

# Network Management with ArcGIS

Foundational Technologies for Modern  
Network and Asset Management

Jay Hoffman, Account Manager







# esri

## SERVING OUR USERS

*... Working Together  
to Make a Difference*

*Advancing GIS & The Science of Where*

*Engineering and Science Focused*

*Strong and Growing*

*Promoting Geographic Thinking  
... at a Global Scale*



The background is a dark blue map with a light blue grid pattern. A white dotted rectangle is centered on the map, containing the text. The text is white and bold.

# ArcGIS

Enables Utilities to Operate  
More Efficiently and Cost  
Effectively

# Network Management with ArcGIS

More than just where assets are

- System of record
- Trusted information
- Available anywhere
- Enables analysis





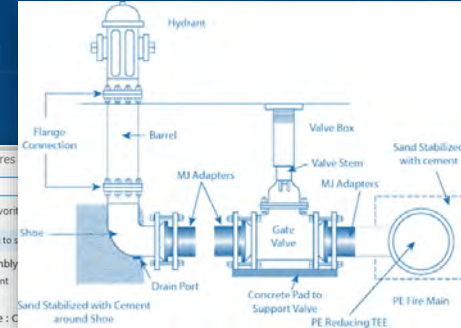
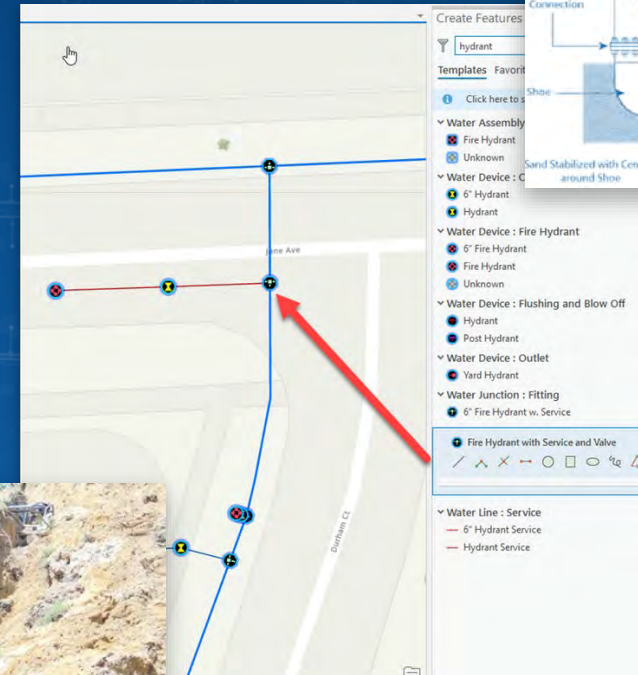
# Key Drivers of Modern Network Management:

- Data integrity
- Asset modeling capabilities
- Emergency response and communication
- System analysis and reporting
- Configuration instead of customization

# Key Drivers of Modern Network Management:

## Data Integrity

- Less prone to errors
- Efficient editing
- Understand how assets are connected



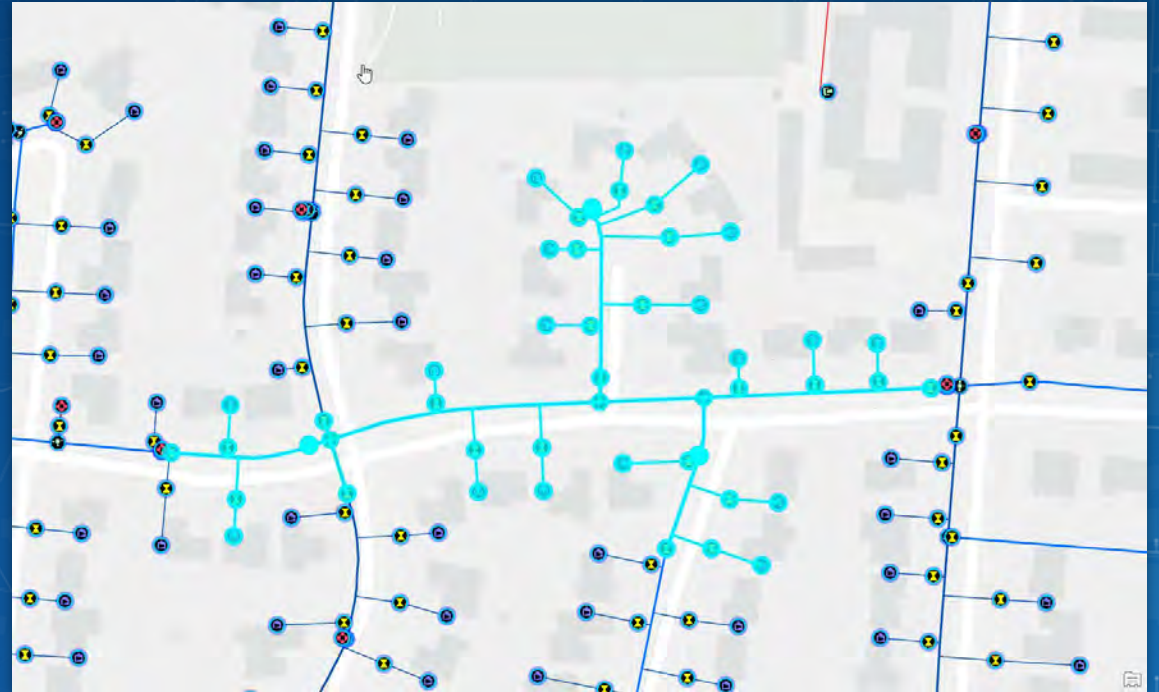


# Key Drivers of Modern Network Management:

## Emergency Response and Communication

- Outage isolation tracing identifies:
  - valves to turn during main breaks and planned outages
  - customers out of service
  - hydrants out of service
- Contamination tracing
- Office and field staff perform traces with a few clicks

Customers, hydrants, and valves impacted by outage



# Key Drivers of Modern Network Management:

## System Analysis and Reporting

Understand the state of the entire system

- Automated asset reporting
- Water loss
- Sewer overflow

### Pressure Zone Asset Reporting



*Gain deeper understanding of the system...*



# Key Drivers of Modern Network Management:

## Configuration Instead of Customization

Does more out of the box

- Meet needs of business as they change
- Reduce needs for 3<sup>rd</sup> party applications
- Deploy configurable apps quickly

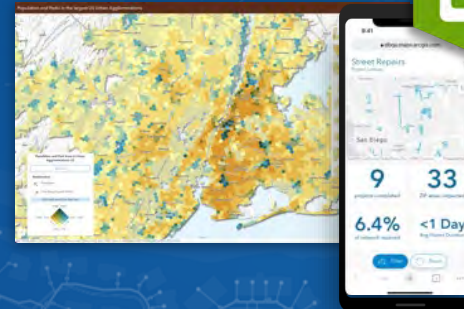
Dashboards



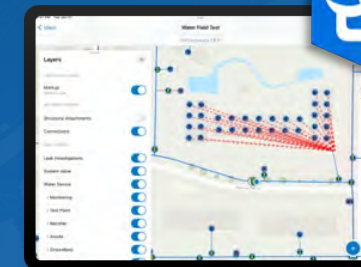
Experience Builder



Instant apps



Field Maps

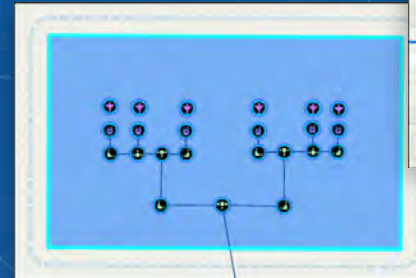


# Key Drivers of Modern Network Management:

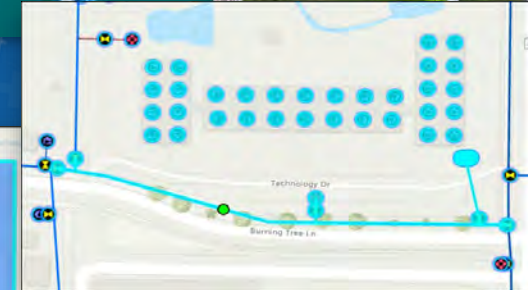
## Asset Modeling Capabilities

- Detailed industry standard data models
- Configurable
- Model complex asset configurations
- Enables detailed analysis

Treatment Plants



Meter Vaults



Apartment Buildings



# Challenges

# Obsolete Technology



# Outdated Workflows

[illegible]

# Embracing Change



## Modernization affects technology and people

# ArcGIS supports modern water and wastewater utility workflows

A Comprehensive Location-Based System





# Modern Network Management:



Demonstration

ArcGIS Utility Workflows

# ArcGIS Solutions

Solutions support network modernization

- Industry standard data models
- Scale to utilities of any size
- Expedite modernization

**Sewer**  
Utility Network Foundation



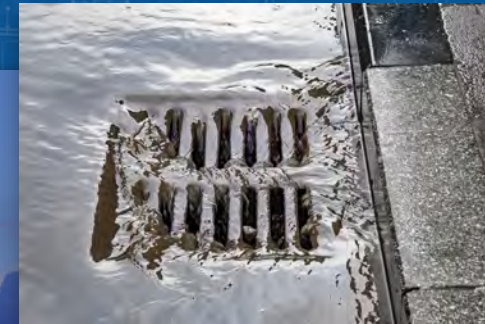
**Combined Sewer**  
Utility Network Foundation



**Water Distribution**  
Utility Network Foundation



**Stormwater**  
Utility Network Foundation





# What's Next?

Identifying Your Opportunities for Applying the Geographic Approach



The background is a dark blue map of a city, showing a network of streets and some green spaces. A semi-transparent blue rectangle is centered on the map. Inside this rectangle, the text "I ask Everyone 'Can you Live without Water for a Day'" is displayed. The text is in a bold, sans-serif font. "I ask Everyone" is white, while the rest of the text is a lighter blue. The rectangle has a dotted pattern on its right side.

**I ask Everyone “Can  
you Live without Water  
for a Day”**





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THE  
SCIENCE  
OF  
WHERE®