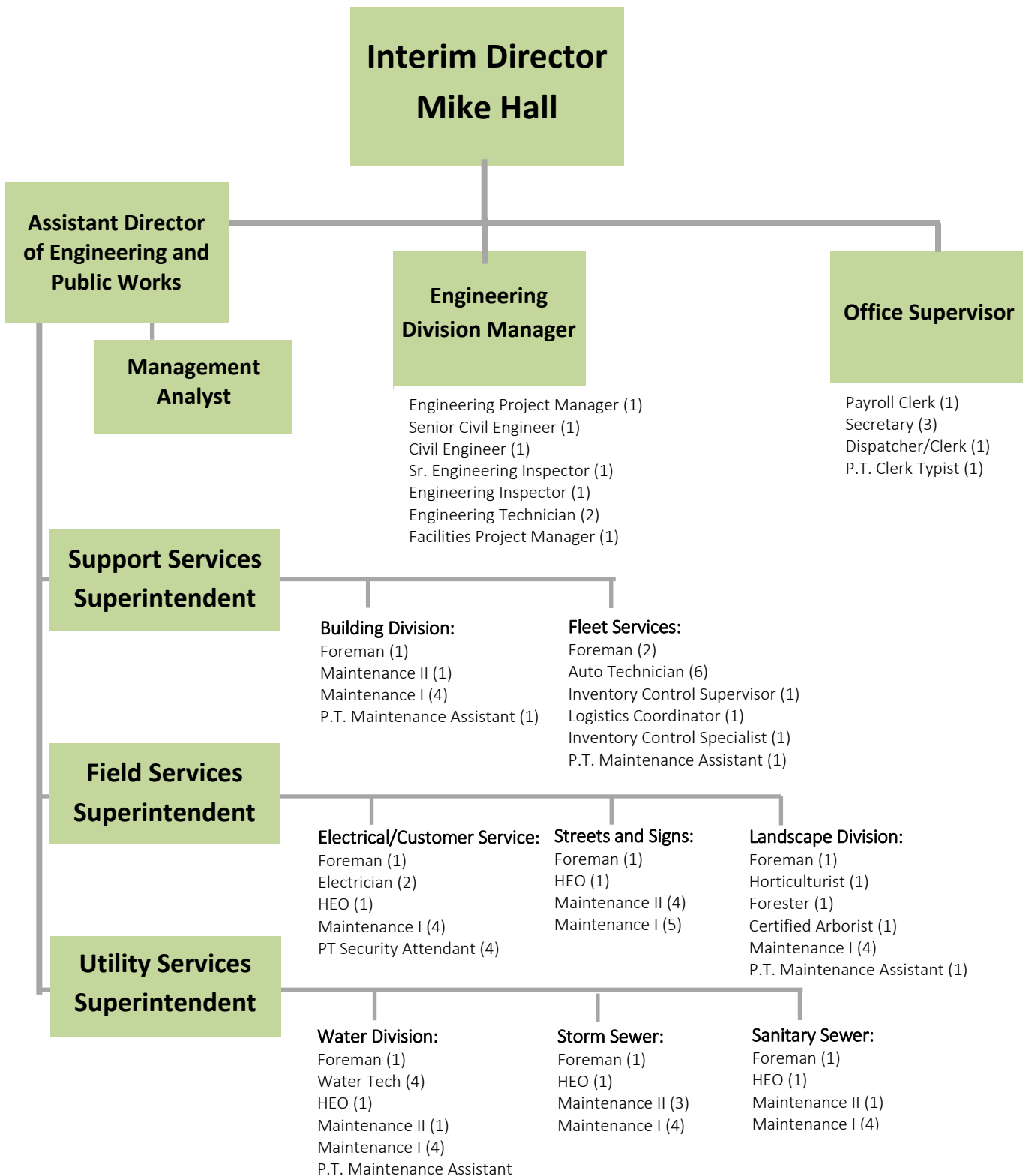
Engineering &  
Public Works  
Department  
Monthly Report

September 2018

## Table of Contents

ORGANIZATION CHART .....	1
DEPARTMENT OVERVIEW .....	2
KEY ACTIVITIES .....	3
Emerald Ash Borer (EAB) Program.....	3
Streets & Signs Division.....	4
Electrical/Customer Service Division.....	4
Water Division.....	6
ENGINEERING & PUBLIC WORKS KEY PERFORMANCE INDICATORS:.....	8

# 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 three groups. Each group is under the direction of a superintendent whose responsibilities include quality inspection, workload scheduling, contract management, and PR/customer service. Each group superintendent is responsible for coordinating the personnel and equipment resources of their respective divisions, with each division under the direction of a supervisor who is responsible for the day-to-day operations of the division. Additionally, public improvements are addressed by the Engineering Division.

**Field Services:** *Landscape Division* (provides services to maintain the village's urban forest, shrubbery, and beautification); *Streets & Signs Division* (provides street and sign maintenance for village roadways); *Electrical/Customer Service Division* (provides street light and traffic signal maintenance, plus extended hours of customer service from 7:00 a.m.-11:00 p.m.).

**Utility Services:** *Storm Sewer Division* (provides services to ensure proper storm water drainage throughout the village); *Sanitary Sewer Division* (provides service to sanitary sewers and lift stations); *Water Division* (provides services to ensure continuous distribution of safe drinking water throughout the village).

**Support Services:** *Building Maintenance Division* (provides repair and maintenance services to all village owned buildings); *Fleet Services Division* (provides repair and maintenance services to village-owned vehicles and equipment).

**Engineering Division:** Under the direction of the Engineering Division Manager, this division is responsible for planning and directing the implementation of public improvement projects.

## KEY ACTIVITIES

### American Public Works Association - Reaccreditation

Department staff met with the APWA Accreditation Team to demonstrate the Village's compliance with the recommended Public Works Management Practices Manual. We expect to receive results from APWA's review next month.

### Septemberfest

Several divisions continued their support in Septemberfest, utilizing supplies and equipment as well as clean-up.

### Emerald Ash Borer (EAB) Program

#### Removals:

Ash tree inspections are complete for the 2018/19 season. The village's contractor has removed 206 of the 221 trees marked for removal.

#### Reforestation:

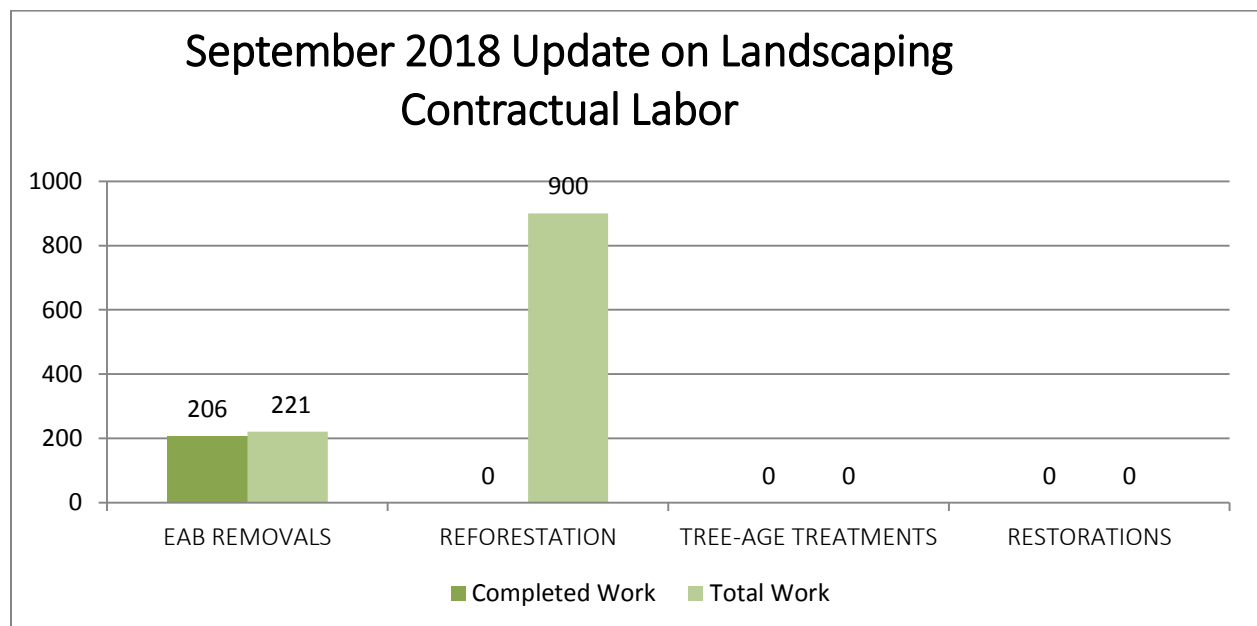
Approximately 900 trees are scheduled to be planted this fall, which have been inspected and tagged at the tree nursery.

#### Treatments:

No treatments were scheduled. The village is currently reviewing the EAB management strategy and treatment contract.

#### Restorations:

The village's contractor has completed all of the EAB restorations.



## Landscape Division

- Completed fall brush pick up program, chipped over 1000 piles of brush.
- Monitored the contractual restoration of the Septemberfest grounds due to the rainy conditions during the festival.
- Concluded the markings for the fall tree planting program, over 1000 trees will be planted this fall.
- Continued to monitor the progress of the Woodland Creek Restoration Project, it is about 2/3 complete.
- Began the winterization of irrigation systems on medians and village buildings.
- Planting plans were created for installation of spring flowers and bulbs.
- Monitored the contractor that cut back perennials and removed summer annuals.

## Streets & Signs Division

- Repaired 164 potholes.
- Completed 16 Customer Service Requests.
- Completed 378 square yards of street patching.
- Completed 2400 square yards of milling on Crystal Court.
- Maintained 119 signs.
- Manufactured 19 signs.
- Added 88 signs to the GPS inventory list.
- Created 75 specialty signs.
- Continued the Street Identification Sign Project of evaluating and replacing signs to meet Federal requirements, with work concentrating in areas G, I and L.
- Installed two emergency warning beacon systems on Wright Boulevard for Fire Station 3, to warn motorists that fire apparatus are exiting/returning to the fire house.
- Provided six hours for field electric repairs, four hours to water main repairs, 1.5 hours for B-box repairs and 6 hours on JULIE locates.

## Electrical/Customer Service Division

- Completed 53 water turn-ons due to delinquent billing.
- Picked up and disposed of 28 deceased animals.
- Completed Group 3 Opticom – folding stop sign inspections.
- Completed 750 area checks for light outages.
- Banners: changed 85, repaired three, and installed four.
- Inspected poles that Meade Electric and Electrical Condit installed for Verizon Cell Site project.
- Completed eight E-locates.
- Made repairs to two fixtures at the Fire Memorial.
- Inspected banners after heavy windstorm.
- Repaired 51 streetlight outages.
- Cold patched seven trip hazards on sidewalks.
- Visited two pole locations with concerns relating to JCI LED conversion.
- Assisted with eight sanitary sewer backups.
- Performed two after-hours sanitary sewer inspections.

- Performed security check at 121 Long Avenue.
- Grinded 33 sidewalk locations.
- Performed area checks at airport, ballpark and commuter lot twice.
- Performed Farmers Market cleanup four times.
- Completed six checks on swans at the Atcher Municipal Center.
- Delivered and picked up block party barricades, signs eight times.
- Secured and reset the control cabinet at Campanelli School.
- Took complete count of fixtures for Retrofit to LED project: Ballpark 10, Commuter Lot 59.
- Evaluated and reported traffic signal light outage at Valley Lake / Roselle Roads.
- Reset Davit pole on Frontage / Irving Park Roads.
- Took three trucks for vehicle inspections.
- Adjusted yellow flashing light at Blackwell School.
- Assisted with temporary shutdown of water to Barn and Teen Center.
- Terminated new lines for ComEd to connect into transformer.
- Assisted with removal of outdoor speaker from stage area.
- Assisted with setting new beacon light poles.
- Installed new fixture in Well 22's bathroom.
- Evaluated and reported water main break at 929 West Higgins Road.
- Replaced flood lights at Town Square.
- Assisted with traffic control on Meacham Road due to car accident.
- Relocated stock of light poles and light arms.
- Reset light pole at 404 Bristol Lane.
- Checked timing of traffic signals at Meacham / McConnor Roads.
- Terminated 24 street light poles with outlets on Meacham Road to accommodate new holiday decorations.
- Assisted with closure of I-90 and Meacham due to flooding.
- Trimmed branches from banners and poles with holiday decorations.
- Reset power switches at two hangers at the airport.
- Inspected fuel island box for Nema rating.
- Secured wires and removed pole from knocked-down street light at Golf/Plum Grove Roads.

### **Storm Sewer Division**

- Repaired 41 inlets.
- Repaired a manhole / catch basin.
- Completed 127 inlet cleaning and 18 grate cleanings.
- Cleaned 146 catch basins.
- Completed 17 Customer Service Requests.
- Repaired eight feet of mainline.
- Cleaned 1,810 feet of storm sewer mainline.
- Televised 970 feet of storm sewer mainline.
- September 2018: Completed 1,291 requests for J.U.L.I.E. locates.
- September 2017: Completed 1,337 requests for J.U.L.I.E. locates.
- Performed 192 hot spot inspections.

## Water Division

- Repaired four water mains.
- Repaired 12 Buffalo boxes.
- Replaced 42 hydrant signs.
- Replaced two hydrants.
- Repaired one fire hydrant.
- Fire Hydrant Flushing: 659 completed.
- Fire hydrant painting has been completed.
- Repaired one valve.
- Took 97 water distribution samples as part of our required monthly samples. All samples passed and met IEPA requirements.
- Took two well samples and delivered to the lab.
- Routine water quality parameter samples were taken at the designated sites.
- Repaired 63 residential water meters.
- Replaced two residential water meters and one commercial water meters.
- Processed 217 Customer Service Requests.
- Performance Contract improvements continue and all stations are fully online and operational.
- Station 12 Pump and Motor 3 was removed for repair and is expected to be reinstalled in November.
- Station 20 Motor 2 was removed for repair.
- Investigated Well 15's flow.
- Processed 86 water billing shut-off requests.
- Process 55 service calls.

Reduced Pressure Zone (RPZ) inspections continue. As of the end of September 2012, there have been a total of 2,086 commercial records in the database and 79 total records for residential properties. Physical inspections on properties continue. Each month the database continues to grow, adding devices that were either not tracked or that the village was unaware of. Below is how they continue to grow every month.

### Commercial Devices:

September 2018:	3,467
September 2017:	3,275

### Residential Devices:

September 2018:	501
September 2017:	452

## Sanitary Sewer Division

- Received and closed 61 Customer Service Requests.
- Repaired six manholes.
- Performed heavy cleaning of sanitary mains, 12 hours.
- Excavated and repaired the sanitary sewer main at Civic / Carver Lanes.
- Excavated and repaired the sanitary service line at 1028 Bourne Lane.
- Village's contractor cleaned and televised 2,108 linear feet of sanitary sewer mains.
- Cleaned 2,210 linear feet of hot spots.

### Status of Current Construction Projects

List of explanation of the Village's current construction projects.



## Sanitary Sewer Cleaning and Inspection Statistics

### September 2018:

- 4,864 linear feet of sanitary sewer main lines were televised.
- 10,997 linear feet of sanitary main lines were jetted.
- 2,065 linear feet of sanitary service lines were televised.
- 867 linear feet of sanitary service lines were cleaned.

### September 2017:

- 6,682 linear feet of sanitary sewer main lines were televised.
- 18,958 linear feet of sanitary main lines were jetted and 812 linear feet were root cut.
- 1,264 linear feet of sanitary service lines were televised.
- 1,330 linear feet of sanitary service lines were cleaned.

## ENGINEERING & PUBLIC WORKS KEY PERFORMANCE INDICATORS:

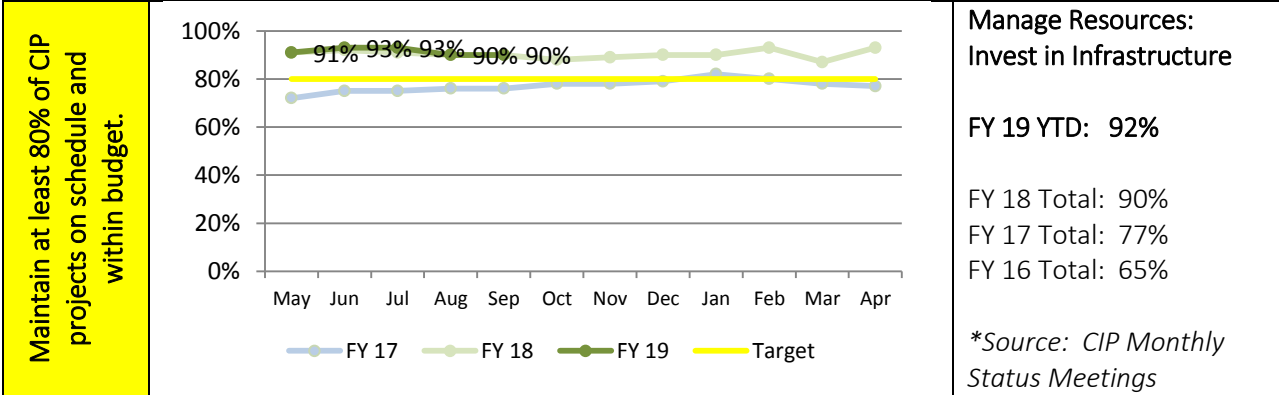
### KPI 1: Provide an effective and efficient response to snow events.

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.

<p>Clear all primary routes within an average of less than 10 hours.</p>	<table border="1"> <caption>Primary Routes Snow Clearing Hours</caption> <thead> <tr> <th>Month</th> <th>FY 17</th> <th>FY 18</th> <th>FY 19</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>Oct</td> <td>0</td> <td>0</td> <td>0</td> <td>10</td> </tr> <tr> <td>Nov</td> <td>0</td> <td>0</td> <td>0</td> <td>10</td> </tr> <tr> <td>Dec</td> <td>6</td> <td>8</td> <td>8</td> <td>10</td> </tr> <tr> <td>Jan</td> <td>8</td> <td>7</td> <td>7</td> <td>10</td> </tr> <tr> <td>Feb</td> <td>0</td> <td>8</td> <td>8</td> <td>10</td> </tr> <tr> <td>Mar</td> <td>9</td> <td>9</td> <td>9</td> <td>10</td> </tr> <tr> <td>Apr</td> <td>0</td> <td>0</td> <td>0</td> <td>10</td> </tr> </tbody> </table>	Month	FY 17	FY 18	FY 19	Target	Oct	0	0	0	10	Nov	0	0	0	10	Dec	6	8	8	10	Jan	8	7	7	10	Feb	0	8	8	10	Mar	9	9	9	10	Apr	0	0	0	10	<p>Run the Business: Optimize Business Processes</p> <p>FY 19 YTD: 0 Hours</p> <p>FY 18 Total: 7.5 Hours FY 17 Total: 7 Hours</p> <p><i>*Source: PubWorks</i></p>
Month	FY 17	FY 18	FY 19	Target																																						
Oct	0	0	0	10																																						
Nov	0	0	0	10																																						
Dec	6	8	8	10																																						
Jan	8	7	7	10																																						
Feb	0	8	8	10																																						
Mar	9	9	9	10																																						
Apr	0	0	0	10																																						
<p>Cut the center line on all secondary routes, clear courts, and cul-de-sacs within an average of less than 12 hours.</p>	<table border="1"> <caption>Secondary Routes Snow Clearing Hours</caption> <thead> <tr> <th>Month</th> <th>FY 17</th> <th>FY 18</th> <th>FY 19</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>Oct</td> <td>0</td> <td>0</td> <td>0</td> <td>12</td> </tr> <tr> <td>Nov</td> <td>0</td> <td>0</td> <td>0</td> <td>12</td> </tr> <tr> <td>Dec</td> <td>9</td> <td>11</td> <td>11</td> <td>12</td> </tr> <tr> <td>Jan</td> <td>11</td> <td>10</td> <td>10</td> <td>12</td> </tr> <tr> <td>Feb</td> <td>0</td> <td>11</td> <td>11</td> <td>12</td> </tr> <tr> <td>Mar</td> <td>10</td> <td>11</td> <td>11</td> <td>12</td> </tr> <tr> <td>Apr</td> <td>0</td> <td>0</td> <td>0</td> <td>12</td> </tr> </tbody> </table>	Month	FY 17	FY 18	FY 19	Target	Oct	0	0	0	12	Nov	0	0	0	12	Dec	9	11	11	12	Jan	11	10	10	12	Feb	0	11	11	12	Mar	10	11	11	12	Apr	0	0	0	12	<p>Run the Business: Optimize Business Processes</p> <p>FY 19 YTD: 0 Hours</p> <p>FY 18 Total: 10.5 Hours FY 17 Total: 10 Hours</p> <p><i>*Source: PubWorks</i></p>
Month	FY 17	FY 18	FY 19	Target																																						
Oct	0	0	0	12																																						
Nov	0	0	0	12																																						
Dec	9	11	11	12																																						
Jan	11	10	10	12																																						
Feb	0	11	11	12																																						
Mar	10	11	11	12																																						
Apr	0	0	0	12																																						

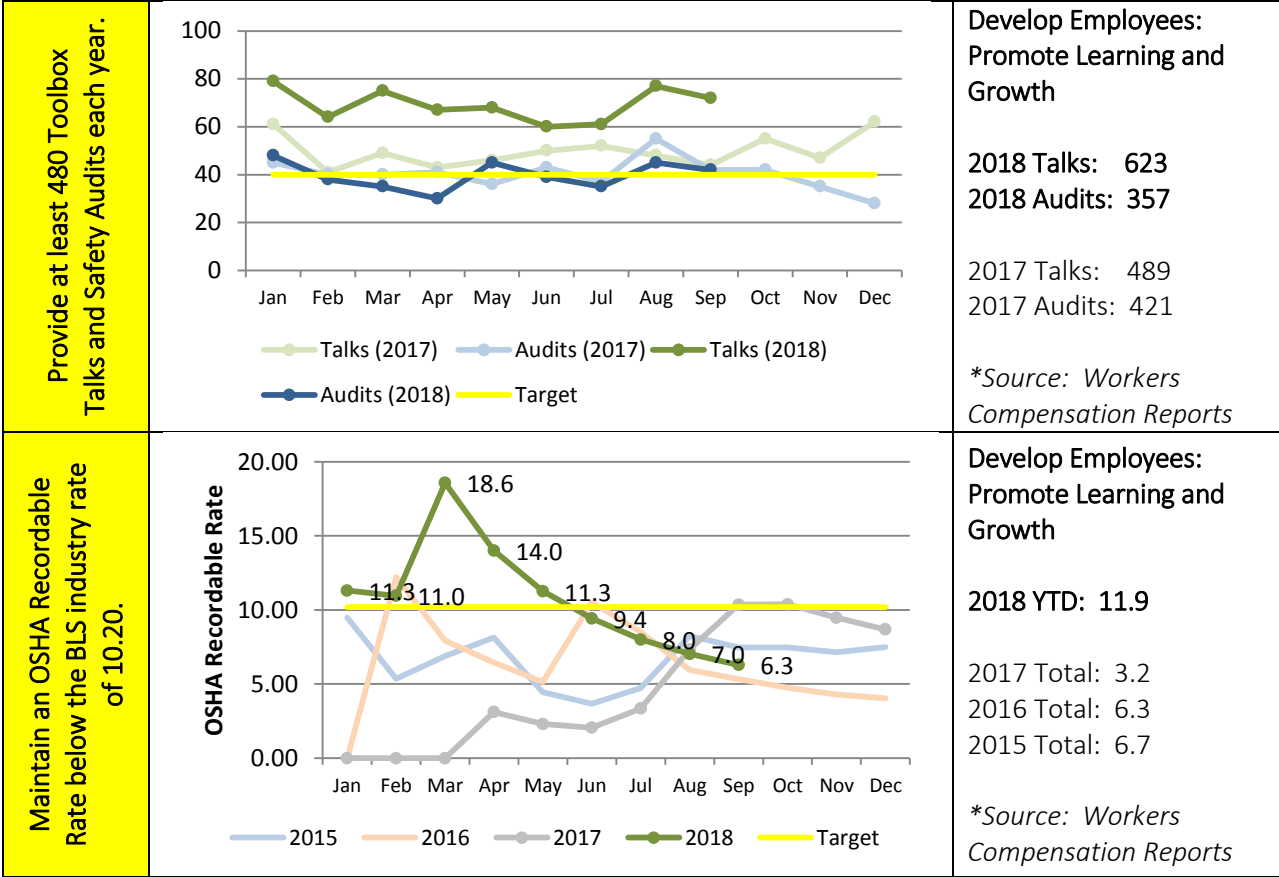
### KPI 2: Ensure that CIP projects continue to come in on schedule and within budget.

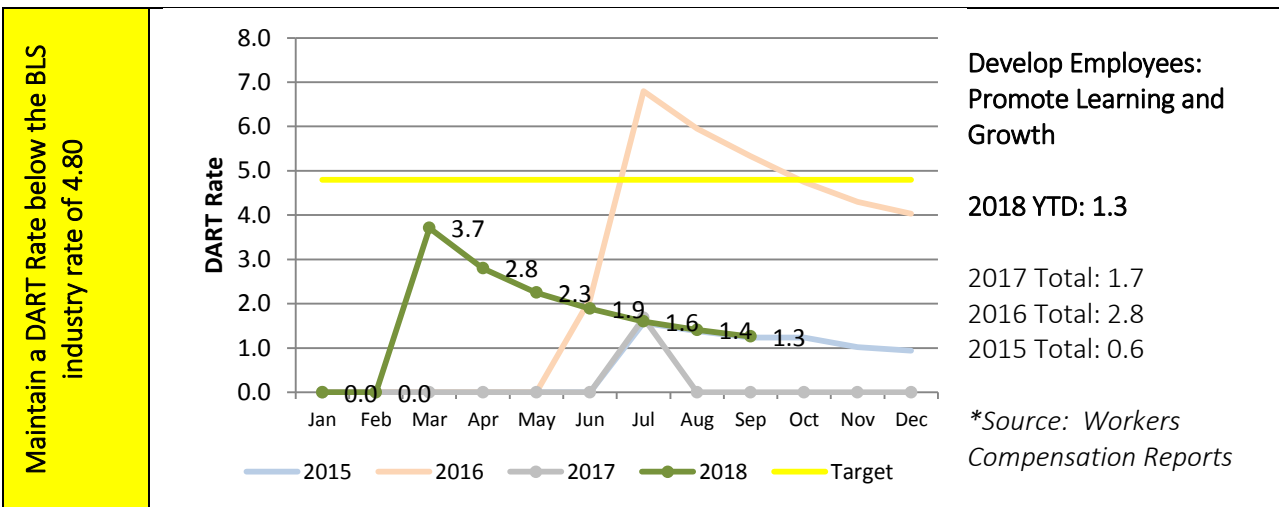
The department currently holds monthly CIP Meetings where projections, timelines, milestones, and schedules are discussed and updated. With this KPI, the department aims to establish a better tracking system for CIP projects to ensure they meet both time and budget commitments. Due to a number of factors 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 70% of projects completed both on time and within budget.



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

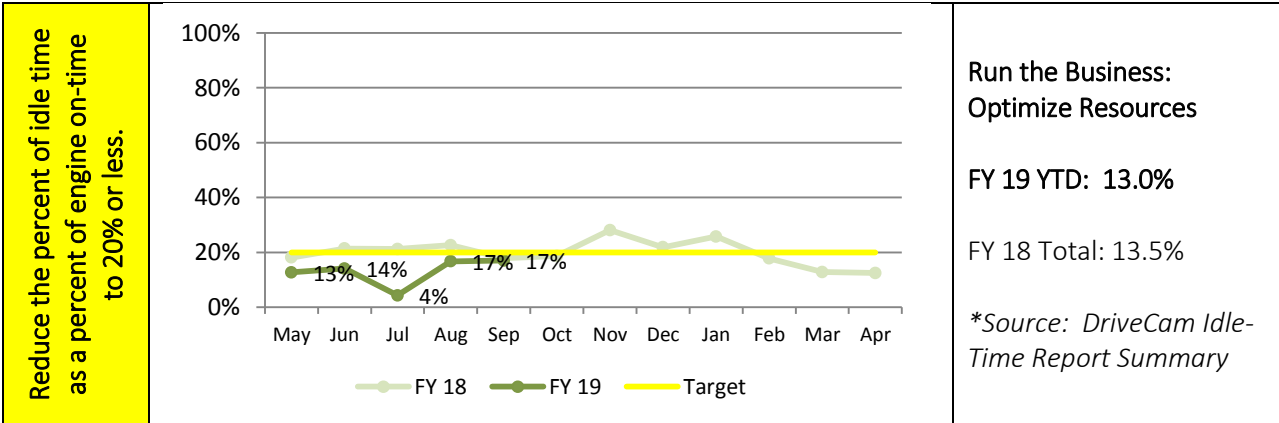
In an effort to drive compliance and increase safe work environments, the Engineering and Public Works Department contracts with an on-site safety consultant who administers the safety program for EPW labor staff. This consultant oversees and monitors all safety procedures, accidents, and required safety 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.





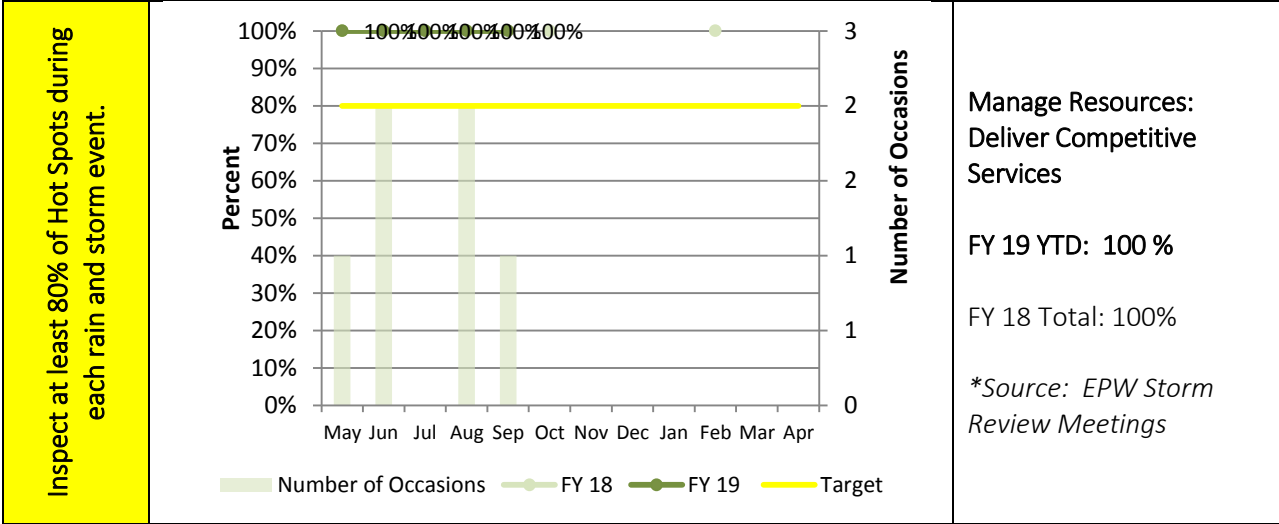
**KPI 4: Reduce the average idle time for EPW vehicles.**

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%.



**KPI 5: Provide an efficient response to storm events.**

The safety and well-being of our storm sewer system and village is of utmost importance. Thus, a KPI to measure the department’s effectiveness in identifying, categorizing, planning and executing proper patrol and risk elimination of storm and flooding hotspots is recommended. Effective categorization will lead to improved use of resources during a flood patrol by focusing on the most important, critical, and risky spots. The measurement of this KPI is the successful completion of inspection and the execution of identified actions related to critical hotspots. A list of critical hotspots will be determined prior to the start the measurement of this KPI. This list of hotspots will be specifically inspected and recorded each time a rain forecast of 1 inch+ is present.



**KPI 6: 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.

