

### IC WORKS BALTIMORE CITY DEPARTMENT OF PUBLIC WORKS BALTIMOR



**CWEA – The Soft Side of Asset Management Webinar** 

January 18, 2018

## **Baltimore Department of Public Works**

### Water

Serves 1.8 million consumers 3,700 mi/400k accounts 3 reservoirs 3 WTPs / 405 MGD 19 pump stations 24 storage tanks/reservoirs Wholesale customers

## Waste Water

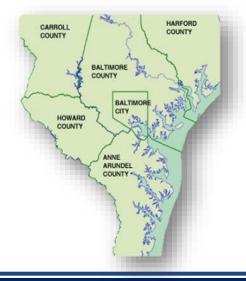
1,400 mi of pipe 270K accounts in the City 9 pump stations 2 WTPs - 250 MGD Serve Adjacent Counties

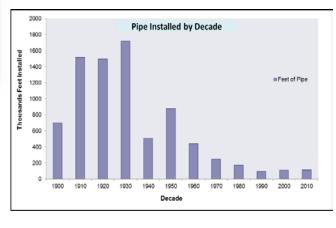
## **Storm Water**

Separate system 92 square miles 1,200 miles of pipes 4 pump stations

## **Solid Waste**

Quarantine Rd Landfill 1 transfer station Trash Collection/Recycling Street Sweeping Abandoned Properties Rat Control Graffiti Public ROW cleaning



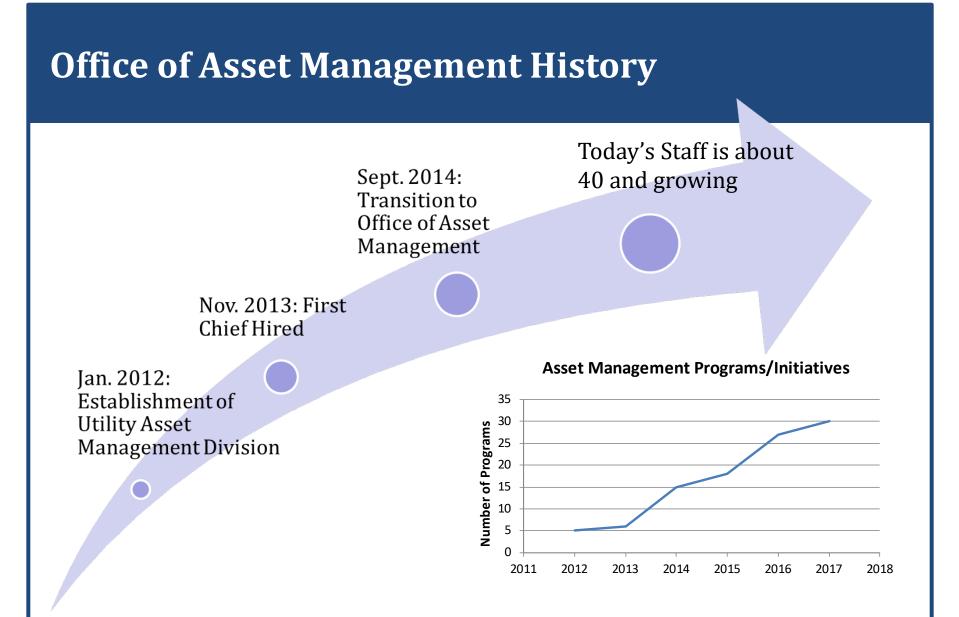




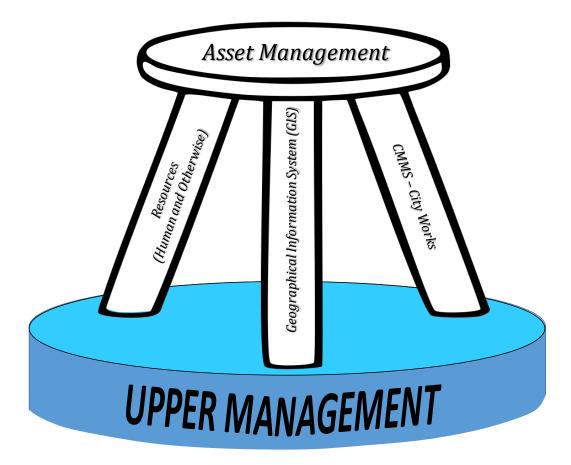
## **Asset Management Drivers**

- Managing aging, high-risk infrastructure
- Meeting environmental mandates in a responsible and sustainable manner
- Justify infrastructure investments
- Providing adequate LOS without excessive burden to customers

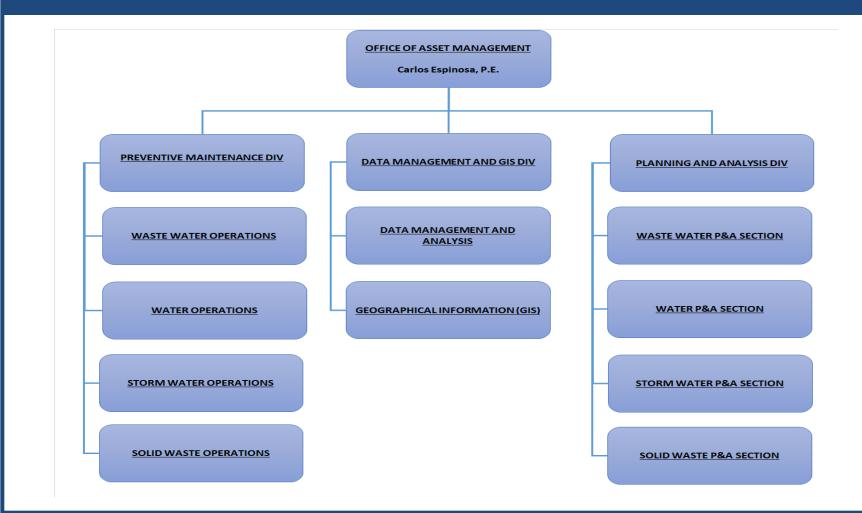




## Asset Management Stool



## **Asset Management Organization**



## **PM Program Planning Document**



## **Asset Management Programs**



#### Water Infrastructure

- Distribution System Renewal
- Strategy for Minimizing Risk of Failure in PCCP
- Large Ferrous Main Assessment
- Unidirectional Flushing (UDF)
- Valve and Hydrant Assessment
- Water System Audit
- Leak Detection
- Water Main Failure Analysis
- -Water Meter Maintenance and Testing

#### Waste Water Infrastructure

- SSO Root Cause Analysis
- FOG Prevention and Abatement
- Root Control
- Lateral Assessment and Renewal
- Collection System Cleaning
- Trunk Main Inspections
- Force Main Assessments
- Collection System Valves

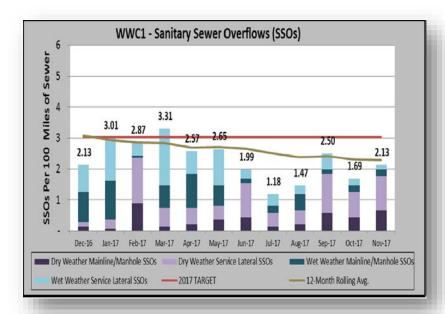
#### Storm Water Infrastructure

- Inlet Inspections
- Storm Water Facilities (BMPs) O&M

#### Solid Waste

- -Street Sweeping
- Big-Belly Cans
- Abandoned Properties Maintenance

## Level of Service (LOS) Indicators

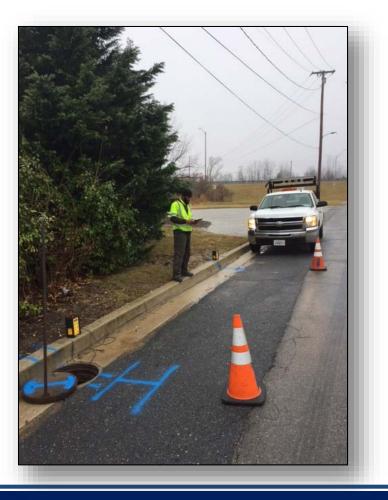




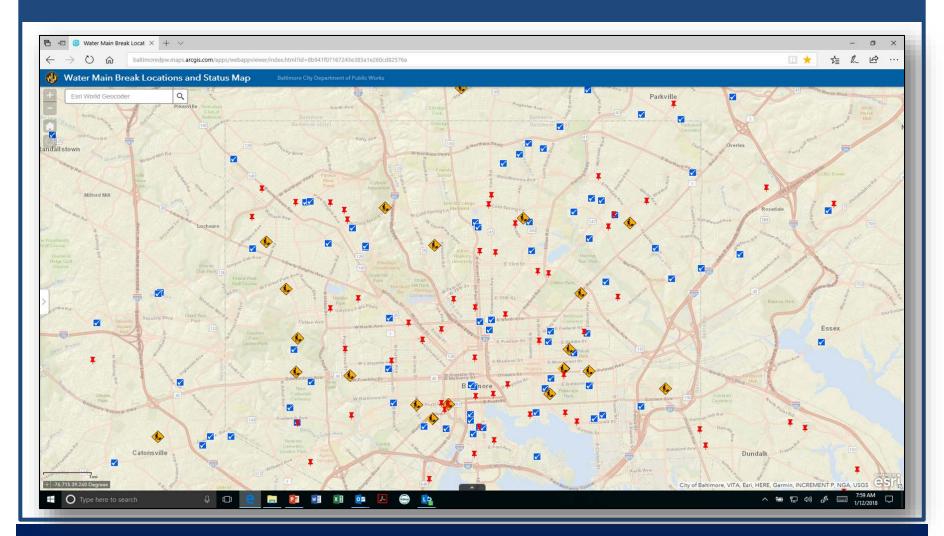
## **Data Collection**

## Inspections using field apps.

- Leak Detection
- Valve and Hydrant Assessments
- Sanitary Sewer Overflows
- Storm Water Inlet Inspections
- Fire flow tests
- C-factor tests



## **Leveraging Information**





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