

Village of Schaumburg

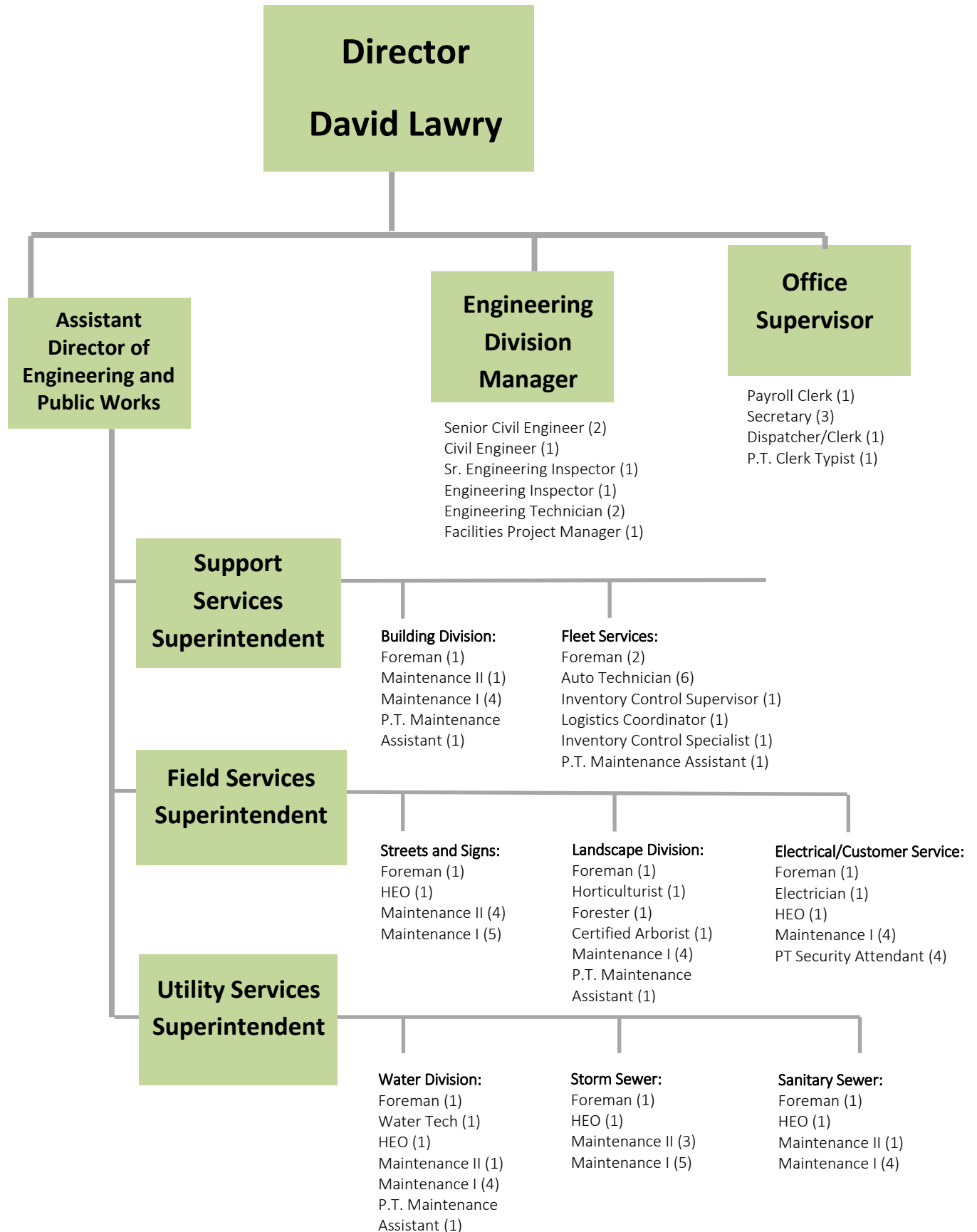
Engineering &  
Public Works  
Department  
Monthly Report

January 2018

## Table of Contents

|   |    |
|---|----|
| ORGANIZATION CHART .....                  | 1  |
| DEPARTMENT OVERVIEW .....                 | 4  |
| KEY ACTIVITIES .....                      | 5  |
| Emerald Ash Borer (EAB) Program.....      | 5  |
| Landscape Division.....                   | 6  |
| Streets & Signs Division.....             | 6  |
| Electrical/Customer Service Division..... | 6  |
| Storm Sewer Division .....                | 8  |
| Water Division.....                       | 8  |
| Sanitary Sewer Division.....              | 9  |
| KEY PERFORMANCE INDICATORS: .....         | 10 |

# 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

### Emerald Ash Borer (EAB) Program

#### Removals:

The village's contractor, Landscape Concepts, has removed 204 of the 429 EAB trees marked for removal. Village crews are assisting in EAB tree removals this winter. Village crews have removed 35 EAB trees. A total of 239 EAB trees have been removed.

#### Reforestation:

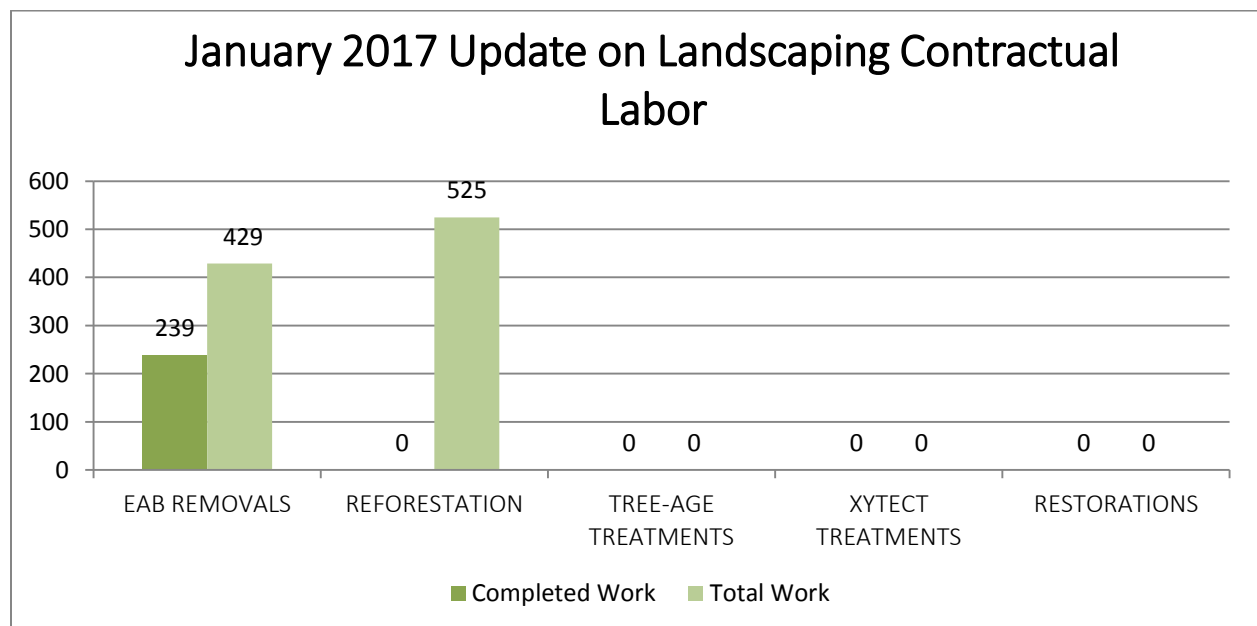
Trees for the Spring 2018 planting season have been tagged at the nursery. More trees will be tagged after cost-share information has been released to the public.

#### Treatments:

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

#### Restorations:

No restorations were scheduled.



## Landscape Division

- Removed the holiday decorations from various locations.
- Removed 31 trees.
- Monitored the contractual tree trimming.
- Monitored the woodland restoration project on the Civic Center grounds.
- Updated contracts for the full landscape maintenance and for the natural area maintenance.
- Beginning first stages of spring tree planting and of flower planting.
- Seeking a contractor to reprocess our wood chips in early March for delivery in spring.

## Streets & Signs Division

- Repaired 574 potholes.
- Completed nine square yards of restorations after utility repairs.
- Completed seven sign inspections.
- Maintained 84 signs.
- Manufactured 81 signs.
- Installed two new signs.
- Created nine specialty signs.
- Manufactured ten and installed nine vehicle markings.
- Committed 138 man-hours to the in-house pavement survey, which is used to develop the patching plan for 2018. The survey results included 78 locations totaling approximately 44,413 square yards. The list is under review and will be compared to locations scheduled in the street management program.
- Manufactured 47,390 gallons of Super Mix. Over eight storm events and 16 operational periods, applied 17,130 gallons of Super Mix and 1,364 tons of salt to the roadways. Applied 9,625 gallons of Super Mix during anti-icing operations on primary routes and parking lots.
- Provided 71.75 man-hours for water repairs, three man-hours for sanitary sewer repairs, 20.5 man-hours for street lighting repairs and six man-hours for HVAC troubleshooting.

## Electrical/Customer Service Division

- Completed 25 water turn-ons due to delinquent billing.
- Installed a new LED wall park light on rear door at Police Department.
- Picked up and disposed of ten deceased animals.
- Completed Group 1 Opticom – folding stop sign inspections.
- Completed 2,750 area checks for light outages.
- Completed 29 banner changes.
- Completed five banner repairs.
- Installed two banners.
- Inspected 270 banners after heavy wind storm.

- Repaired three trip hazards.
- Assisted with repairing cord for flag pole at Police Department.
- Inspected poles that Meade Electric installed for the Verizon Cell Site Project.
- Installed a new indicator light for the brine system at Engineering and Public Works.
- Raised all flags to full staff at Village building locations.
- Completed four E-locates.
- Replaced shoreline for Fire Engine 55.
- Picked up Blood Drive sign and returned to Nurses Center.
- Repaired 11 streetlight outages.
- Secured electrical panel at airport hangar and posted signs.
- Visited eight pole locations relating to JCI LED conversion.
- Visited six pole locations relating to Phase 2 LED conversion.
- Completed nine emergency water shut offs due to extreme cold temperatures.
- Reset wreaths and Christmas lights throughout the village as needed.
- Assisted at ten sanitary sewer backups.
- Repaired duct and conductors after contractor repaired main break at Quentin and Hartung Roads.
- Assisted a contractor with repairing a main on Berkshire Court.
- Completed two sanitary sewer inspections.
- Picked up recycled Christmas lights at the Atcher Municipal Center, Prairie Center for the Arts, and the Engineering Public Works buildings.
- Completed security check at 121 Long Avenue.
- Inventoried entire banner program to determine what needed to be ordered.
- Grinded two sidewalk locations.
- Delivered and picked up Adopt-A-Highway barricades, signs, debris.
- Installed a new truss arm on a pole at the Town Square entrance.
- Assisted with traffic control for sewer flushing on Golf Road.
- Installed safety screws on poles on Central Road.
- Made repairs to four approach lights on the west end of the Airport.
- Assisted with power needs to cameras throughout the village.
- Conducted weekly snow and ice truck inspections and cleaning.
- Picked up one public safety vehicle.
- Conducted eight area checks at the airport, ballpark and commuter lot.
- Completed five cleanups of bay areas.
- Assisted Water Division with a hydrant replacement.

- Assisted Community Development at the Atcher Municipal Center with a power outage on the north side of the building.
- Assisted Public Safety with fluctuations in power.

### Storm Sewer Division

- Completed 30 grate cleanings.
- Completed one inlet cleaning.
- Cleaned two catch basins.
- Responded to eight Customer Service Requests.
- Completed 400 feet of storm sewer mainline.
- Completed 11,975 feet of creek cleaning.
- January 2018: Completed 418 requests for J.U.L.I.E. locates.
- January 2017: Completed 718 requests for J.U.L.I.E. locates.
- Performed 385 illegal discharge inspections.
- Performed 195 hot spot inspections.
- Continued to update the GIS system.
- Assisted the Water Division with several excavations.
- Attended Excavator Safety meetings held by NIPA.

### Water Division

- Completed seven water main break repairs.
- Repaired 15 Buffalo boxes.
- Repaired ten fire hydrants.
- Replaced a fire hydrant.
- Replaced 22 fire hydrant signs.
- Took 97 water distribution samples as part of our required monthly samples. All samples passed and met IEPA requirements.
- Took three well samples and delivered to the lab.
- Routine water quality parameter samples were taken at the designated sites.
- Replaced two commercial water meters, repaired ten water meters.
- Replaced eight commercial meter transmitting units.
- Replaced three residential water meters, repaired 37 water meters.
- Replaced a residential meter transmitting unit.
- Processed 247 Customer Service Requests.
- Performance Contract Improvements continue, temperature viewing and alarms were set for stations 12, 3, the Toys Lift Station and the Bode Lift Station. Station 22 is online and testing of new pumps is scheduled for mid-February.
- Station 12 Pump and Motor 3 are scheduled for repairs by our contractor next month.
- Station 19 Pump and Motor 2 are scheduled for repairs by our contractor next month.
- Performed water billing shut-offs.



- Performed weekly safety talks and safety reviews.
- Performed snow and ice operations as weather required.

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 each month.

**Commercial Devices:**

December 2017: 3,344  
 January 2018: 3,339

**Residential Devices:**

December 2017: 473  
 January 2018: 484

**Sanitary Sewer Division**

- 1,193 Lf. of service laterals were televised.
- 1,625 Lf. of service laterals were cleaned.
- Inspected 117 grease traps.
- Installed a pipe patch kit on Knightsbridge Court.
- Performed a cleanout at 105 Idlestone Lane.

**Status of Current Construction Projects**

[List of explanation of the Village's current construction projects.](#)

**Sanitary Sewer Cleaning and Inspection Statistics**

**January 2018:**

- 7,582 Lf. of sanitary sewer main lines were televised.
- 11,600 Lf. of sanitary main lines were jetted.

**January 2017:**

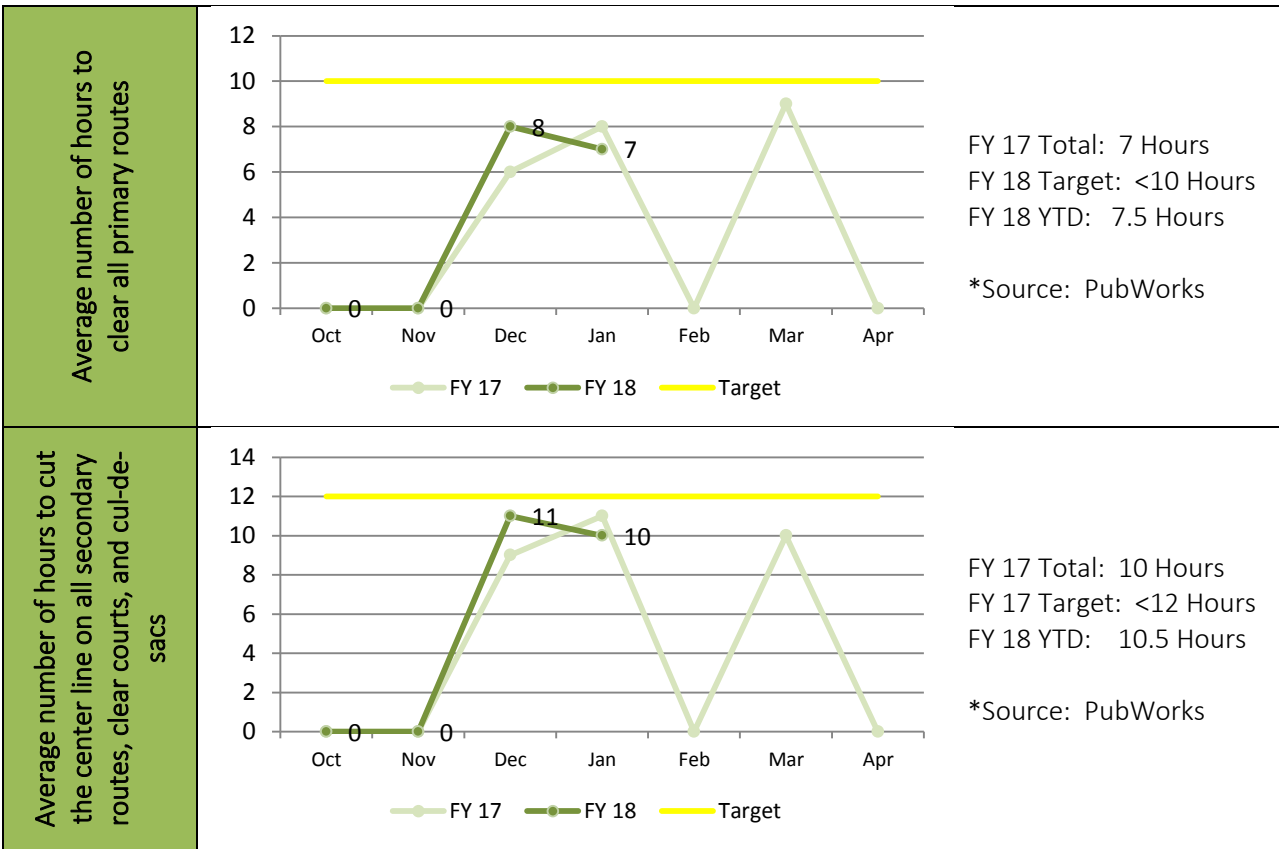
- 2,651 Lf. of sanitary sewer main lines were televised.
- 16,847 Lf. of sanitary main lines were jetted.

# KEY PERFORMANCE INDICATORS:

## ENGINEERING & PUBIC WORKS KEY PERFORMANCE INDICATORS:

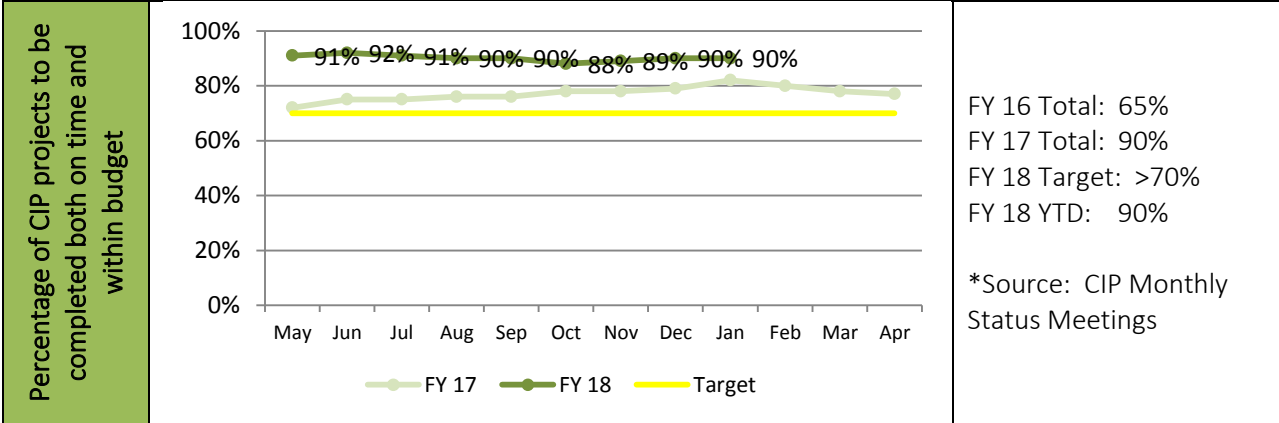
### KPI 1: Roadway Clearing Time- Per Snow Event

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.



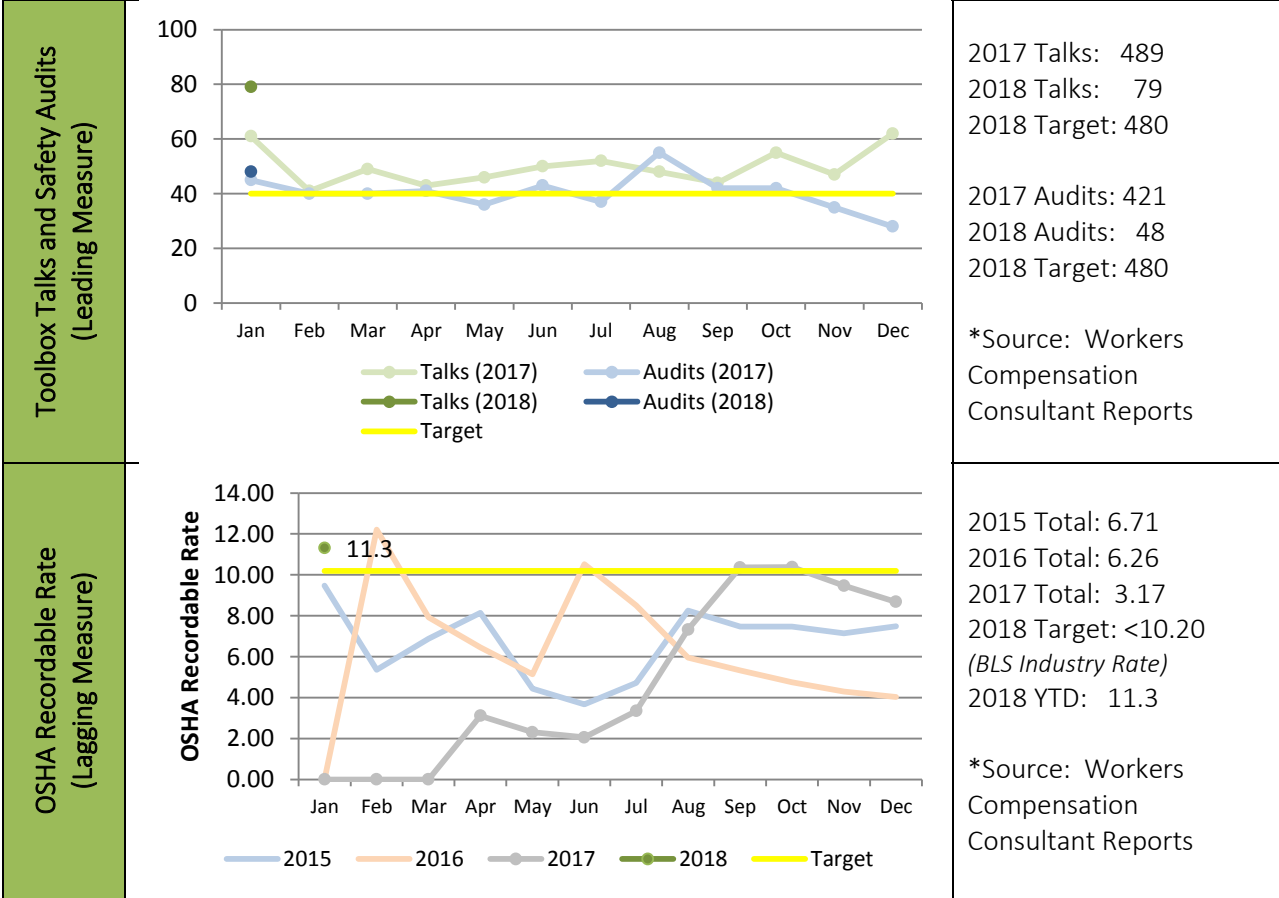
### KPI 2: Effective and Efficient Project Management

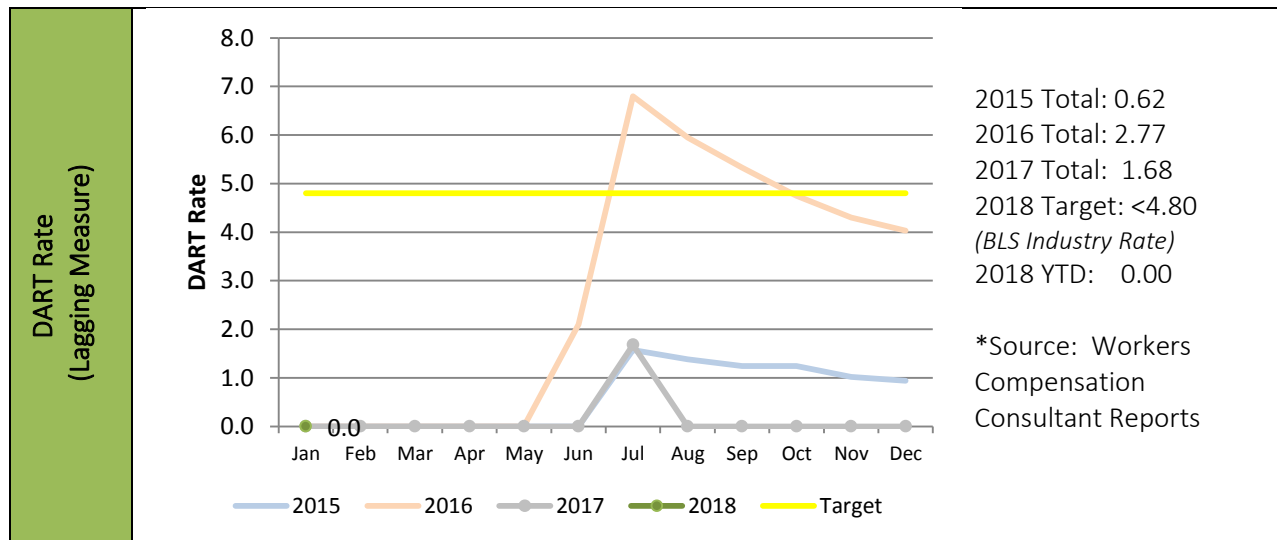
The department currently holds monthly CIP Meetings where projections, timelines, milestones, and schedules are discussed and updated. With this KPI, the department aims to establish a better tracking system for CIP projects to ensure they meet both time and budget commitments. Due to a number of factors 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: Risk Management and Employee Safety**

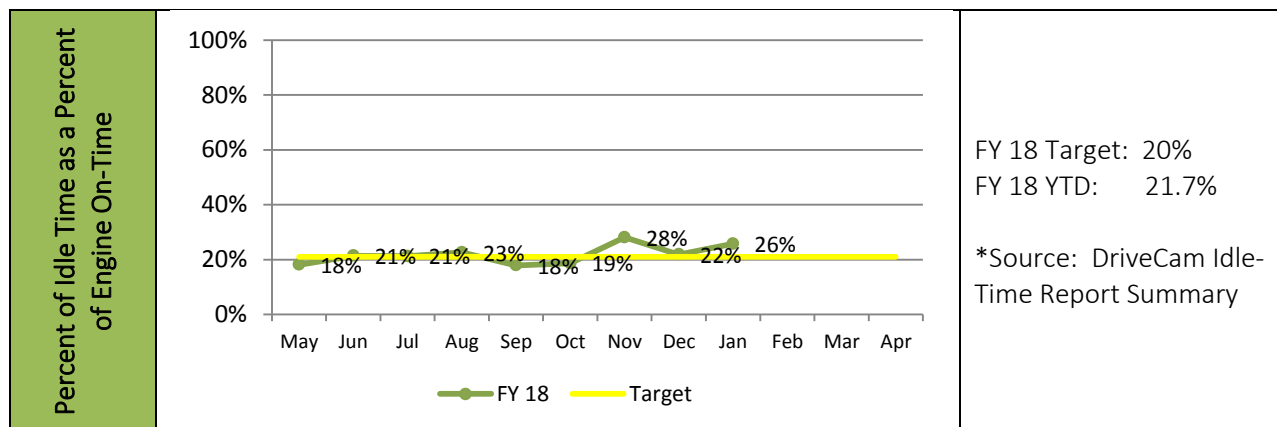
In an effort to drive compliance and increase safe work environments, the Engineering and Public Works Department contracts with an on-site safety consultant who administers the safety program for EPW labor staff. This consultant oversees and monitors all safety procedures, accidents, and required safety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





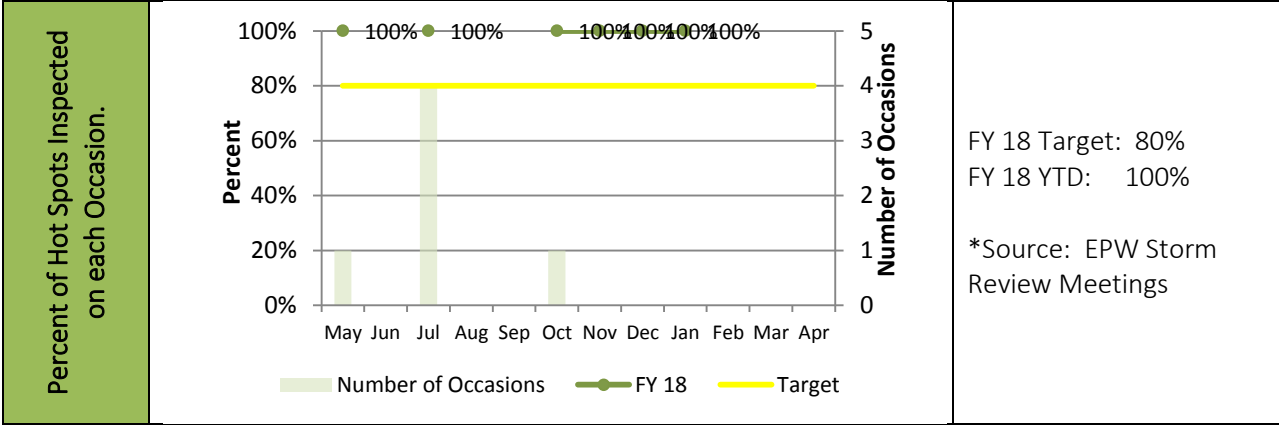
#### KPI 4: Average Idle Time Reduction for EPW vehicles

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: Storm Patrol Efficiency (Storm Sewer)

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: Customer Service Request (CSR) Response Rate**

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.

