

Village of Schaumburg

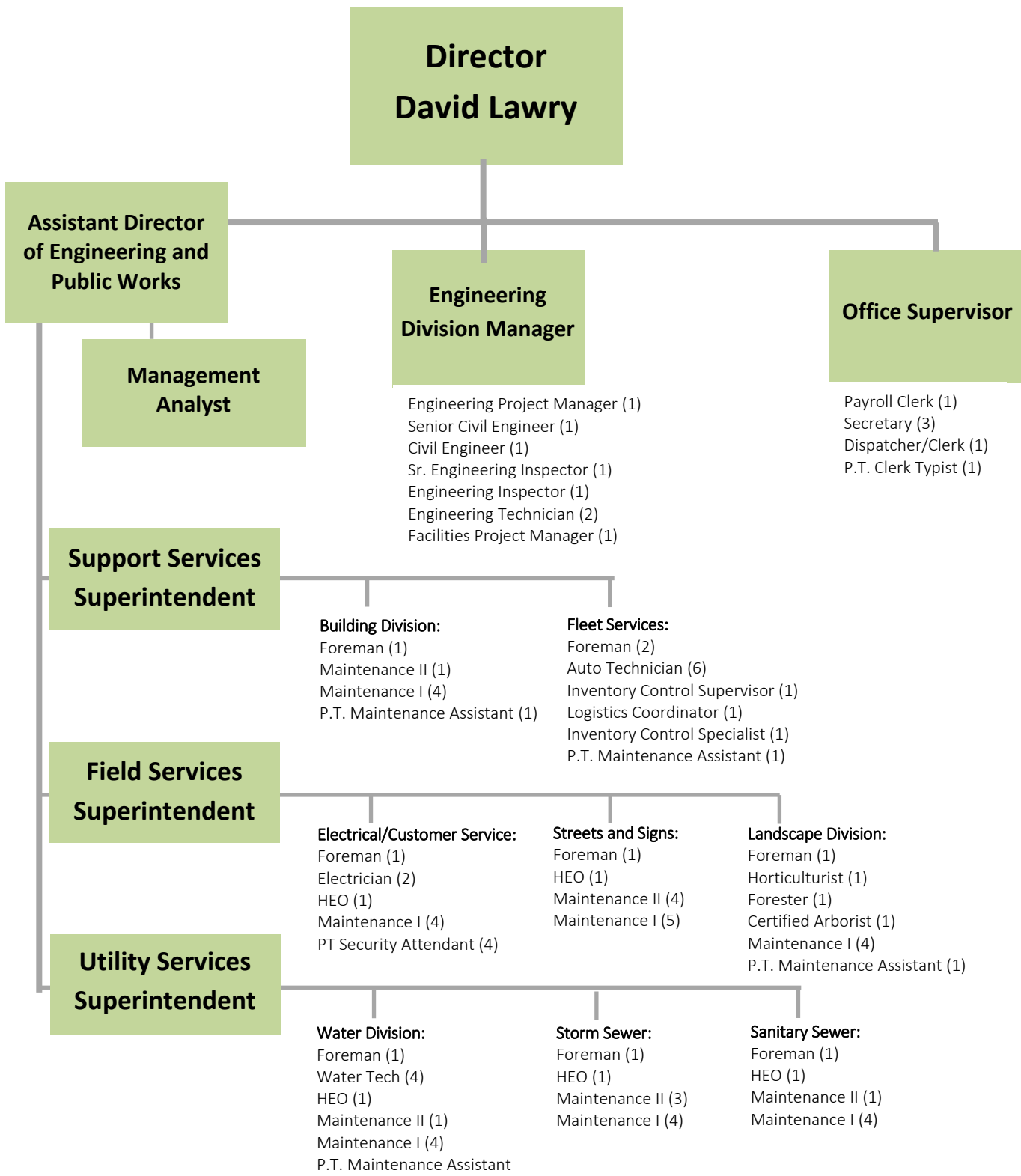
Engineering &  
Public Works  
Department  
Monthly Report

February 2018

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# 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 245 of the 429 EAB trees marked for removal. Village crews are assisting in EAB tree removals this winter. Village crews have removed 44 EAB trees. A total of 289 EAB trees have been removed.

#### Reforestation:

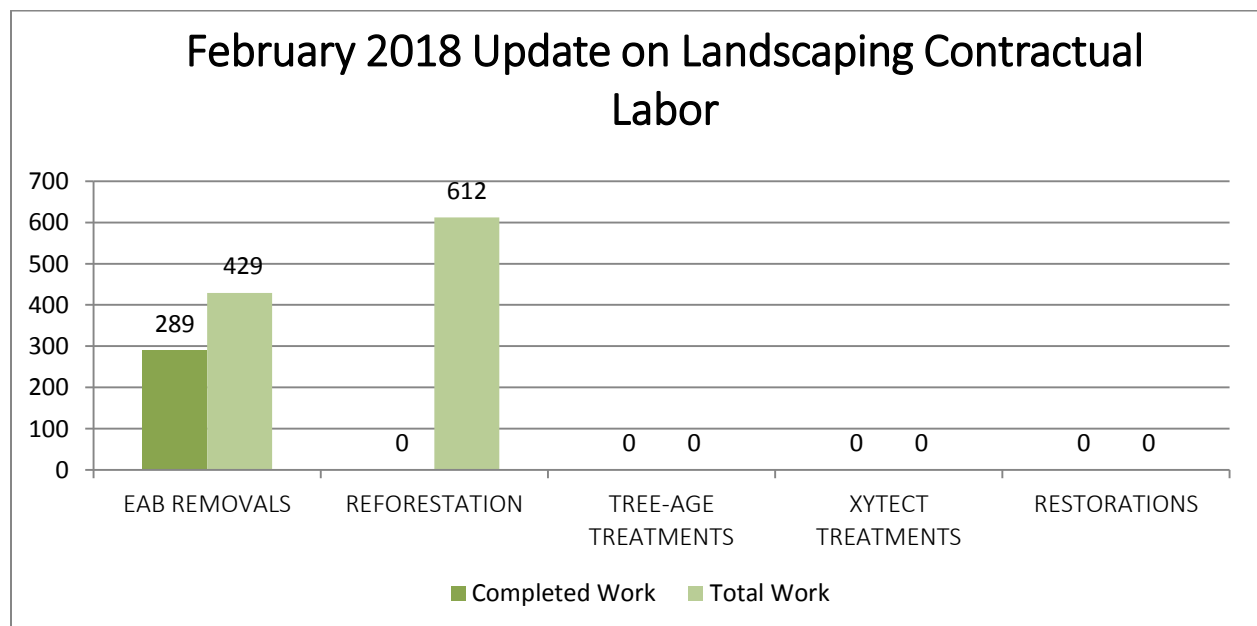
Currently, 612 trees for the spring 2018 planting season have been tagged at the nursery. More trees will be tagged after cost-share information has been released to the public.

#### Treatments:

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

#### Restorations:

No restorations were scheduled.



## Landscape Division

- Continued to monitor the progress of contractual area tree trimming and the woodland restoration project on the village hall grounds.
- Continued to oversee the trimming of trees on the village hall grounds with the removal of deadwood and areas of concern.
- Removed the holiday lights from the trees at Town Square.
- Continued to remove trees that had been marked during the summer months.
- Began distribution of reforestation letters to residents along with the cost share program. We anticipate adding over 600 trees to the existing urban forest.
- Made arrangements with the contractor to twice grind our woodchips for resident use at the end of March.

## Streets & Signs Division

- Repaired 798 potholes.
- Completed 29 square yards of restorations after utility repairs.
- Completed 90 sign inspections.
- Maintained 55 signs.
- Manufactured 26 signs.
- Added 20 signs to the GPS inventory list.
- Created 11 specialty signs.
- Manufactured 11 and installed 25 vehicle markings.
- Committed 138 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 31,000 gallons of Super Mix. Over eight storm events and 24 operational periods, applied 28,243 gallons of Super Mix and 3,319 tons of salt to the roadways. Applied 8,525 gallons of Super Mix during anti-icing operations on primary routes and parking lots.
- Provided 64 hours for mailbox repairs, 24 hours for electrical work and 14.5 hours on water related repairs.
- Provided 1,032 hours to snow and ice activities.

## Electrical/Customer Service Division

- Installed a new LED wall park light on rear door at Police Department.
- Picked up and disposed of 16 deceased animals.
- Completed Group 2 Opticom – folding stop sign inspections.
- Completed 4,385 area checks for light outages.
- Completed 95 banner changes.
- Completed 15 banner repairs.
- Installed two banners.
- Inspected 416 banners after heavy wind storm.
- Repaired three trip hazards.
- Assisted with some snow and ice complaints.
- Inspected poles that Electrical Conduit installed for the Verizon small cell antenna project.

- Completed six E-locates.
- Rewired hot water tank, refrigerator and service in ladies bathroom at Teen Center.
- Installed can lights in Emergency Operations Center at Engineering Public Works facility.
- Visited 35 pole locations relating to JCI LED conversion.
- Visited eight pole locations relating to Phase 2 LED conversion.
- Completed three emergency water shut offs due to extreme cold temperatures.
- Repaired 37 streetlight outages.
- Repaired photo control at Roselle and Commerce Roads.
- Assisted at 14 sanitary sewer backups.
- Assisted Storm Division with cleaning debris from covering inlets.
- Grinded three sidewalk locations.
- Made repairs to four approach lights on the west end of the Airport.
- Conducted five after-hour sanitary sewer inspections.
- Picked up recycled Christmas lights at Village Hall, Al Larson Prairie Center for the Arts and Engineering and Public Works.
- Conducted security check at 121 Long Avenue.
- Delivered and picked up Adopt-A-Highway barricades, sign and debris.
- Installed 23 foot black pole in Sara's Grove subdivision.
- Changed out 111w fixture to 50w in 12 locations of Spring South.
- Assisted IT Department with power needs to cameras throughout the village.
- Assisted Police Department with cleaning debris from accidents four times.

### Storm Sewer Division

- Completed 254 grate cleanings.
- Completed 227 inlet cleanings.
- Cleaned 3025 feet of storm sewer mainline.
- Televised 200 feet of storm sewer mainline.
- Completed 9,250 feet of creek maintenance.
- February 2018: Completed 520 requests for J.U.L.I.E. locates.
- February 2017: Completed 918 requests for J.U.L.I.E. locates.
- Performed 525 hot spot inspections.
- Continued to update the GIS system.

### Water Division

- Completed three water main break repairs.
- Repaired seven Buffalo boxes.
- Repaired 17 fire hydrants.
- Replaced three fire hydrants.
- Replaced 22 fire hydrant signs.
- Took 101 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.

- Repaired two commercial water meters.
- Replaced a commercial meter transmitting unit.
- Replaced three residential water meters.
- Repaired 34 residential water meters.
- Replaced two residential meter transmitting units.
- Processed 134 Customer Service Requests.
- Performance Contract Improvements continue, Station 22 is online and testing of new pumps was completed.
- Station 12 Pump and Motor 3 are scheduled for repairs by our contractor.
- Station 19 Pump and Motor 2 are scheduled for repairs by our contractor.
- 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:**

January 2018: 3,339  
February 2018: 3,362

**Residential Devices:**

January 2018: 484  
February 2018: 485

**Sanitary Sewer Division**

- Cleaned 2,596 linear feet of service laterals.
- Repaired service line at 1530 Dedham.
- Sanitary Division worked 514.6 hours on snow and ice.
- Inspected 37 sanitary manholes
- Repaired two sanitary manholes.
- Root cut 640 linear feet of sanitary mainlines.
- Received and closed 69 Customer Service Requests.

**Status of Current Construction Projects**

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

**Sanitary Sewer Cleaning and Inspection Statistics**

**February 2018:**

- 2,040 linear feet of sanitary sewer main lines were televised.
- 5,459 linear feet of sanitary main lines were jetted.

**February 2017:**

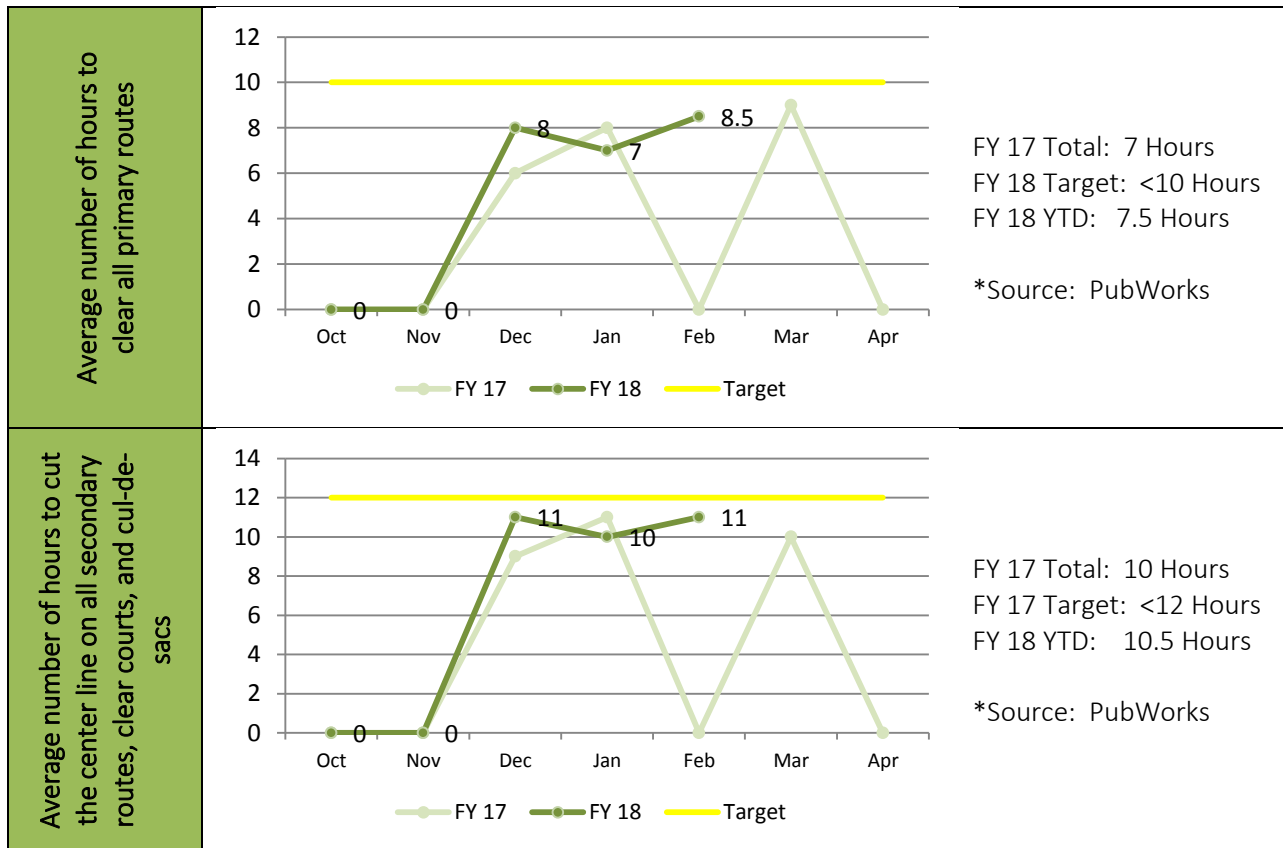
- 2,651 linear feet of sanitary sewer main lines were televised.
- 16,847 linear feet of sanitary main lines were jetted.



## KEY PERFORMANCE INDICATORS:

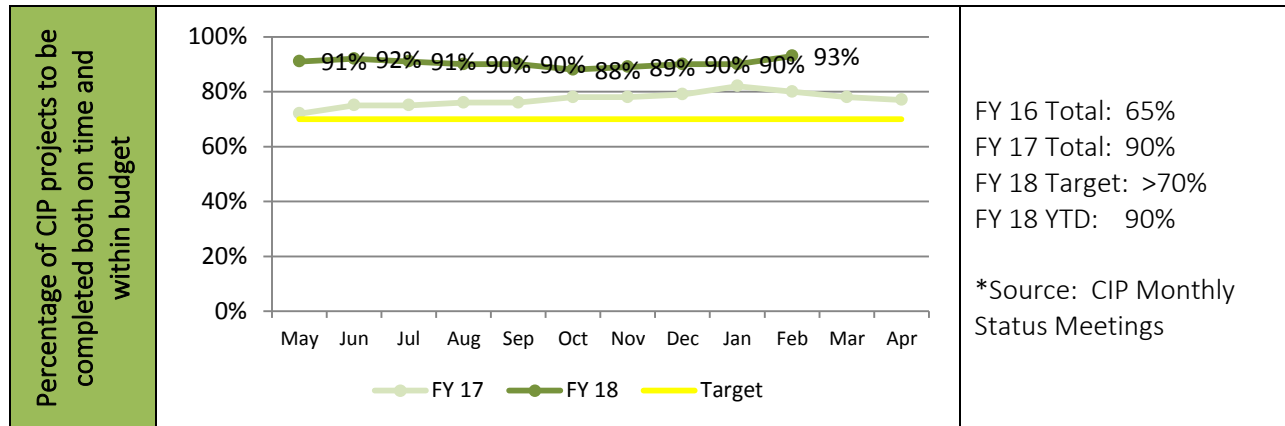
### KPI 1: Roadway Clearing Time- Per Snow Event

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.



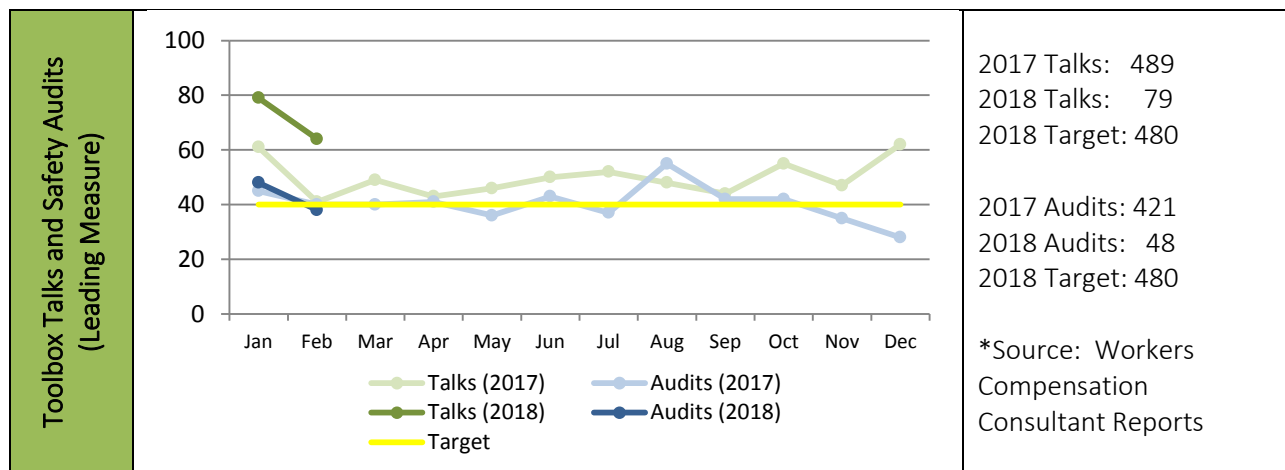
### KPI 2: Effective and Efficient Project Management

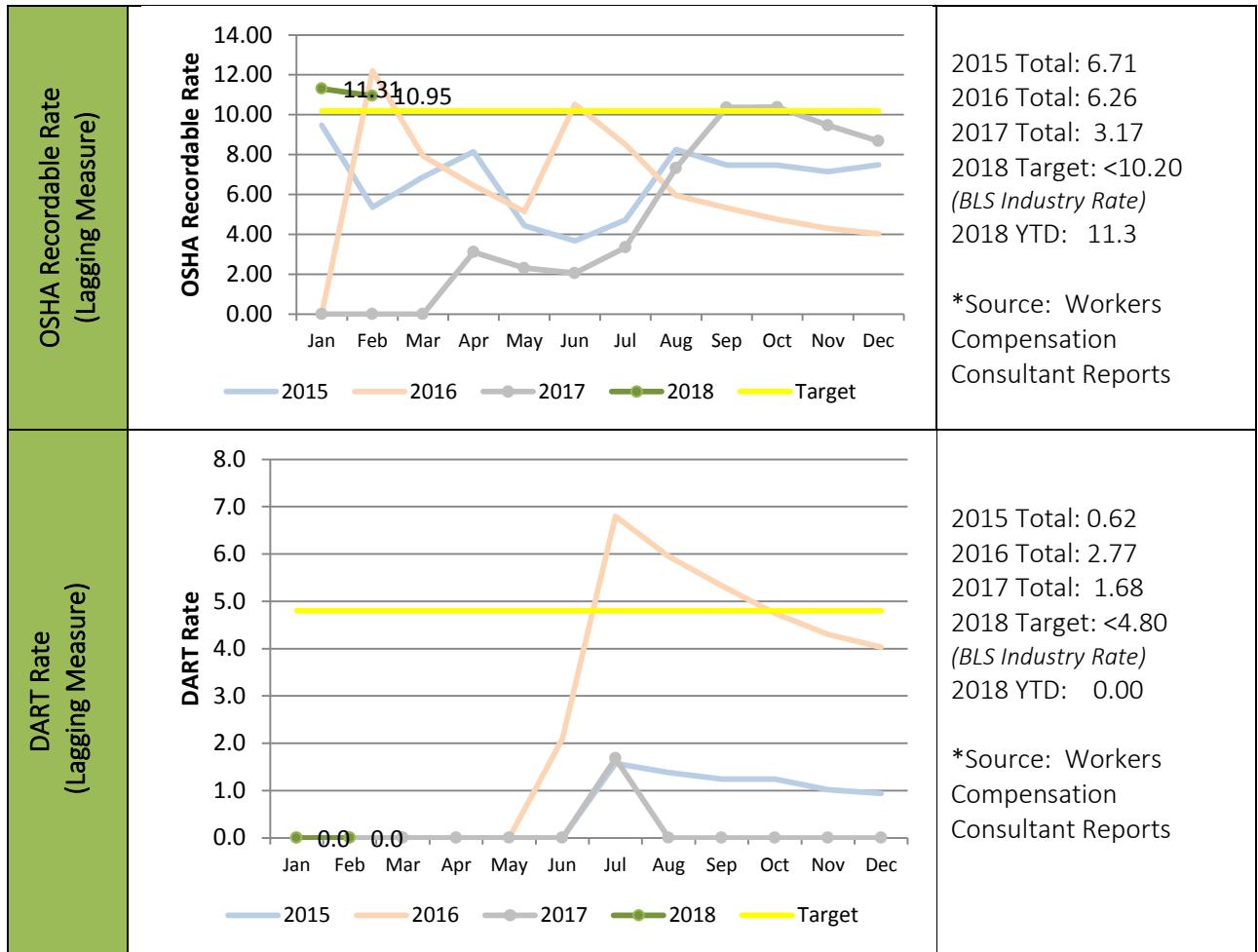
The department currently holds monthly CIP Meetings where projections, timelines, milestones, and schedules are discussed and updated. With this KPI, the department aims to establish a better tracking system for CIP projects to ensure they meet both time and budget commitments. Due to a number of factors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

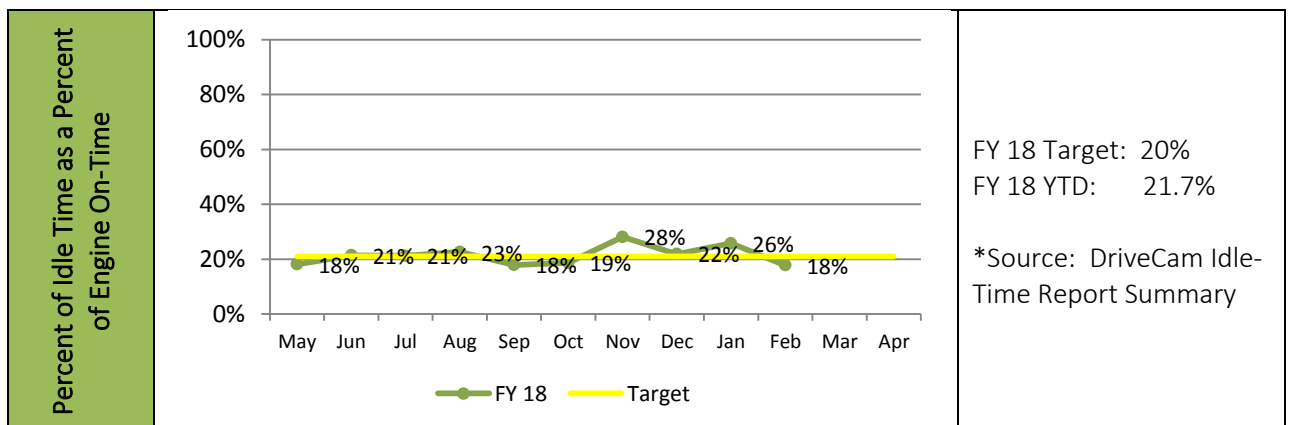
In an effort to drive compliance and increase safe work environments, the Engineering and Public Works Department contracts with an on-site safety consultant who administers the safety program for EPW labor staff. This consultant oversees and monitors all safety procedures, accidents, and required safety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





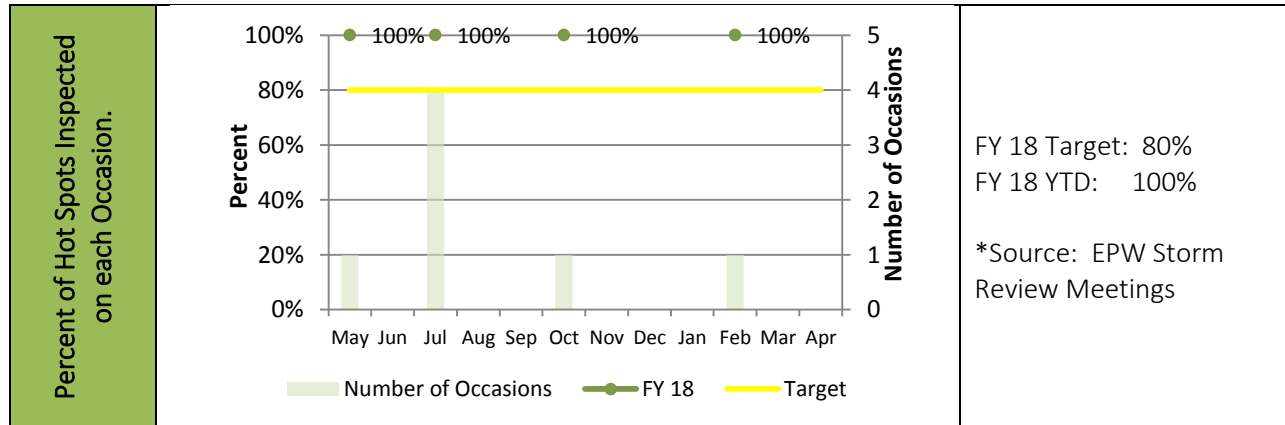
**KPI 4: Average Idle Time Reduction for EPW vehicles**

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.

