Analytics Kickstart: Shedding Light on Safety

Fort Lauderdale, FL

August 2016

The Bottom Line	Fort Lauderdale's vision to be a safe, beautiful, pedestrian friendly city for all residents can be enhanced by improving the city's intel regarding its street lighting, so GovEx is helping build an intelligence layer for street light operations to leverage when making repair and installation decisions.
Problem	Each year, the city of Fort Lauderdale surveys residents multiple times and street light inadequacy is always a top complaint. The Department of Parks & Recreation manages street lighting for the city's residential neighborhoods and parks, but lacks an adequate parcel-based map of the city's street lighting infrastructure which would enable numerous lighting optimization projects.
Leadership	The city of Fort Lauderdale places enormous importance on ensuring its streets are not only safe, but that residents and visitors *feel* safe no matter where they travel in this destination city. From the City Manager to the department heads, all members of the city's leadership team demonstrated commitment to improving their use of data for street light operations.
Staffing	The project involves a collaboration between four members of the GovEx team and at least three members of the Fort Lauderdale team, all of which work on this project part time.
Data	The project team is leveraging streetlight location owned by Florida Power and Light; City Building permits for 2015; 311 data 2014-present; Crime data for Uniform Crime Reporting requirements; and resident survey data about the perception of safety.
Technology	During the planning and development of this project, the team is using Excel, CartoDB, QGIS, and Open source geocoders.
Methodology	The team is mapping street light locations against physical and political boundaries & determining light coverage and dark areas of the city - then comparing the results to crime and perception results. The team is also analyzing building permit data to anticipate where FTL is growing, informing the future placement of street lights.
Results	The project is expected to be completed in the Fall of 2016. Results will be available at that time.