

Village of Schaumburg

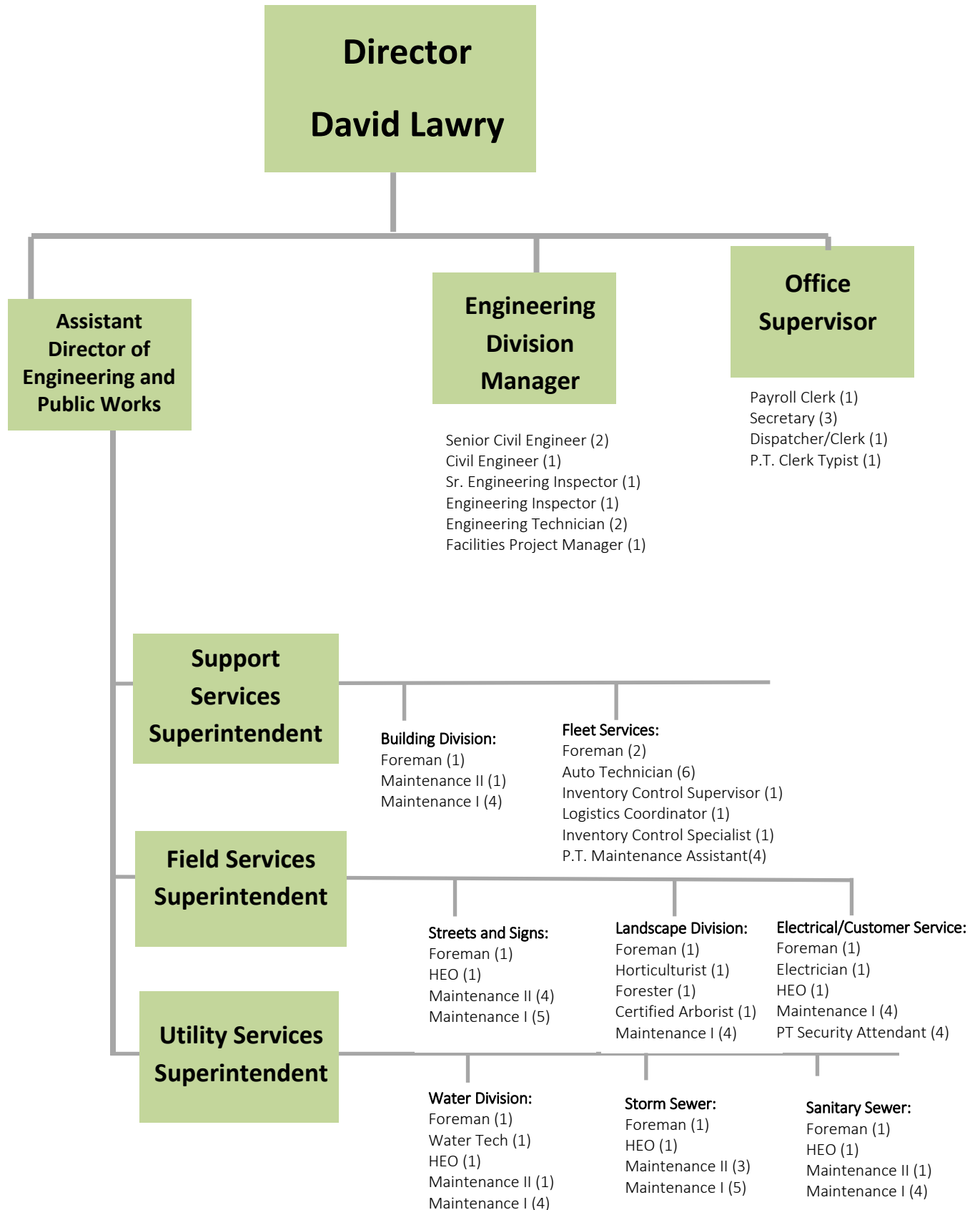
Engineering &  
Public Works  
Department  
Monthly Report

June 2017

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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 removal contract was awarded to Landscape Concepts.

The EAB interns are inspecting ash trees throughout the village, and they have marked 419 trees for removal so far.

#### Reforestation:

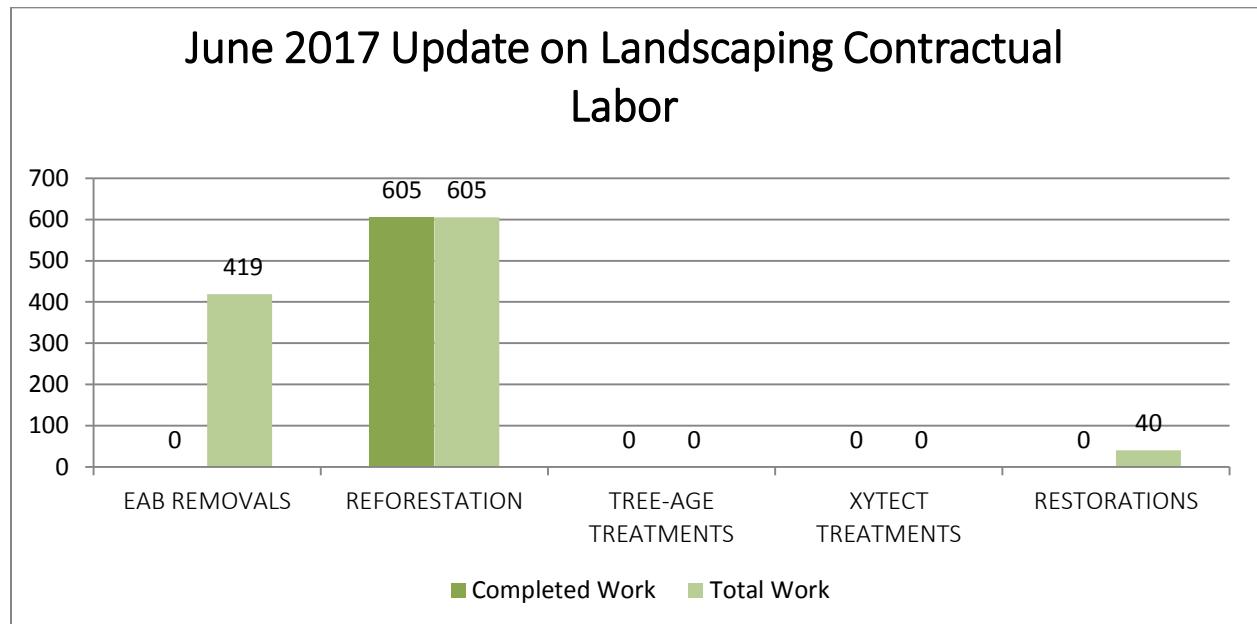
The Spring-17 planting season is complete with the planting of 605 trees, and the village is preparing for the Fall-17 planting season.

#### Treatments:

Currently no treatments are scheduled.

#### Restorations:

The new restoration contractor Langton Group has 40 EAB restorations to complete.



## Landscape Division

- Completed the spring planting program with the addition of 539 trees in the village.
- Completed storm clean-up.
- Began marking for EAB throughout the village. We anticipate the removal of an additional 500 ash trees this year.
- Completed distribution of gator bags to newly planted trees and began contractual watering during the dry period in June. The Landscape Division will continue to water through the week of July 4<sup>th</sup> and assess the rainfall after this period to determine if additional watering is required.
- Continued parkway repairs due to snow and ice damage and dig-up restoration.
- During the brush pick up program, the Landscape Division picked up 935 piles of brush.

## Streets & Signs Division

- Repaired 293 potholes.
- Pavement patching operations were completed on Winthrop and Westover Lanes. Milling and paving operations then moved to Slingerland and Concordia Lanes and will continue in this area through most of July.
- Completed 2,860 square yards of patching and milled 4,175 square yards of pavement.
- Completed 54 sign inspections, maintained 137 signs, manufactured 19 signs, installed 2 new signs, and created 136 specialty signs.
- Removed 126 No Parking signs for the Timbercrest Garage Sale.
- Provided assistance to other divisions for various tasks.
- Personnel worked on the Household Hazardous Waste recycling event.
- Provided assistance to the Sanitary Division with sanitary service repairs.
- Completed a 50 square yard street restoration repair in Jamestown Court. This repair was necessary due to a soft spot in the pavement. The incident occurred on April 5, 2017 and the utility divisions recently completed their exploratory excavation. No conclusive evidence was found as to why this area is holding water.

## Electrical/Customer Service Division

- Completed 69 water turn-ons due to delinquent billing.
- Installed a new Hali-Brite LED wind cone.
- Picked up/disposed of twelve deceased animals.
- Completed opticom and folding stop sign inspections.
- Completed 3,200 area checks for light outages.
- Completed banner change and modification of 99 banners.
- Completed 44 banner repairs.
- Repaired a cable fault at Remington Road and Plum Grove Road.
- Repaired seven trip hazards.
- Repaired a power outage in an administration area due to damaged power points.

- Relocated ComEd service at Weathersfield Way and Springinsguth Road when a new ComEd pole was installed.
- Brought three trucks to safety inspections.
- Assisted the village contractor with the shutdown of a 24-inch water main at Bethal Road and Roselle Road.
- Completed seven emergency J.U.L.I.E. locates.
- Collected a blood drive sign from the Nurses Center.
- Checked the power at the American Indian Center parking lot for Farmers market repairs to be made.
- Checked village banners after heavy windstorms three times.
- Completed 58 streetlight outage repairs.
- Assisted the Fleet Division with the delivery of a vehicle.
- Visited 13 pole locations with concerns from the village contractor for LED conversion in Lion's Gate subdivision.
- Prepared for inspection of the traffic signal transfer from the Tollway contractor.
- Delivered 15 barricades and 20 cones to the Church of Holy Spirit for family fest.
- Delivered and collected debris for six Adopt-A-Highway events.
- Set up traffic control at the Boomers ballpark.
- Cleaned up after the farmers market on four occasions.
- Repaired a 15-foot arm on a 45-foot pole that sustained wind damage.
- Changed three ground fault circuit interrupters on the concourse area of the Boomers ballpark.
- Installed two 50W LED fixtures not within the village contractors contract.
- Repaired a 475-foot section of wire and duct on a streetlight hit, along Commerce Drive near Basswood Drive.
- Completed the scraping and painting of six streetlight cabinets.
- Ground down 12 sidewalk trip hazards.
- Changed the air compressor motor for fire suppression at the ballpark.
- Secured and reset a streetlight pole in Remington Circle after a vehicle accident caused damage.
- Cleaned up before and after the summer concerts at Town Square on seven occasions.

## Storm Sewer Division

- Completed 47 inlet repairs and 5 manhole/catch basin replacements.
- Completed 70 inlet and 42 grate cleanings.
- Cleaned 73 catch basins.
- Cleaned 300 feet of Storm Sewer Mainline and televised 82 feet of Storm Sewer Mainline.
- Completed 40 feet of creek cleaning and checked 67 hot spots.
- Completed 22 Customer Service Requests.
- June 2017: Completed 2,087 requests for J.U.L.I.E. locates.
- June 2016: Completed 2,291 requests for J.U.L.I.E. locates.
- Performed field inspections on streets that will be resurfaced.
- Worked on Collector App for Hot Spot Inspections.

## Water Division

- Repaired one water main break.
- Dug up and repaired seven Buffalo Boxes.
- Repaired 45 fire hydrants, above ground.
- Repaired one fire hydrant, below ground.
- Replaced one fire hydrant.
- Continued fire hydrant flushing. Half of the town has been completed.
- Repaired one valve.
- Completed 96 required water distribution samples. All samples passed and met IEPA requirements.
- Routine water quality parameter samples were taken at designated sites.
- Prepared for collection of lead and copper samples. Mailings were sent out and collection is set for July 26<sup>th</sup> and August 2<sup>nd</sup>, 2017. Lead and copper samples are required every three years by the IEPA.
- The new sanitary lift station at the Toys and Bode lift station continues.
- Painting of the water tank of station 22 was completed and the station was put back in service the week of June 26<sup>th</sup>.
- The JAWA Braintree site lost flow reading capabilities for roughly 4-5 hours. No problems were encountered on the Village of Schaumburg end, as crews made adjustments at the Sheffield site during this time.
- Completed water billing shut offs.
- Completed emergency J.U.L.I.E. locate training.
- Assisted the Building Division with water line repairs at the Boomer's Ballpark.
- Worked with a contractor to perform two water main line shut downs for Bethel Lane improvements.



- 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:**

May 2017: 3,236

June 2017: 3,241

**Residential Devices:**

May 2017: 414

June 2017: 420

### Sanitary Sewer Division

- Sanitary crews root-cut 1,026 Lf. of main lines.
- Sanitary crews televised 1,067 Lf. and cleaned 1,148 Lf. of service laterals.
- Sanitary crews jetted 16,958 Lf. of sanitary sewer main lines. In 2016, 28,108 Lf. of sanitary main lines were jetted.
- Sanitary crews conducted inspections of 96 Grease traps throughout the village this month.
- Concept Plumbing repaired a service lateral on South Braintree Drive, the excavation was 24 feet deep and the two laterals needed to be replaced from the tee up and the sidewalk to the street.
- Sanitary and Water Divisions cross trained employees this month, to help with the certification program and to familiarize those employees with day to day operations.
- Following recommendations of the 2016 Sewer Evaluation, the Sanitary Crews replaced manhole covers in the Walnut Lane Lift Station Tributary Area.
- Sanitary seasonal crews replaced 50 manhole covers that had a gasket, self-sealing or had no pick holes to allow water to infiltrate into the sanitary system.
- Sanitary crews replaced the service lateral on Webster Lane. A new stainless steel sleeve was installed and 8 feet of 6 inch service lateral was replaced.

### Status of Current Construction Projects

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

### Sanitary Sewer Cleaning and Inspection Statistics

**June 2017:**

- 11,572 Lf. of sanitary sewer main lines were televised.
- 8,746 Lf. of sanitary main lines were jetted and 1,047 Lf. were root-cut.

**June 2016:**

- 13,015 Lf. of sanitary sewer main lines were televised.
- 15,451 Lf. of sanitary main lines were jetted.

# KEY PERFORMANCE INDICATORS

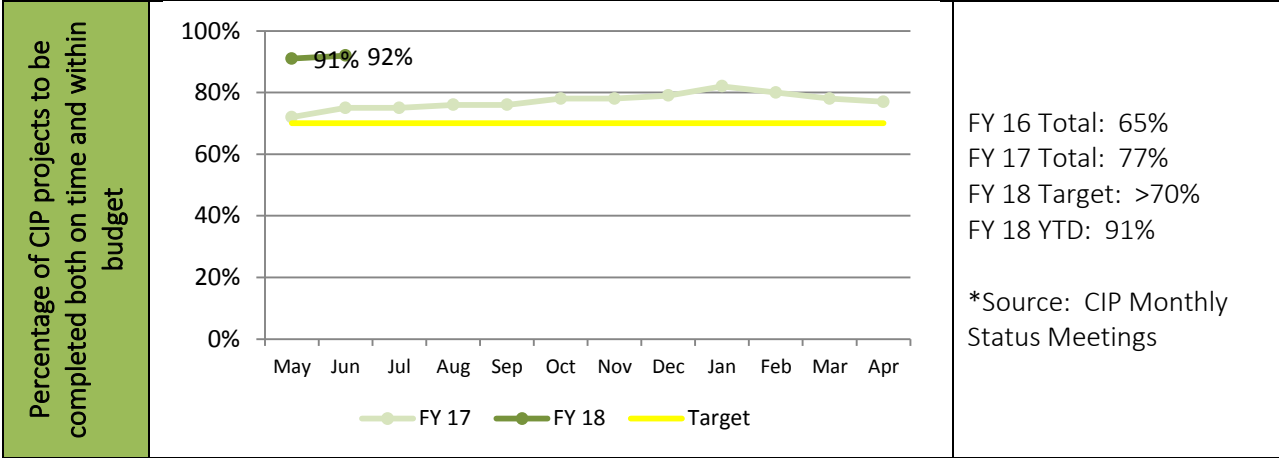
## KPI 1: Roadway Clearing Time- Per Snow Event

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 centerline 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 centerline on all secondary routes, clear courts, and cul-de-sacs.

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Average number of hours to clear all primary routes</p>	<table border="1"> <caption>Primary Routes Clearing Time Data</caption> <thead> <tr> <th>Month</th> <th>FY 17</th> <th>FY 18</th> <th>Target</th> </tr> </thead> <tbody> <tr><td>Oct</td><td>0</td><td>0</td><td>10</td></tr> <tr><td>Nov</td><td>0</td><td>0</td><td>10</td></tr> <tr><td>Dec</td><td>6</td><td>6</td><td>10</td></tr> <tr><td>Jan</td><td>8</td><td>8</td><td>10</td></tr> <tr><td>Feb</td><td>0</td><td>0</td><td>10</td></tr> <tr><td>Mar</td><td>9</td><td>9</td><td>10</td></tr> <tr><td>Apr</td><td>0</td><td>0</td><td>10</td></tr> </tbody> </table>	Month	FY 17	FY 18	Target	Oct	0	0	10	Nov	0	0	10	Dec	6	6	10	Jan	8	8	10	Feb	0	0	10	Mar	9	9	10	Apr	0	0	10	<p>FY 17 Total: 7 Hours          FY 18 Target: &lt;10 Hours          FY 18 YTD: N/A</p> <p>*Source: PubWorks</p>
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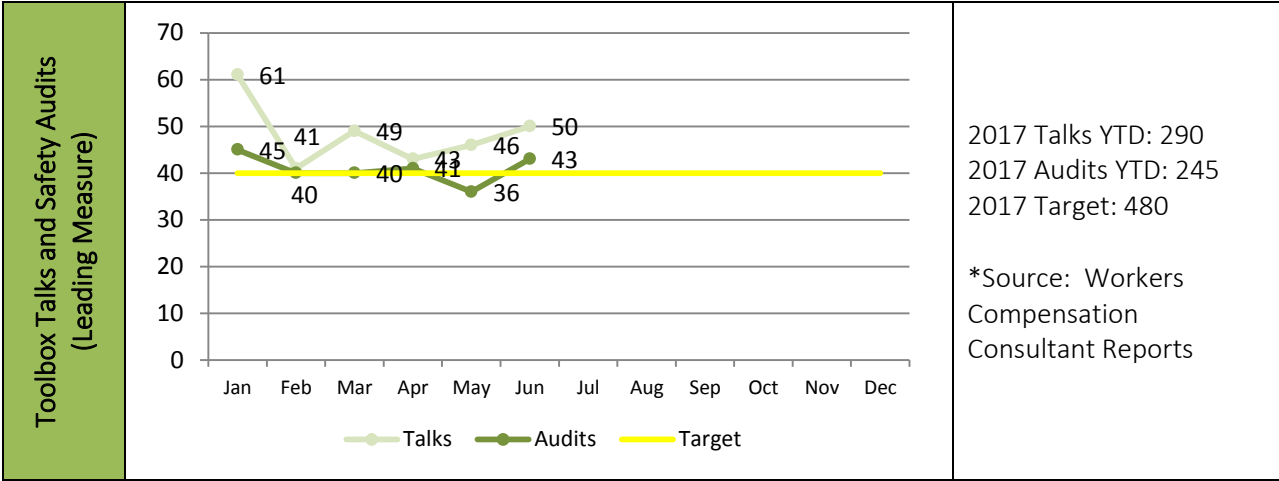
## KPI 2: Effective and Efficient Project Management

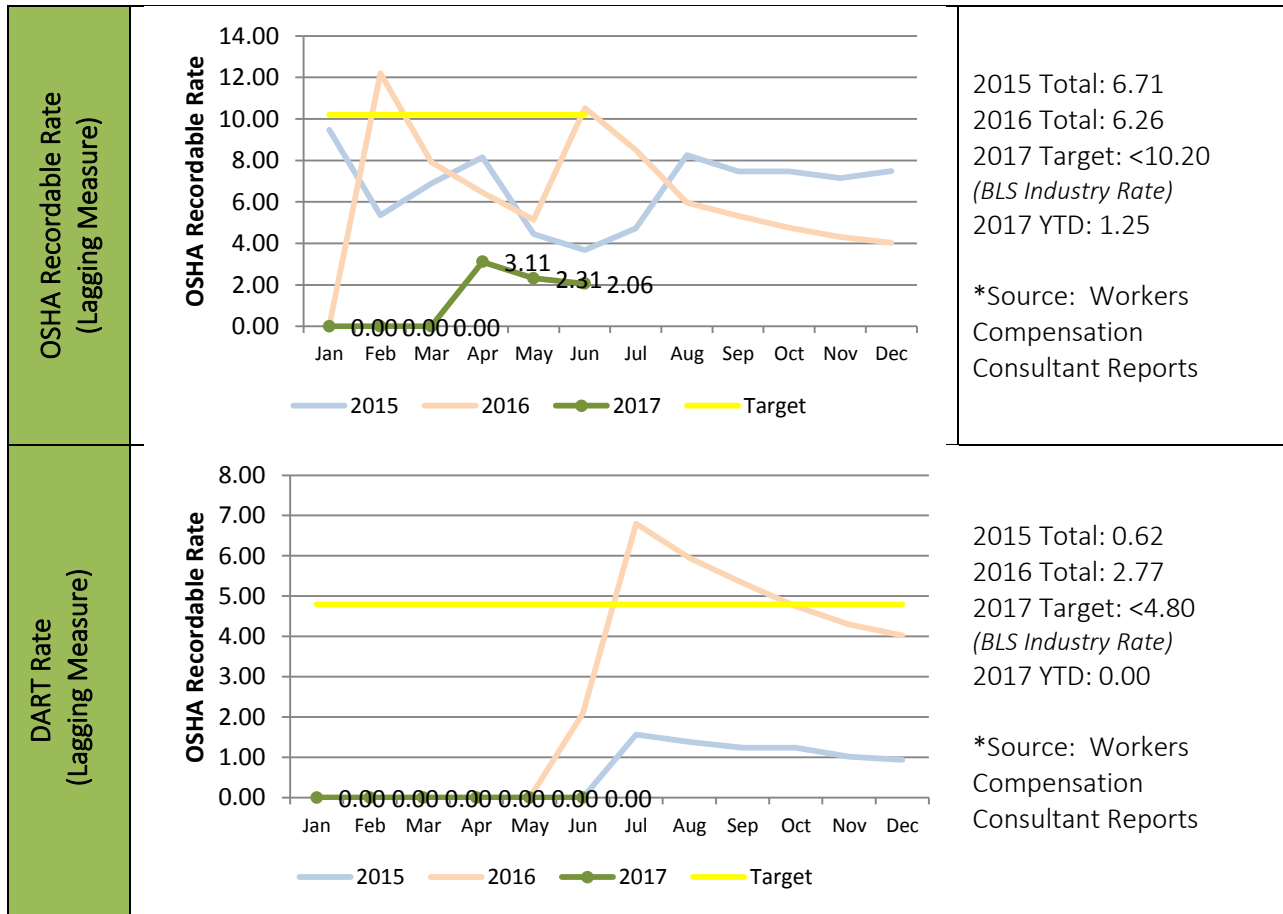
The department currently holds monthly CIP Meetings where projections, timelines, milestones, and schedules are discussed and updated. With this KPI, the department aims to establish a better tracking system for CIP projects to ensure they meet both time and budget commitments. Due to a number of factors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

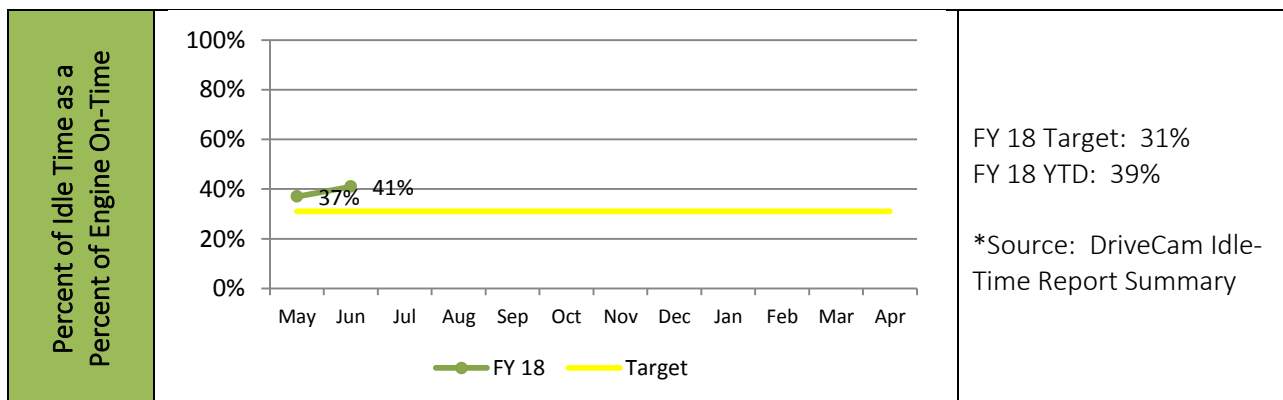
In an effort to drive compliance and increase safe work environments, the Engineering and Public Works Department contracts with an on-site safety consultant who administers the safety program for EPW labor staff. This consultant oversees and monitors all safety procedures, accidents, and required safety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





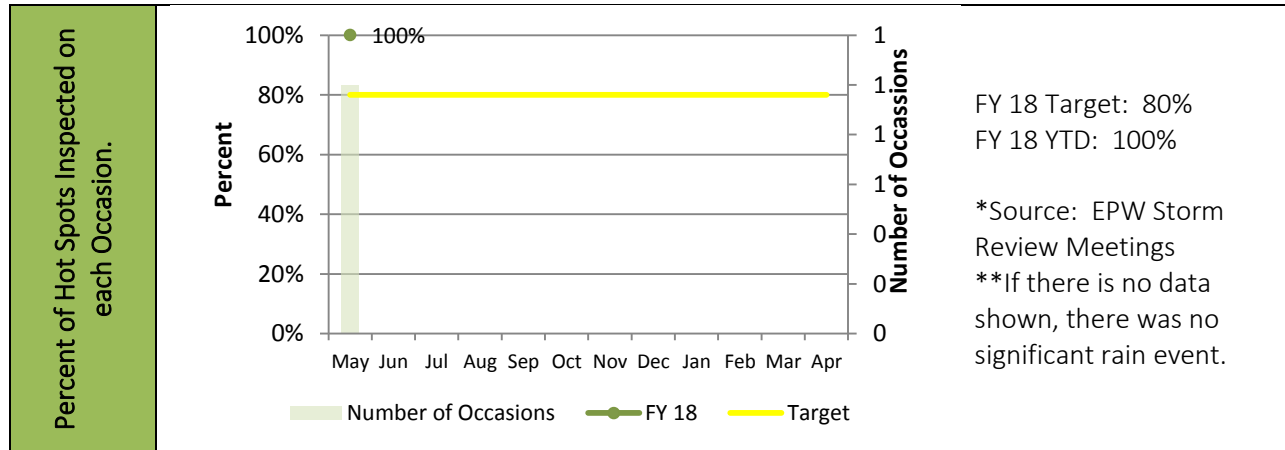
**KPI 4: Average Idle Time Reduction for EPW vehicles**

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 total amount of idle time (both violation and non-violation) as a percentage of engines on time. The benchmark is the rolling average of the last two years and is represented by a goal of 31%.



### 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.

