

Village of Schaumburg

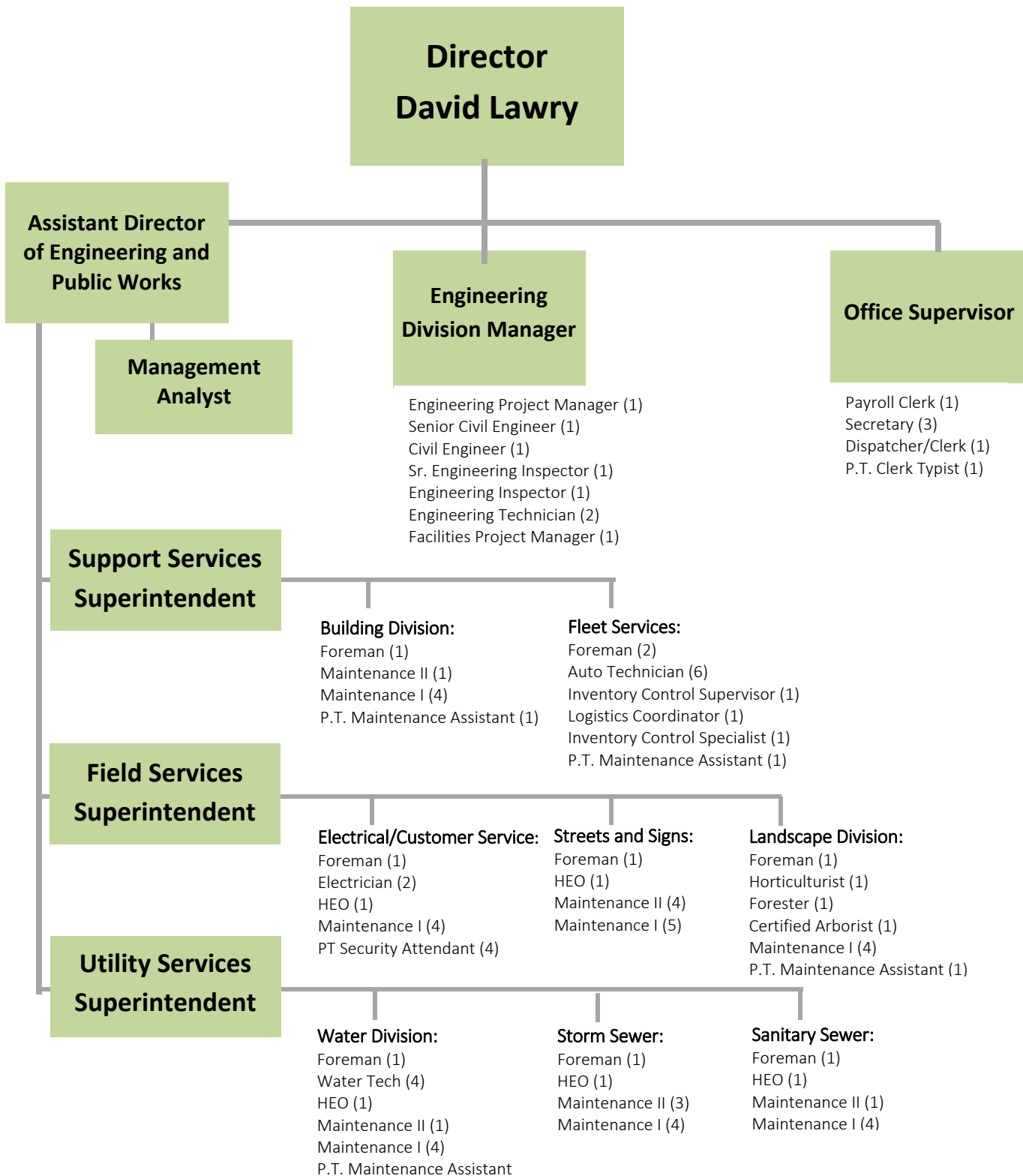
Engineering &
Public Works
Department
Monthly Report

June 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

American Public Works Association - Reaccreditation

Department staff have been working on reviewing current practices and gathering information/documentation to demonstrate the Village's compliance with the recommended Public Works Management Practices Manual. This process provides the department with the opportunity to promote our high-quality work standards and processes as well as identify improvements. Staff will continue working on this process over the next few months.

Emerald Ash Borer (EAB) Program

Removals:

Ash trees are in the process of being inspected and assessed for removal. Currently there are 130 ash trees marked for removal, and the village's contractor has removed 34 of them.

Reforestation:

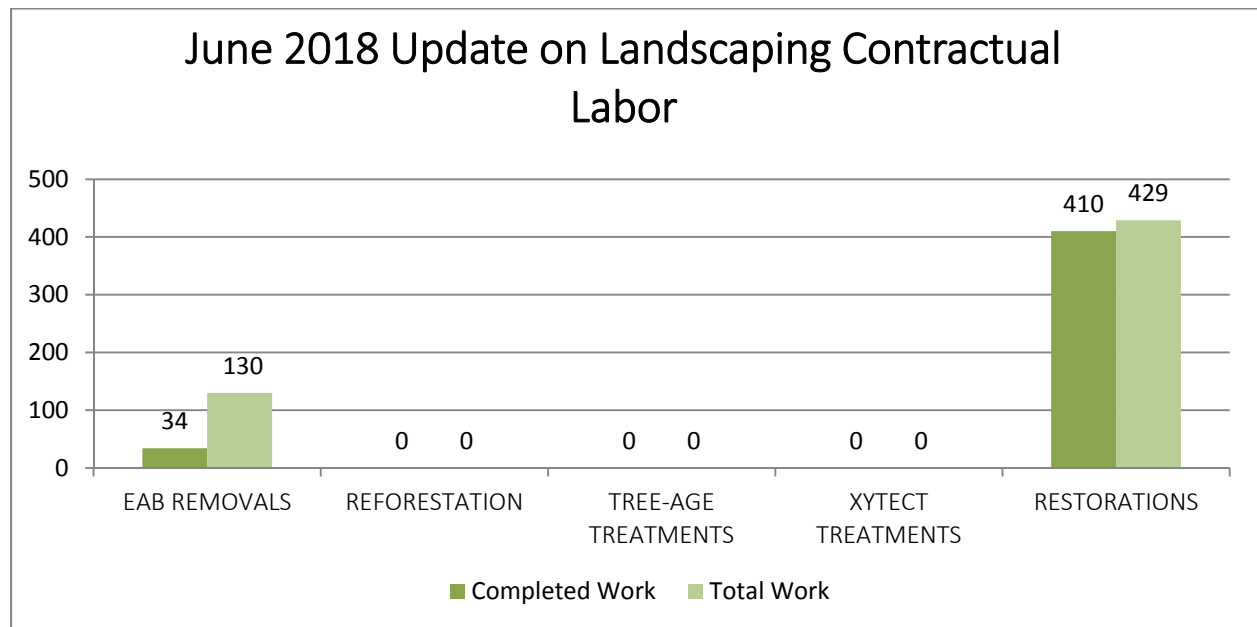
Preparation for the fall planting season will begin soon.

Treatments:

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

Restorations:

The village's contractor has completed 410 of the 429 EAB restorations. The contractor is currently working in town.



Landscape Division

- Completed the spring portion of the semi-annual brush pick up program, chipping 208 piles of brush and bringing the total to 578 piles of brush chipped during the program.
- Completed the mulch delivery to residents with 14 loads delivered, bringing the total to over 200 loads of mulch delivered to residents.
- Kicked off our maintenance program on the 3,600 newly planted trees which consists of: removal of deadwood, structural pruning, and mulching. To date we have addressed 1,100 trees. This program will continue during the summer months.
- Distributed over 1,100 watering bags to residents, bringing the total distributed to over 3,600 bags.

Streets & Signs Division

- Repaired 586481 potholes.
- Completed 1,985 square yards of street patching.
- Completed 13 Customer Service Requests.
- Completed 50 square yards of street restoration.
- Maintained 175 signs.
- Manufactured 54 signs.
- Added 134 signs to the GPS inventory list.
- Created 269 specialty signs.
- Manufactured and installed two vehicle markings.
- Over the past 14 months, sign manufacturing costs have declined dramatically, due to the new process of printing signs rather than using cut vinyl letters.
- Removed 126 No Parking signs throughout the Timbercrest-Woods subdivision for its annual garage sale.
- Provided 15 hours to culvert cleaning, five hours to storm sewer hotspot checks and seven and a half hours for water main repairs.

Electrical/Customer Service Division

- Completed 43 water turn-ons due to delinquent billing.
- Picked up and disposed of nine deceased animals.
- Completed Group 3 Opticom – folding stop sign inspections.
- Completed 1,600 area checks for light outages.
- Banners: Changed four, repaired four, and installed five.
- Repaired nine trip hazards.
- Completed nine checks on swans at the Atcher Municipal Center.
- Inspected poles that Meade Electric and Electrical Condit installed for Verizon Cell Site project.
- Repaired three fixtures at the Fire Memorial.
- Completed six E-locates.
- Inspected banners after two heavy windstorms.
- Repaired 16 streetlight outages.
- Cold patched nine trip hazards from sidewalk program.
- Visited ten pole locations with concerns relating to JCI LED conversion.
- Assisted at five sanitary sewer backups.

- Inspected all Welcome to Schaumburg signs, installed LED fixture at one.
- Performed three after-hours sanitary sewer inspections
- Performed security check at 121 Long Avenue.
- Performed area checks at airport, ballpark, commuter lot twice.
- Grinded five sidewalk locations.
- Performed re-inspection of street lighting system at Meacham Road Tollway Project.
- Made repairs to four approach lights at airport's west end.
- Worked on September Fest items.
- Assisted Landscape Division with tree removals.
- Assisted with repairs to Well 22.
- Inspection of Mobility sites.
- Farmers Market cleanup.
- Assisted Storm Division with pump.
- Performed cleanups for 7 summer concerts.
- Painted bollard light lens diffusers and installed new lenses as needed.
- Repaired streetlight pole.
- Blood drive sign pickup and delivery.
- Check on swans and cygnets.
- Installed LED for fuel island at Engineering Public Works facility.
- Installed two LEW flood lights at the Prairie Center for the Arts drive.
- Reset pole at after car accident
- Delivered traffic control devices for Church of the Holy Spirit's carnival.
- Installed LED fixture for gateway sign on Algonquin Road.
- Re-inspection of the Roselle Road Tollway project.
- Replace flag and rope for Air Force flag at clock tower.
- At ballpark, worked on wiring in visitors bathroom.
- Installed outlets for Community Development Department.
- Checked street light control boxes for meters throughout village.
- Check holiday power needs for new decorations.
- Assisted Landscape Division with stalls at commuters lot.
- Installed electric padlocks on street light cabinets.
- Repaired lights on Town Square fountains.
- Assisted Prairie Center for the Arts with motor installation.

Storm Sewer Division

- Completed 11 inlet and two grate cleanings.
- Cleaned six catch basins.
- Completed nine inlet repairs.
- Repaired 26 feet of mainline and installed 70 feet of new mainline.
- Cleaned 216 feet of storm sewer mainline.
- Completed 59 Customer Service Requests.
- June 2018: Completed 1,696 requests for J.U.L.I.E. locates.
- June 2017: Completed 1,483 requests for J.U.L.I.E. locates.
- Performed 361 hot spot inspections.

Water Division

- Repaired three water mains.
- Repaired five valves.
- Repaired 44 Buffalo boxes.
- Repaired eight fire hydrants.
- Fire Hydrant Flushing: 784 flushed, about 1328 completed.
- 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.
- Replaced three commercial meter transmitting units.
- Replaced one residential water meter.
- Repaired 18 residential water meters.
- Processed 197 Customer Service Requests.
- Performance Contract Improvements continue, and all stations are fully online and operational.
- Pump 1 at Toys Lift Station was pulled for removal of debris.
- Stations 12 and 19 Pump and Motor 3 repairs are completed.
- Station 20 motor was removed for repairs.
- Performed 64 water billing turn-offs and turn-ons.
- Processed 161 water billing 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:

June 2017: 3,241
June 2018: 3,396

Residential Devices:

June 2017: 420
June 2018: 492

Sanitary Sewer Division

- Received and closed 66 Customer Service Requests.
- Excavated and replaced the sanitary service line at 231 West Weathersfield Way
- Completed cleaning and televising of sanitary mains for the North Braintree IICP Project.

Status of Current Construction Projects

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

Sanitary Sewer Cleaning and Inspection Statistics

June 2018:

- 5,411 linear feet of sanitary sewer main lines were televised.
- 12,959 linear feet of sanitary main lines were jetted.
- 800 linear feet of root cutting occurred.
- 2,802 linear feet of sanitary service lines were televised.
- 1,311 linear feet of sanitary service lines were cleaned.

June 2017:

- 12,531 linear feet of sanitary sewer main lines were televised.
- 26,838 linear feet of sanitary main lines were jetted.
- 210 linear feet of root cutting occurred.
- 1,090 linear feet of sanitary service lines were televised.
- 1,597 linear feet of sanitary service lines were cleaned.

ENGINEERING & PUBIC WORKS KEY PERFORMANCE INDICATORS:

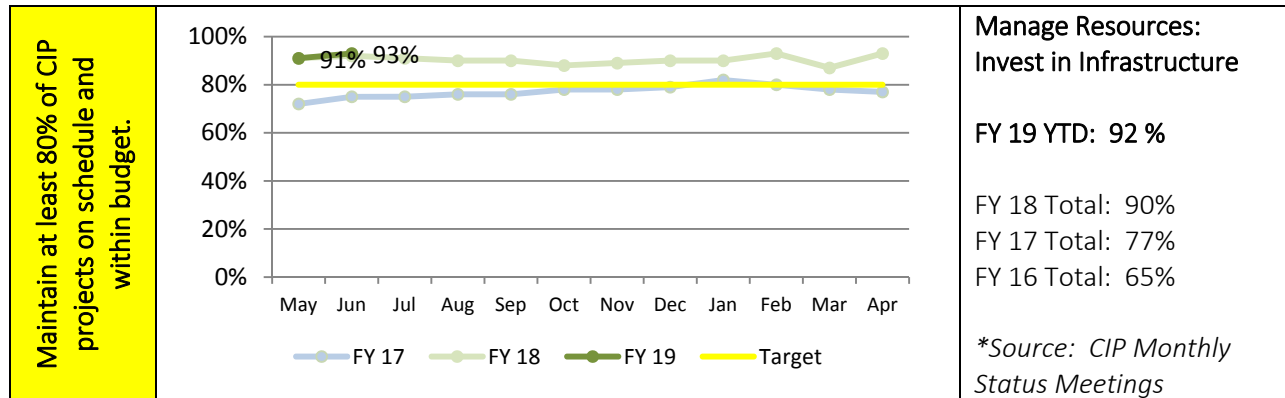
KPI 1: Provide an effective and efficient response to snow events.

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>	<p>The chart displays the number of hours spent on clearing primary routes from October to April. The y-axis ranges from 0 to 12. A horizontal yellow line represents the target at 10 hours. Data points are shown for FY 17 (blue), FY 18 (green), and FY 19 (dark green). FY 19 data is zero for all months. FY 17 and FY 18 show significant activity in winter months, with FY 18 generally exceeding the 10-hour target.</p> <table border="1"> <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>0</td> <td>10</td> </tr> <tr> <td>Jan</td> <td>8</td> <td>7</td> <td>0</td> <td>10</td> </tr> <tr> <td>Feb</td> <td>0</td> <td>8.5</td> <td>0</td> <td>10</td> </tr> <tr> <td>Mar</td> <td>9</td> <td>8.5</td> <td>0</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	0	10	Jan	8	7	0	10	Feb	0	8.5	0	10	Mar	9	8.5	0	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>
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<p>Cut the center line on all secondary routes, clear courts, and cul-de-sacs within an average of less than 12 hours.</p>	<p>The chart displays the number of hours spent on cutting center lines on secondary routes from October to April. The y-axis ranges from 0 to 14. A horizontal yellow line represents the target at 12 hours. Data points are shown for FY 17 (blue), FY 18 (green), and FY 19 (dark green). FY 19 data is zero for all months. FY 17 and FY 18 show activity in winter months, with FY 18 generally exceeding the 12-hour target.</p> <table border="1"> <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>0</td> <td>12</td> </tr> <tr> <td>Jan</td> <td>11</td> <td>10</td> <td>0</td> <td>12</td> </tr> <tr> <td>Feb</td> <td>0</td> <td>11</td> <td>0</td> <td>12</td> </tr> <tr> <td>Mar</td> <td>10</td> <td>11</td> <td>0</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	0	12	Jan	11	10	0	12	Feb	0	11	0	12	Mar	10	11	0	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>
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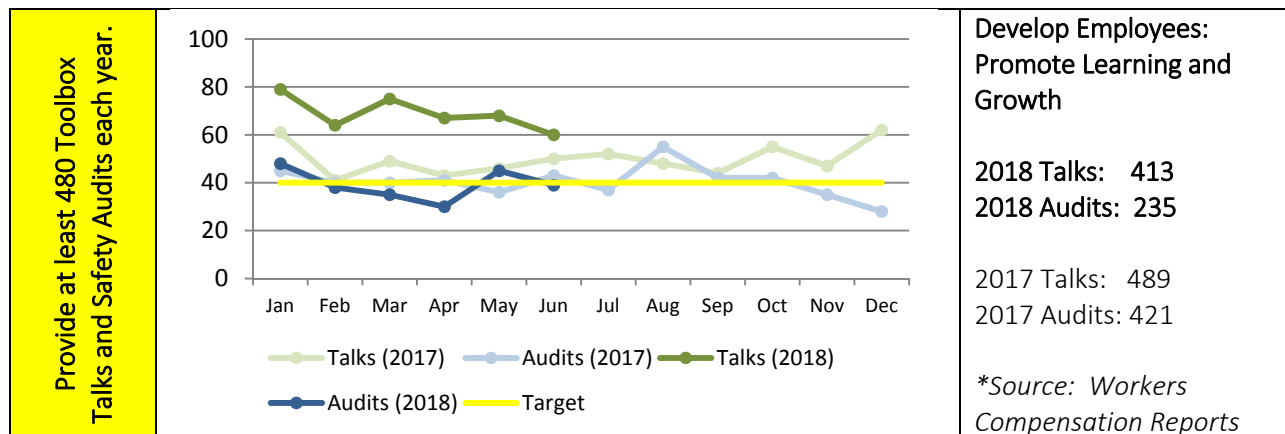
KPI 2: Ensure that CIP projects continue to come in on schedule and within budget.

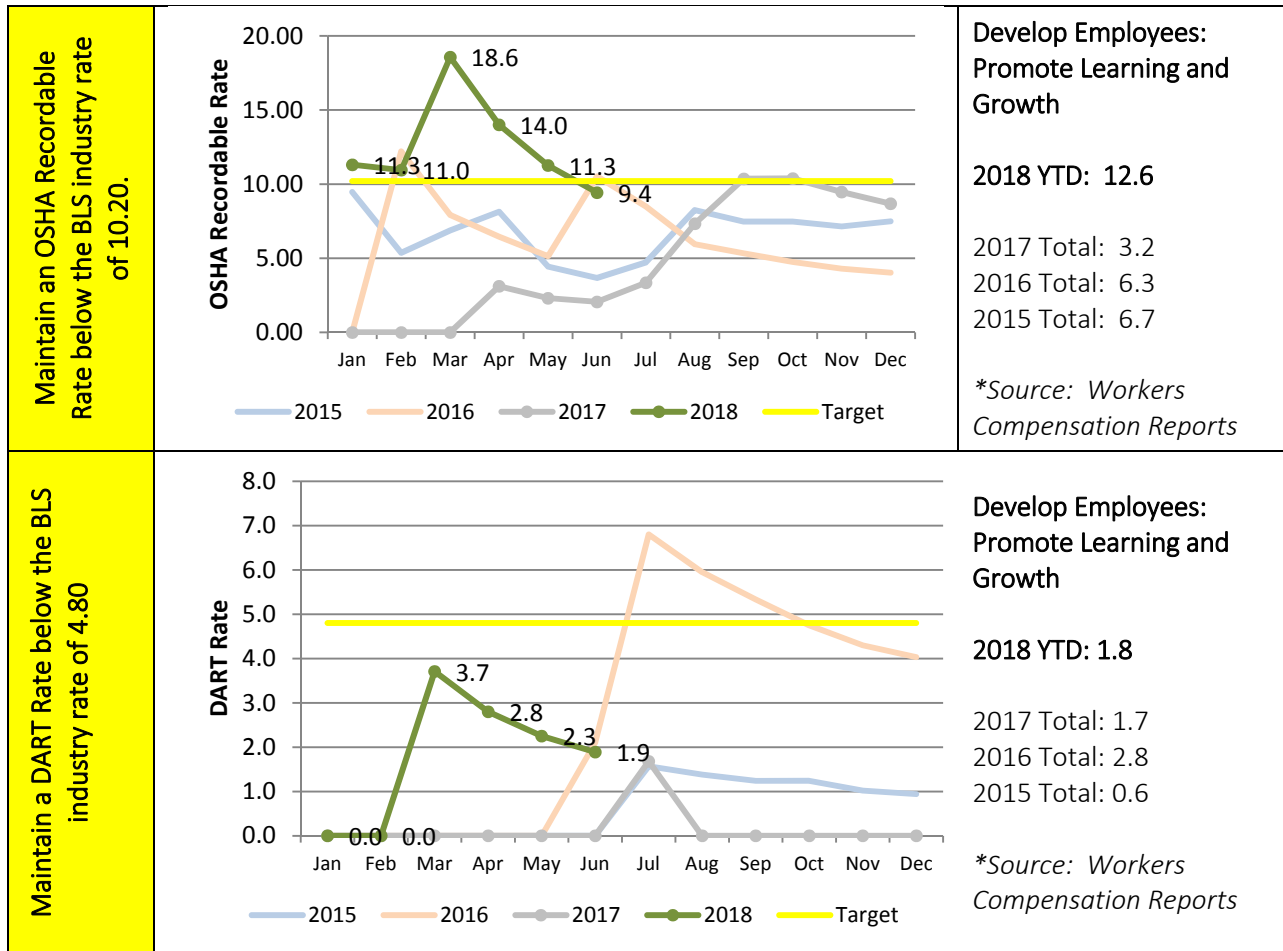
The department currently holds monthly CIP Meetings where projections, timelines, milestones, and schedules are discussed and updated. With this KPI, the department aims to establish a better tracking system for CIP projects to ensure they meet both time and budget commitments. Due to a number of factors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

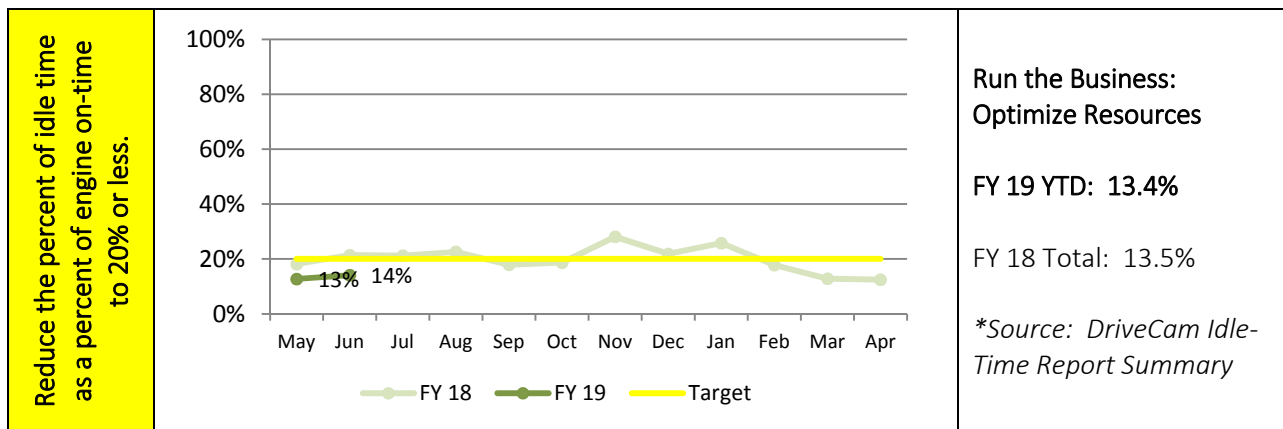
In an effort to drive compliance and increase safe work environments, the Engineering and Public Works Department contracts with an on-site safety consultant who administers the safety program for EPW labor staff. This consultant oversees and monitors all safety procedures, accidents, and required safety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





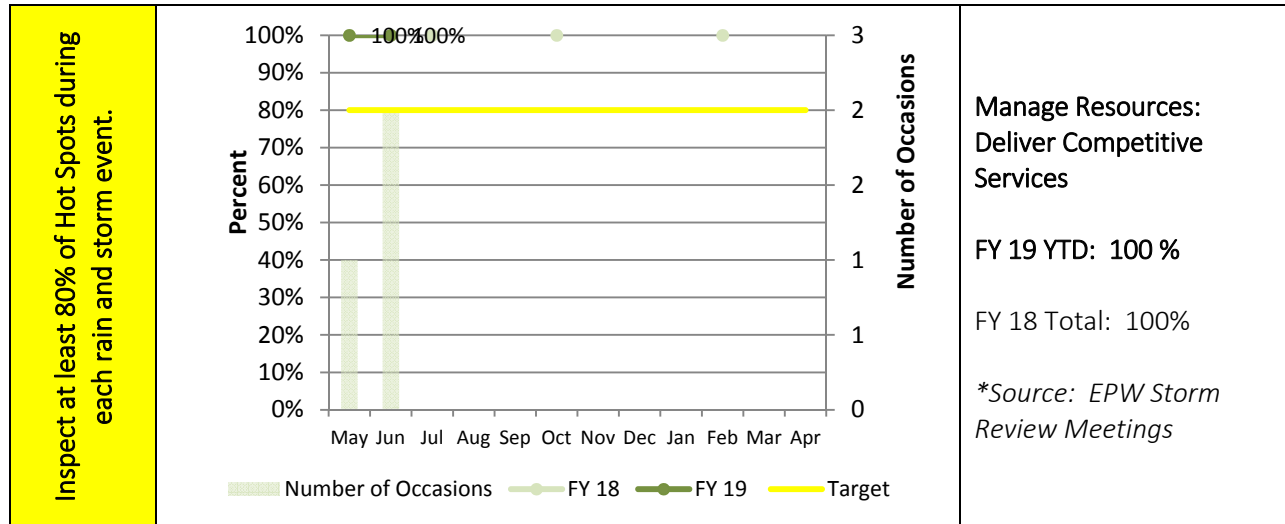
KPI 4: Reduce the average idle time for EPW vehicles.

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.

