

Village of Schaumburg

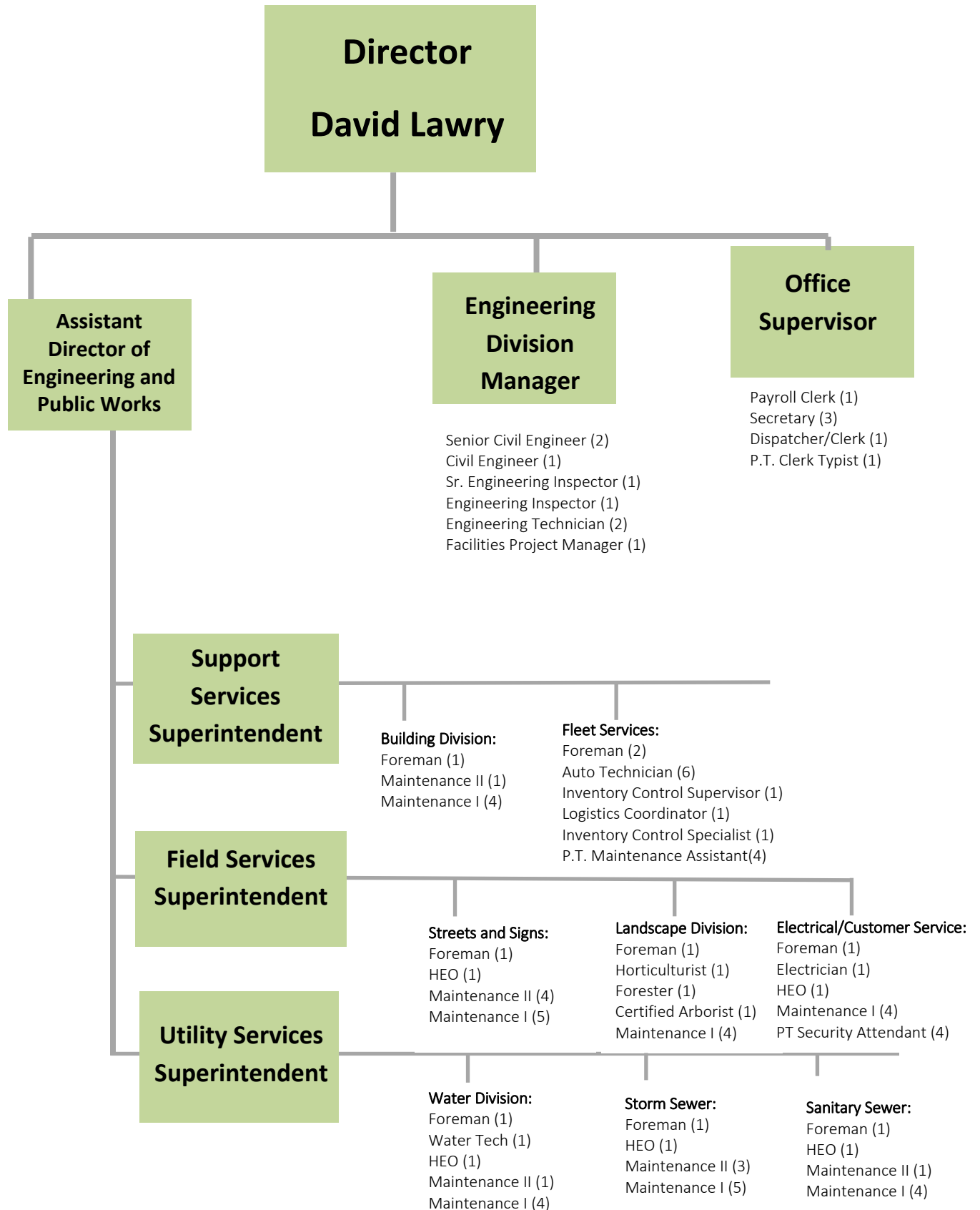
Engineering &
Public Works
Department
Monthly Report

September 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 Village's contractor, Landscape Concepts, has removed 60 of the 422 trees marked for removal. Village crews will be assisting in EAB removals this winter. Village crews are scheduled to remove 49 of the EAB trees marked for removal.

Reforestation:

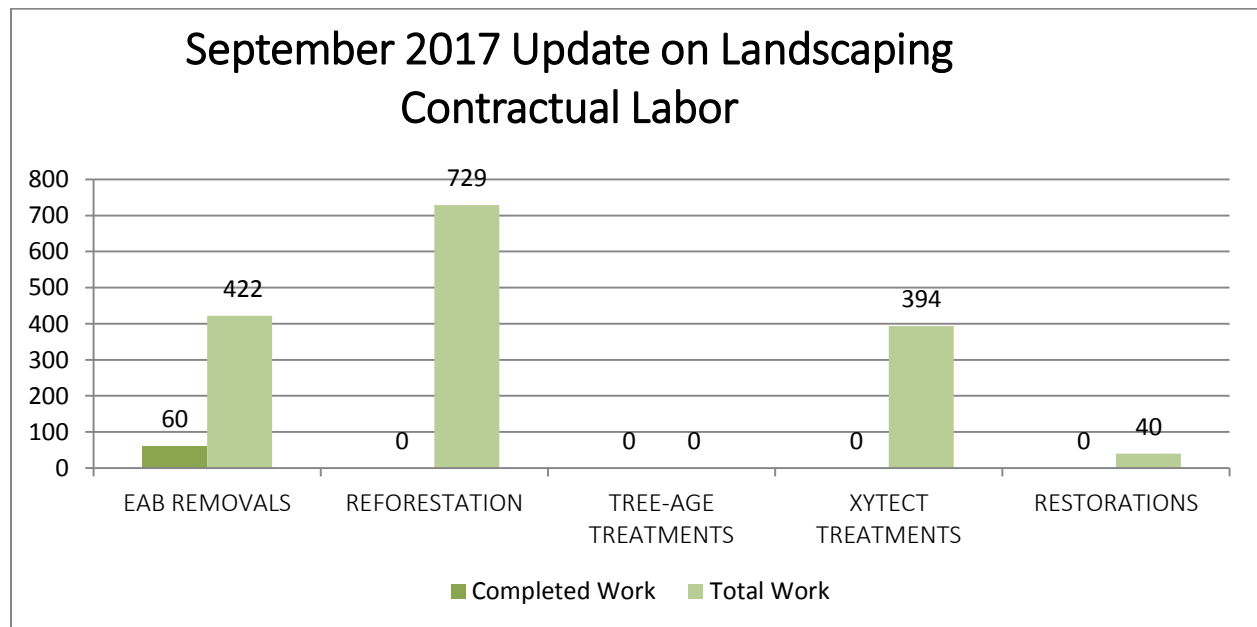
All trees for the fall 2017 planting have been tagged for pick up. ACRES and the Field on Caton Farms are scheduled to start planting reforestation trees at the end of October.

Treatments:

The Village's contractor, Kinnucan, is in town administering fall Xytect treatments.

Restorations:

The restoration contractor, Langton Group, completed 40 EAB restorations.



Landscape Division

- Completed the annual brush pick up program. 1,764 piles of brushed were picked up during the annual brush pick up program.
- Disposed of 297 piles of brush in September.
- Completed the cleanup of Septemberfest in one week.
- Completed the marking of over 1,000 locations for additional trees to be planted in the fall.
- Initiated plans for fall Xytech treatments for the existing ash tree population.
- The village contractor began the removal of ash trees marking during the summer survey of the existing ash tree population.

Streets & Signs Division

- Repaired 216 potholes.
- Completed 2,750 square yards of milling and completed 1,860 square yards of pavement patching on Hinkle Lane and Hinkle Court.
- Completed 30 sign inspections.
- Maintained 51 signs.
- Manufactured 28 signs.
- Installed 12 new signs.
- Created 31 specialty signs.
- Manufactured 21 and installed five vehicle markings.
- Assisted with water main repair and replacement, valve replacement, and fire hydrant replacement.
- Returned Septemberfest equipment borrowed from Cook County Homeland Security and the Cook County Highway Department, such as, portable light towers, message board

The Weathersfield Way and Springinsguth Road intersection is a stop sign controlled intersection. During the month of September, Streets and Signs staff was contacted by the Police regarding this intersection to see what could be done to reduce the amount of motorists that fail to stop for the stop signs. The division suggested adding back-to-back stop signs, red flashing lights on top of each stop sign, and adding a larger stop ahead signs. After reviewing these options with Police, it was decided to move forward with all three suggestions. Staff added solar/battery powered flashing red lights on top of each stop sign facing the direction of travel. All four stop sign locations were upgraded with back-to-back stop signs. All stop sign posts received red reflective post panels. In addition, four stop ahead signs were upgraded to 36 inches.

Electrical/Customer Service Division

- Completed 73 water turn-ons due to delinquent billing.
- Participated in Asset Management demos for potential Asset Management for the Village of Schaumburg.
- Picked up and disposed of 31 deceased animals.
- Completed Group 3 opticom – folding stop sign inspections.
- Completed 980 area checks for light outages.
- Completed 84 banner changes.
- Completed four banner repairs.
- Assisted a resident with the removal of their keys from a storm sewer.
- Repaired 12 trip hazards.
- Installed power in the Engineering and Public Works Weathersfield Meeting Room for audio equipment.
- Installed parking lot lights back up in the Atcher Municipal Center parking lot and bike path near the main stage from Septemberfest.
- Removed handicap signage from the farmers market at the American Indian Center, five times.
- Installed indicator light for the Engineering and Public Works dead animal freezer.
- Completed eight E-Locates.
- Took two trucks to Safety Lane.
- Inspected 240 banners after a heavy wind storm.
- Completed 11 streetlight outage repairs.
- Installed electric services and two locates for the brine pumping station for village trucks.
- Inspected four streetlight pole locations with concerns from the Village’s contractor for the LED conversion.
- Installed a pole for the Jack Siegel memorial.
- Completed 11 swan checks at the Atcher Municipal Center.
- Completed cleanup on Friday afternoons at the farmers market.
- Completed one after-hour sanitary sewer inspection.
- Delivered and picked up block party barricades and signs at 12 locations.
- Installed a LED test bulb in a Bollard fixture around the lake at the Atcher Municipal Center.
- Completed the scraping and painting of six streetlight cabinets.
- Completed sidewalk grinding at 38 locations.
- Delivered and picked up Adopt-A-Highway barricades, signs, and debris on four occasions.
- Reset a knocked down pole due to a car accident on Plumwood and Plum Grove Road.

- Assisted the Fire and Police Department with barricades for the open house.
- Made repairs to the approach lights on the east end, four times, at the airport.
- Completed repairs to a damaged streetlight cable on Williamsburg.
- Completed repairs to a streetlight duct on Whittier and Weathersfield Way.
- Completed 14 area checks at the airport, ballpark, and commuter lot.

Storm Sewer Division

- Completed 17 inlet repairs and 2 manhole/catch basin replacements.
- Completed 223 inlet and 505 grate cleanings.
- Cleaned 81 catch basins.
- Cleaned eight grates and one inlet.
- Responded to 16 Customer Service Repairs.
- Repaired four feet of mainline.
- Cleaned 480 feet of storm sewer mainline.
- Televised 133 feet of storm sewer mainline.
- Check 118 hot spots for cleaning.
- September 2017: Completed 1,337 requests for J.U.L.I.E. locates.
- September 2016: Completed 1,926 requests for J.U.L.I.E. locates.

Water Division

- Completed three water main break repairs.
- Repaired 58 Buffalo Boxes, and located eight.
- Repaired five fire hydrants, aboveground.
- Repaired four fire hydrants, belowground.
- Replaced one fire hydrant.
- Installed 12 fire hydrant signs.
- Flushed 156 fire hydrants.
- Replaced one valve, located and exercised 15, and repaired three.
- 96 water distribution samples were taken as part of our required monthly samples. All samples pass and met IEPA requirements.
- Three well samples were taken and delivered to the lab. Well No. 21 is out of service.
- Routine water quality parameter samples were taken at the designated sites.
- A new sanitary lift station is being constructed at the Toys and Bode lift station; construction continues.
- Scheduled repairs at Water Station No. 20 for a leaking valve.
- Well No. 21 was put out of service for electrical repairs.
- Completed 201 water shut-offs due to delinquent billing.
- Completed Septemberfest take down and clean up.

- 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:

September 2017: 3,289

October 2017: 3,083

Residential Devices:

September 2017: 455

October 2017: 395

Sanitary Sewer Division

- Sanitary crews televised 1,799.9 Lf. and cleaned 1,325 Lf. of service laterals.
- 87 grease traps were inspected throughout the village.
- Crews removed snow fence for Septemberfest and informational signs throughout the festival grounds.
- Sanitary crews jetted 3,809 Lf. of hot spots throughout the village.
- Installed a new clean out on Crandell Lane.

Status of Current Construction Projects

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

Sanitary Sewer Cleaning and Inspection Statistics

September 2017:

- 6,401.7 Lf. of sanitary sewer main lines were televised.
- 17,318.8 Lf. of sanitary main lines were jetted.

June 2016:

- 5,631.7 Lf. of sanitary sewer main lines were televised.
- 15,270 Lf. of sanitary main lines were jetted.

KEY PERFORMANCE INDICATORS

ENGINEERING & PUBIC WORKS KEY PERFORMANCE INDICATORS:

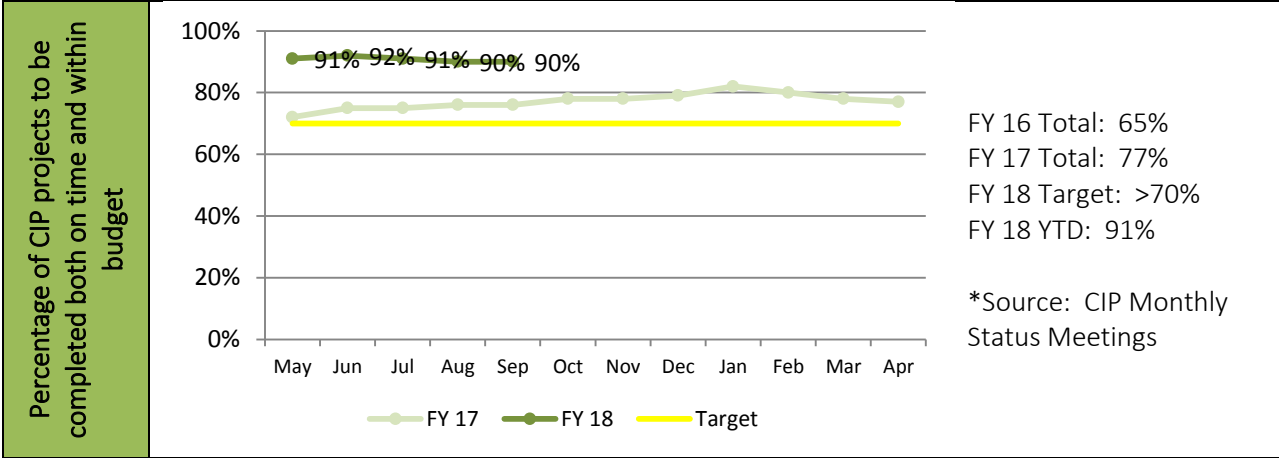
KPI 1: Roadway Clearing Time- Per Snow Event

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 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>0</td><td>10</td></tr> <tr><td>Jan</td><td>8</td><td>0</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>0</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	0	10	Jan	8	0	10	Feb	0	0	10	Mar	9	0	10	Apr	0	0	10	<p>FY 17 Total: 7 Hours FY 18 Target: <10 Hours FY 18 YTD: N/A</p> <p>*Source: PubWorks</p>
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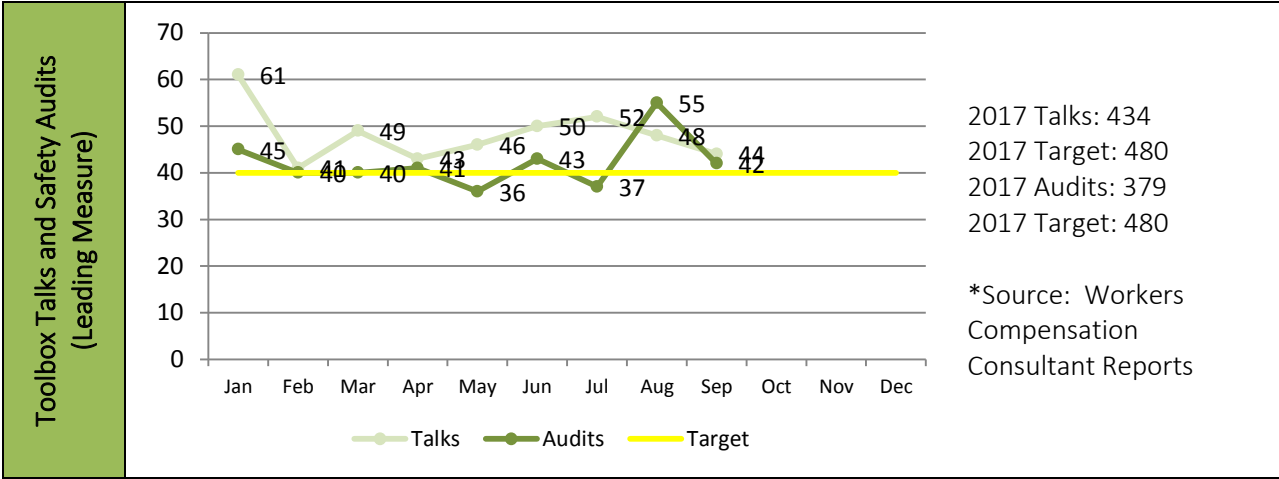
KPI 2: Effective and Efficient Project Management

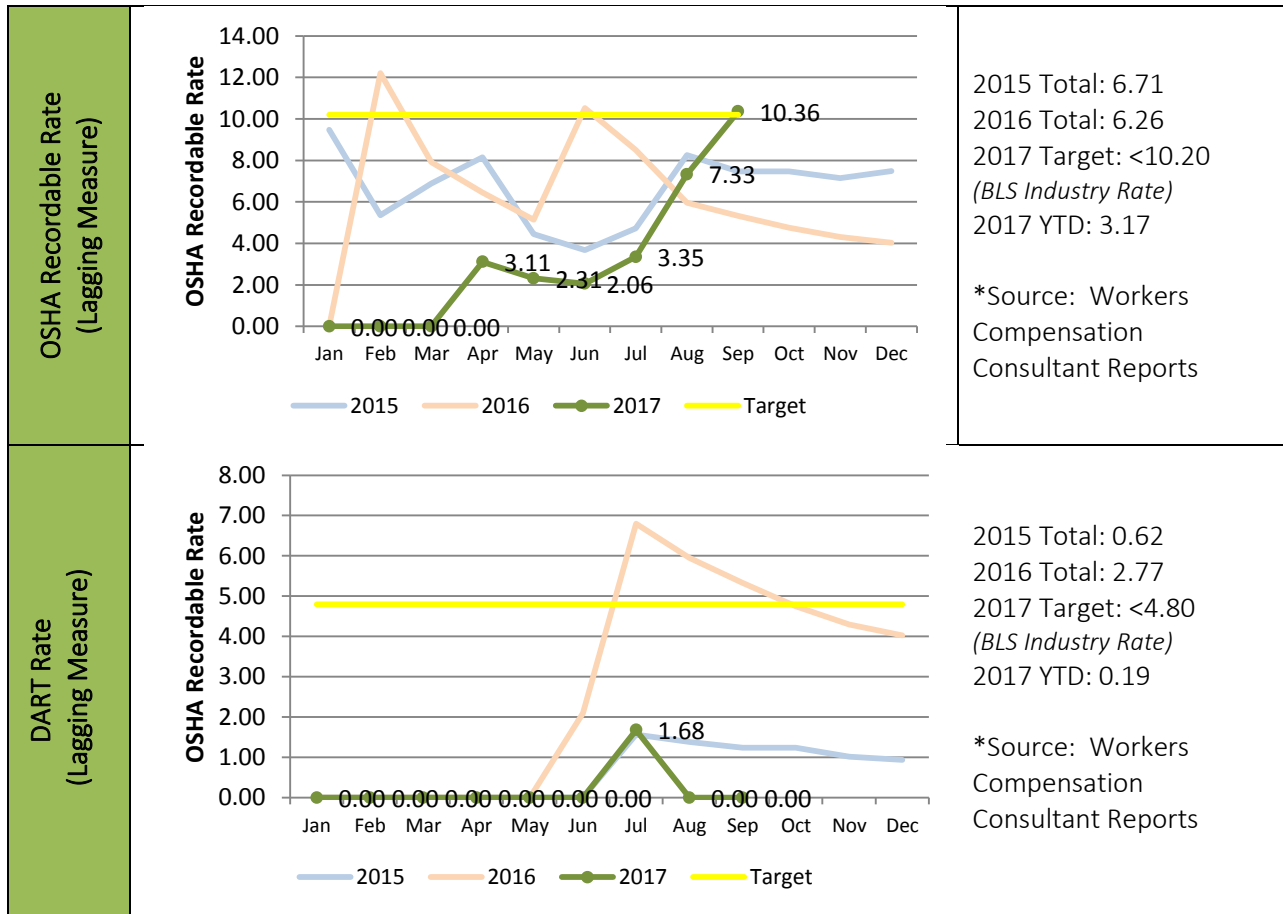
The department currently holds monthly CIP Meetings where projections, timelines, milestones, and schedules are discussed and updated. With this KPI, the department aims to establish a better tracking system for CIP projects to ensure they meet both time and budget commitments. Due to a number of factors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

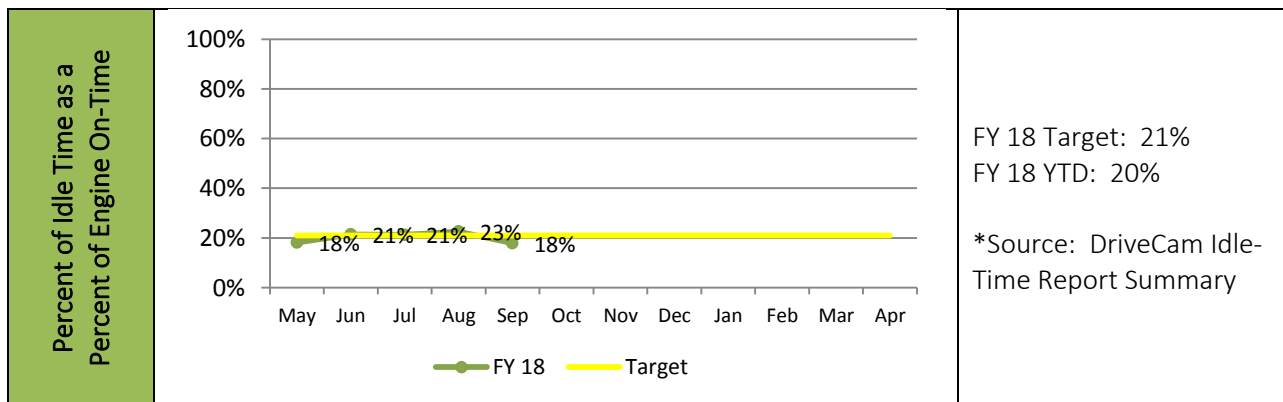
In an effort to drive compliance and increase safe work environments, the Engineering and Public Works Department contracts with an on-site safety consultant who administers the safety program for EPW labor staff. This consultant oversees and monitors all safety procedures, accidents, and required safety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





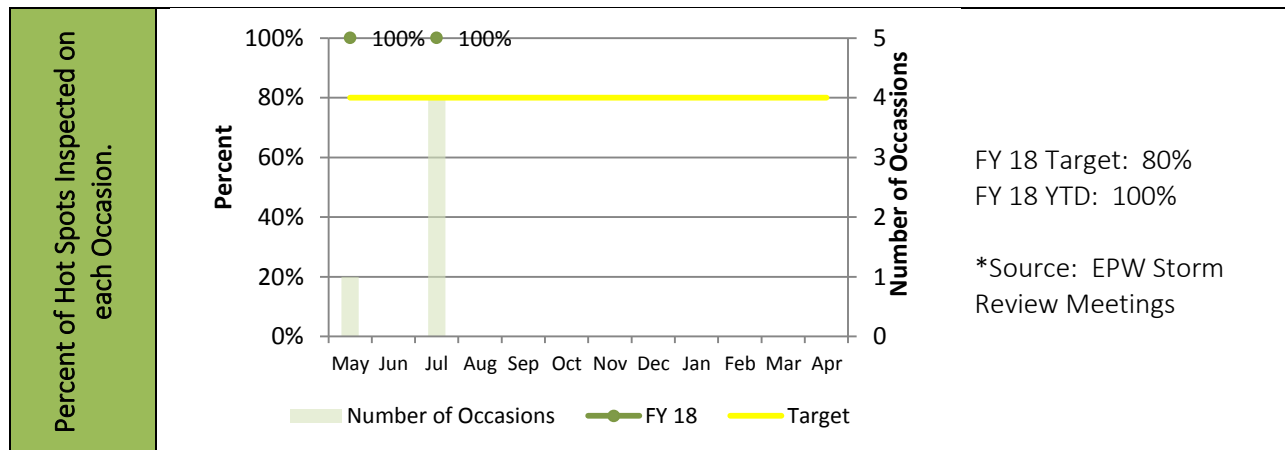
KPI 4: Average Idle Time Reduction for EPW vehicles

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 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.

