

# A Change Is Gonna Come

Continual Asset Management through GIS

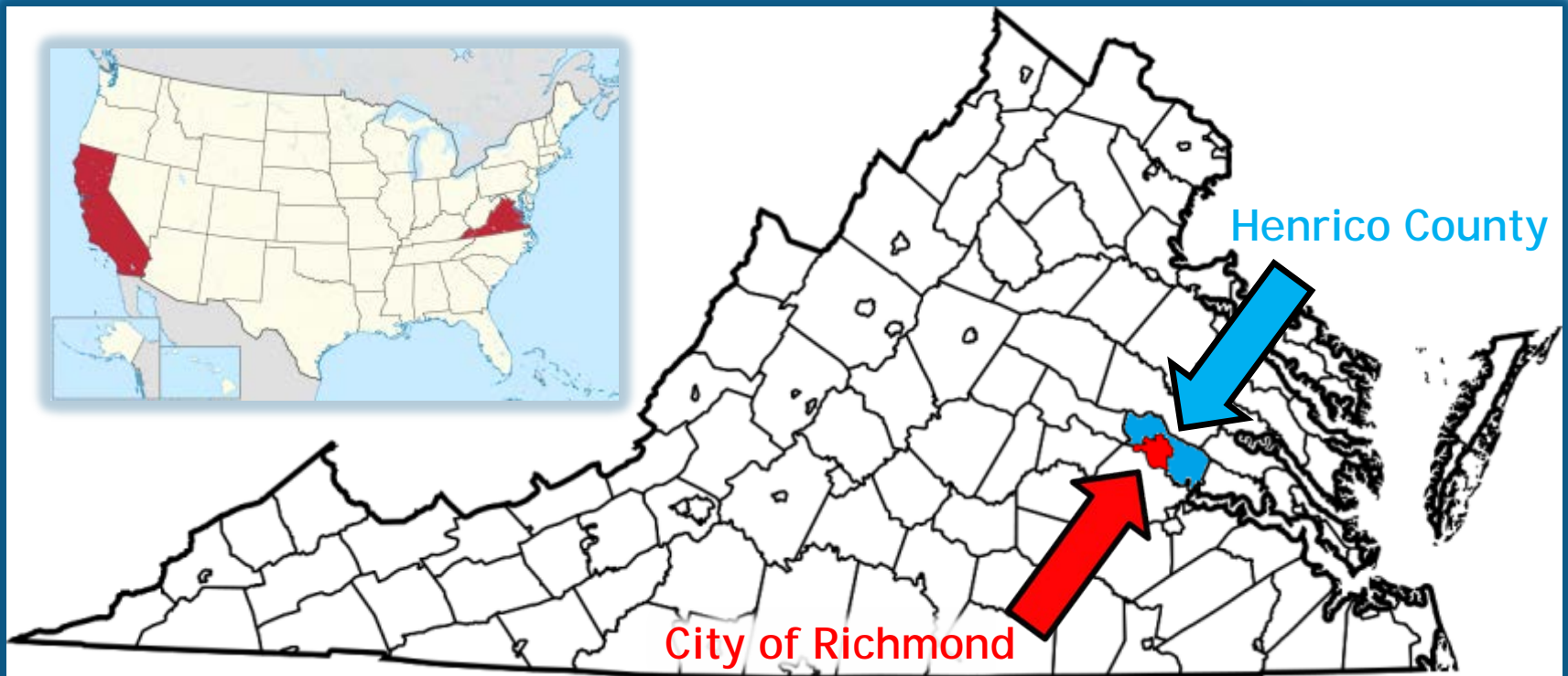
Bentley Chan, P.E., Cliff Parker, and Jeff Owen

Esri User Conference

July 13, 2017



# Henrico County, Virginia



Department of Public Utilities

Director

Assistant Director

Business Division

Construction Division

Design Division

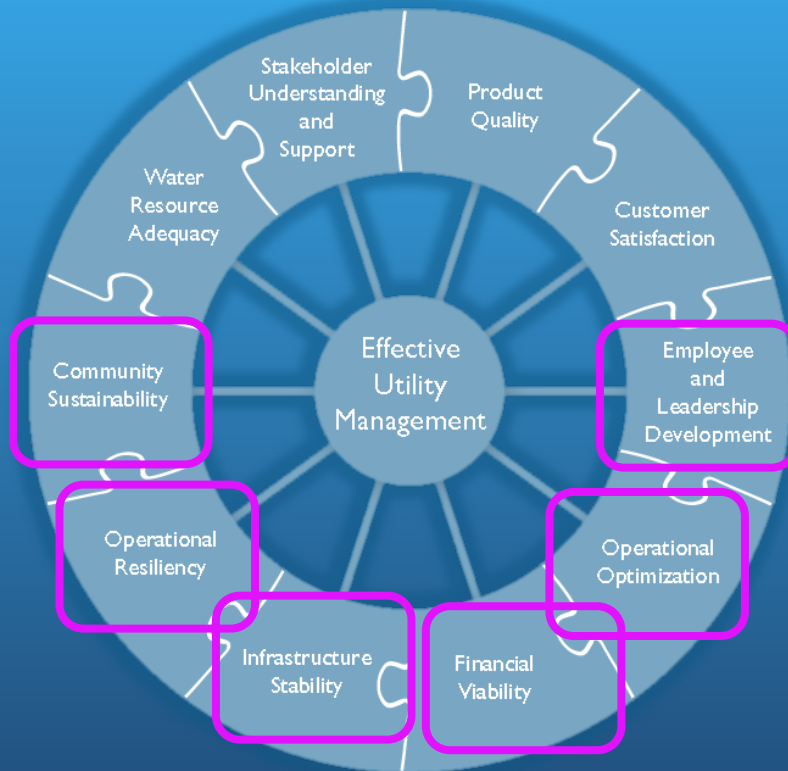
Operations Division

Solid Waste Division

Water Reclamation Division

Water Treatment Division

# Effective Utility Management

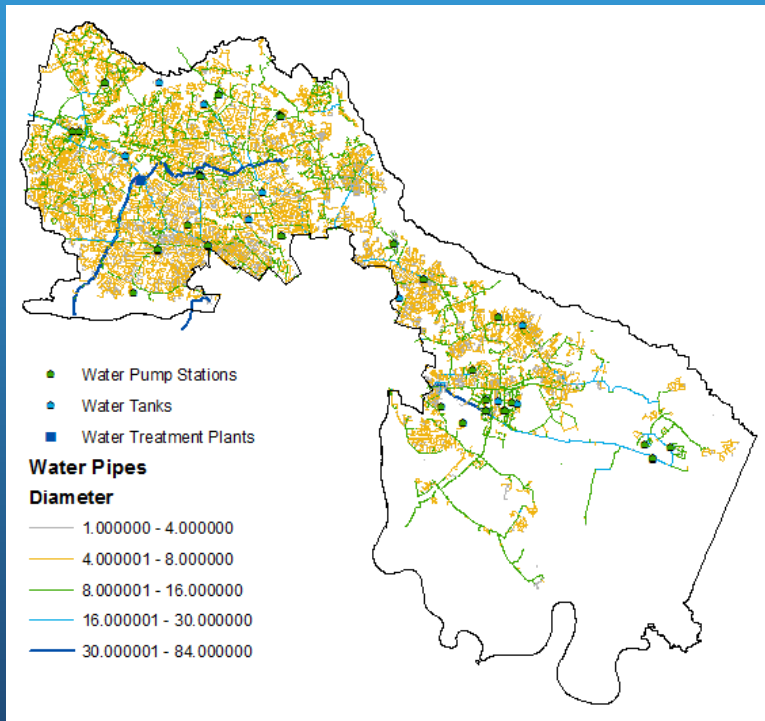


Ten attributes of effectively managed water sector utilities

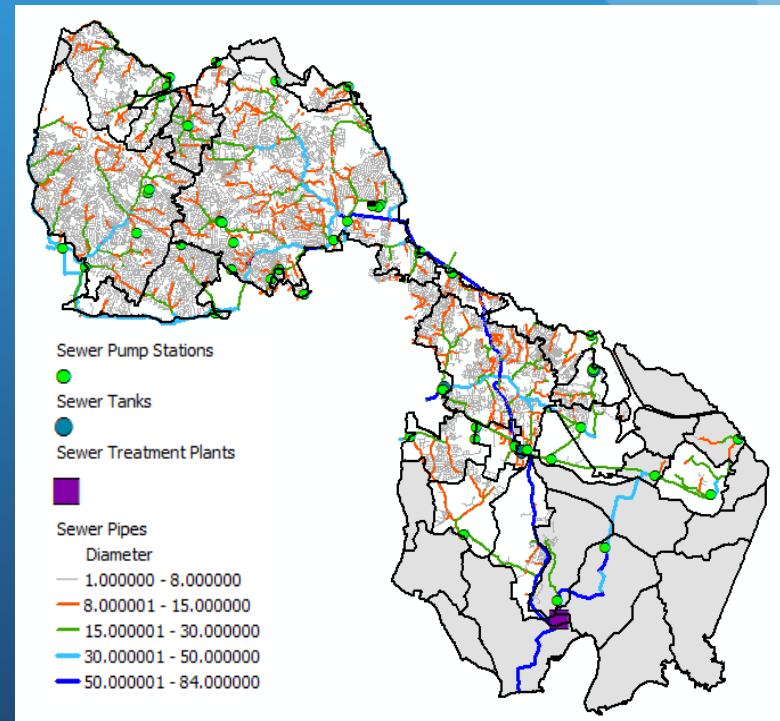


WaterEUM.org

# Water Distribution



# Wastewater Collection

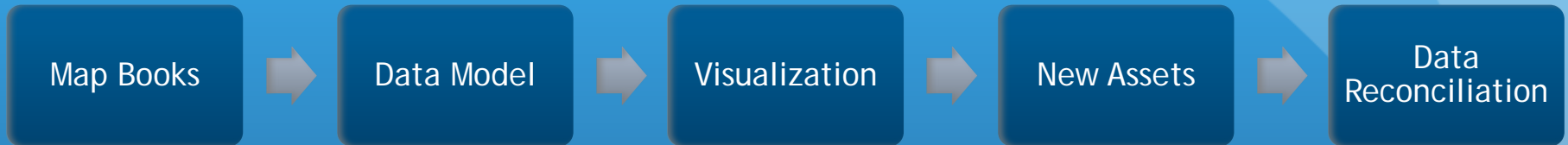


# Build Out (1924 to Present)

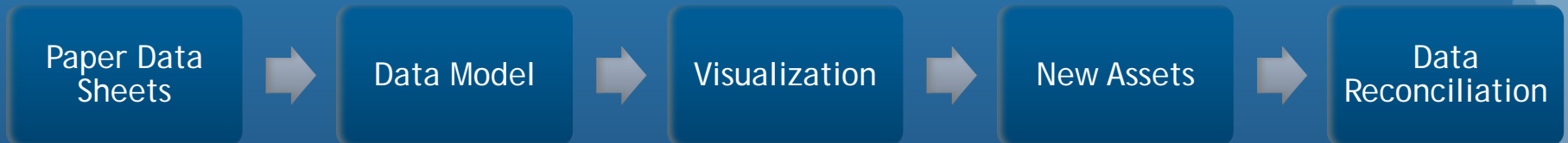
- Video

# How Did We Get Started?

- Horizontal Assets



- Vertical Assets



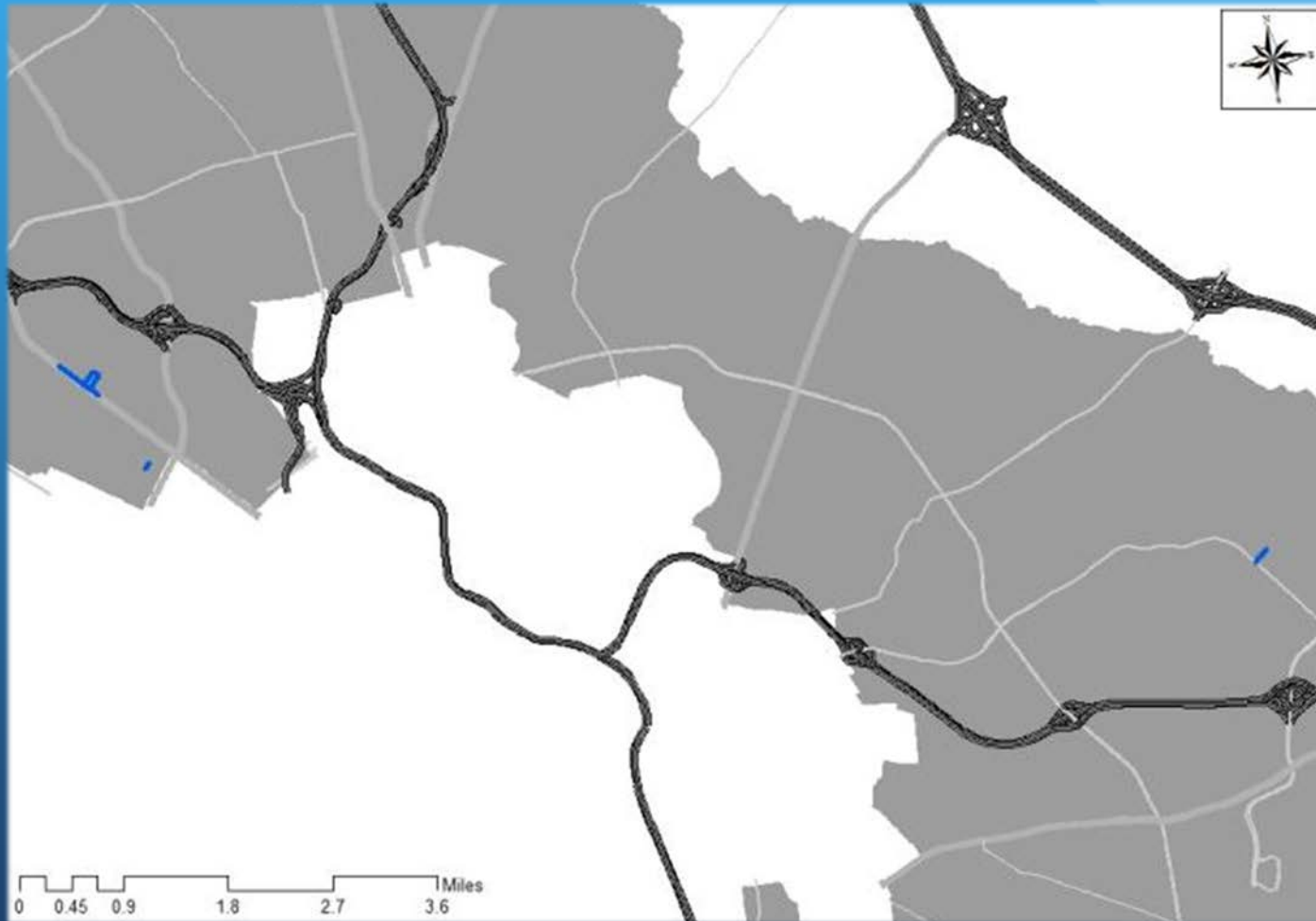
# Where Are We Going?

- Building a Better Process

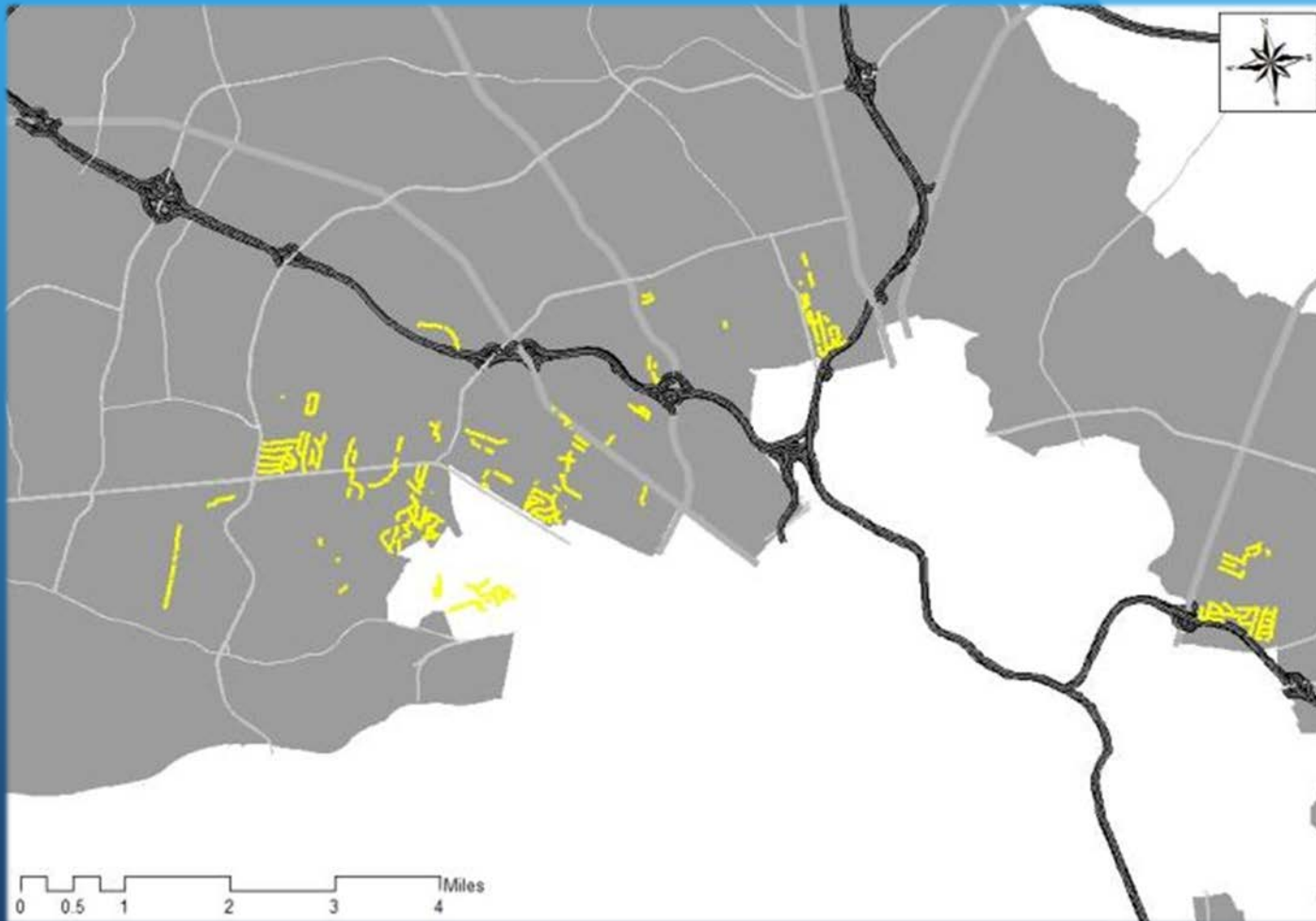




# Why Does It Matter?



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| Fiscal Year   | Number of Items | Total Needs         | Number of Items (Critical) | Total Needs (Critical) | Cost Difference | Current Budget | Anticipated Expenditures |
|---------------|-----------------|---------------------|----------------------------|------------------------|-----------------|----------------|--------------------------|
| FY 2017       | 388             | \$5,345,679         | 12                         | \$405,000              | -\$4,940,679    | \$1,365,600    | \$1,390,729              |
| FY 2018       | 56              | \$744,800           |                            |                        |                 |                |                          |
| FY 2019       | 79              | \$3,507,725         |                            |                        |                 |                |                          |
| FY 2020       | 81              | \$2,398,800         |                            |                        |                 |                |                          |
| FY 2021       | 81              | \$910,400           |                            |                        |                 |                |                          |
| FY 2022       | 29              | \$449,700           |                            |                        |                 |                |                          |
| FY On         | 25              | \$279,500           |                            |                        |                 |                |                          |
| <b>Totals</b> | <b>739</b>      | <b>\$13,636,604</b> |                            |                        |                 |                |                          |

# What Do We Need?

## Data

- Refine
- Quality

## Process

- Retirements
- Replacements

## Criticality

- Rating
- Queries



# Applications



DEMO

# Questions?

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#achangeisgonnacome

