

# City of Dayton

## Preparing for Asset Management



Nick Dailey  
City of Dayton, Ohio  
Department of Water

# Topics to be covered:

- What is Asset Management (AM)?
- City of Dayton Assets
- Evaluating and Understanding Our Asset Needs
- Our Goals



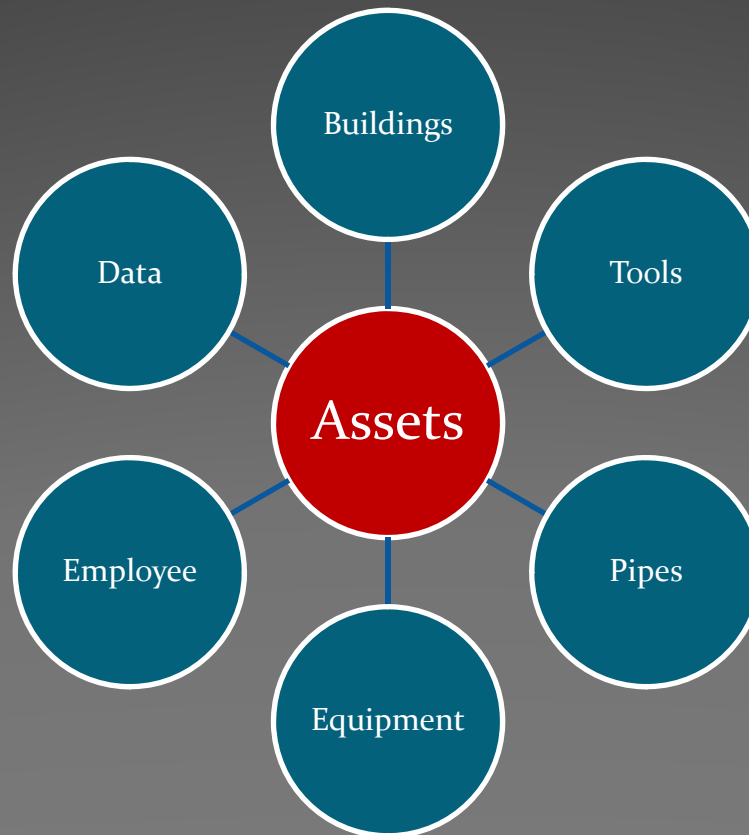
# What is Asset Management?

*“A process for maintaining a desired level of customer service at the most appropriate cost.”*



# What is an Asset?

Data/Resources used in the operation of a utility.



# City of Dayton – Asset Info

- Water System
  - Two 96 MGD Water Treatment Plants
  - Eleven booster stations
  - Nine underground reservoirs
  - Six elevated storage tanks
  - 800+ miles of water mains
- Sanitary System
  - One 72 MGD ADF Advanced Wastewater Treatment Plant
  - Fourteen pumping stations
  - 20,000+ manholes
  - 730+ miles of sanitary sewers

# City of Dayton – Asset Info (cont'd)

- Storm System
  - Encompasses 56.4 square miles
  - Fourteen pump/lift stations
  - 21,000+ catch basins/inlets
  - 15,000+ storm sewer manholes
  - 550+ miles of storm sewers
  - 563 outfalls

# City of Dayton – Asset Info (cont'd)



## Software packages for data storage

- Hansen
- Public Owned Treatment Work (POTW) Administration and Compliance System (PACS)
- Laboratory Information Management Software (LIMS)
- Supervisory Controls and Data Acquisition (SCADA)
- ESRI Geographical Information System (GIS) products
- InfoWorks, InfoWater, Etc.







# Thoughts on Assets

- Assets are not equal
- All assets will fail over time
- Failures impact the entire system
- Condition & criticality analysis should be performed





# Evaluating and Understanding Our Asset Needs

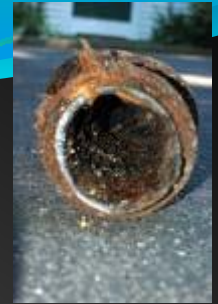


# Questions We Asked?

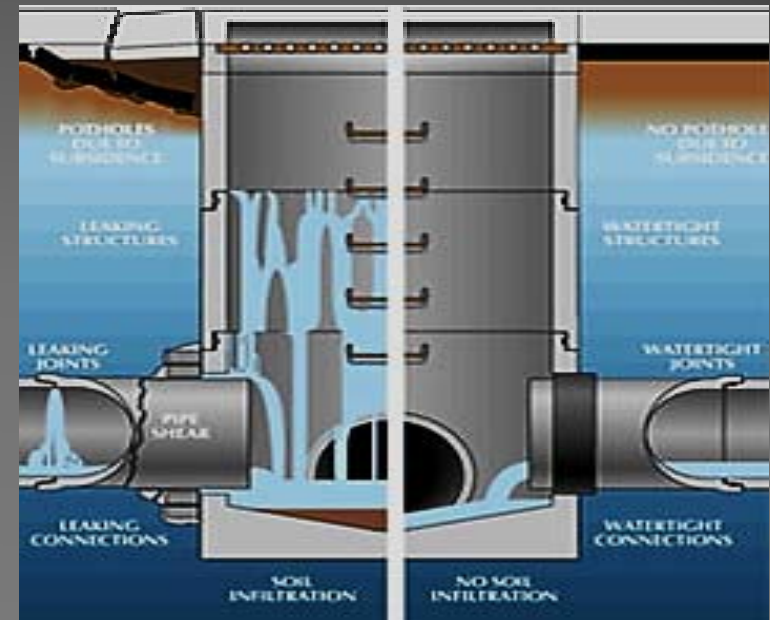


- What assets do we own?
- Where is information stored for the assets?
- What is its condition?????????
- What is its useful life?????????
- What is its value?????????

# Questions we need answered?



- How could our assets fail?
- What are the consequences and potential for failure?
- Costs to repair?



# What is Our Desired Level of Service?

- Are regulators involved? Not yet!!!
- Determine performance goals for the utility
- What level of service do our customers demand?
- What are the performance capabilities of our assets?



# What is our best Maintenance Strategy?

## ➤ Two Options for Asset Maintenance

1. Non-preventative
  - (wait)
2. Preventative
  - (plan)

- Repair
- Rehab
- Replace
- Abandon



# Utilizing Our AM for Capital Improvement Planning (CIP)

- Development of Cost
  - CIP vs. O&M
- Prioritizing Improvements
- Financing and Planning



# Determining our best Long-Term Financing Strategy.



- What are the economic costs associated with our utility?
- How can we move to a true cost of service pricing?

## Potential Strategies:

1. Revisit our rate structure
2. Create an asset annuity or another type of reserve
3. Consider financial assistance



# Our Goals



## Through Our RFP:

- ✓ Review and understand our current assets
- ✓ Find our most critical assets
- ✓ Provide defensible facts to backup budget requests



# Our Goals (Cont'd)

## Future:

- Determine our desired level of service
- Determine our best CIP and O&M strategies
- Analyze long-term financing options
- Increase efficiency (staffing and operations)
- Reduce cost and time by being proactive
- Improve customer service



# Questions??



Any additional questions can be sent to  
[nick.dailey@cityofdayton.org](mailto:nick.dailey@cityofdayton.org).

