



Network Management with ArcGIS

Foundational Technologies for Modern
Network and Asset Management



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Advancing GIS & The Science of Where

Engineering and Science Focused

Strong and Growing

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



ArcGIS

Enables Utilities to Operate
More Efficiently

Network Management with ArcGIS

More than just where assets are

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



ArcGIS supports modern water and wastewater utility workflows

A Comprehensive Location-Based System



Challenges

Obsolete Technology



Outdated Workflows

A complex, multi-page form titled "Getting To Know You Survey" with various sections, checkboxes, and a grid for data entry. The form includes sections for "Getting To Know You Survey", "Which of the following are true about you?", and a grid for data entry.

Embracing Change



Modernization affects technology and people

Water Utilities Leading the Way

Standout utilities that have modernized their network management





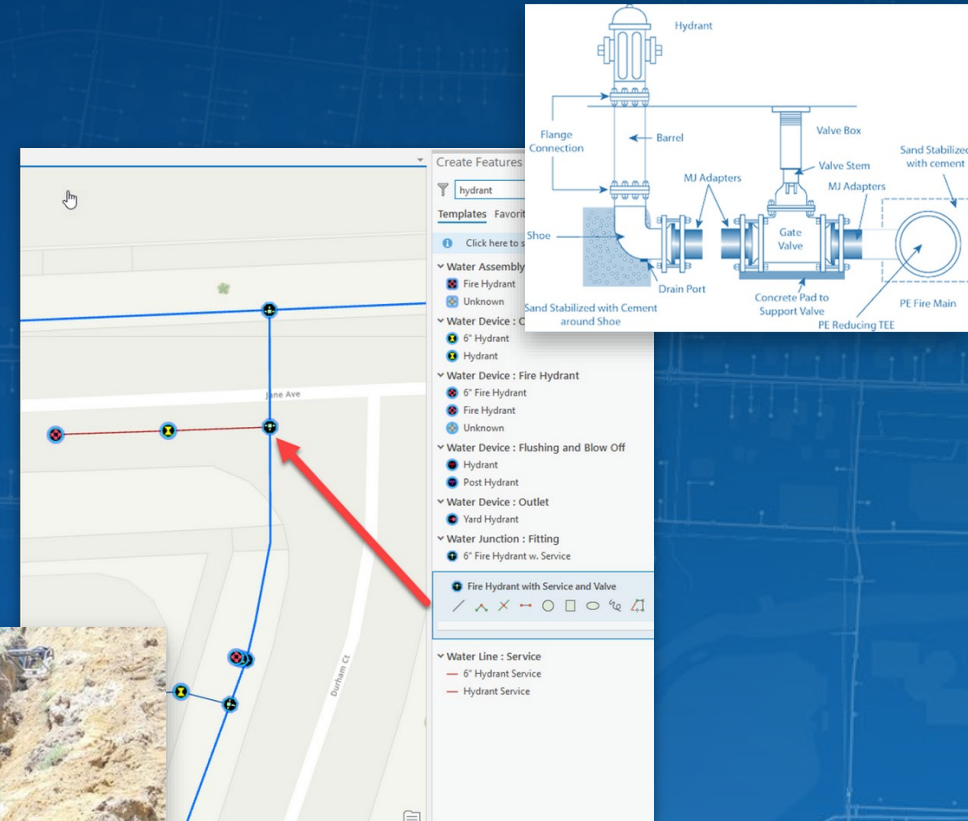
Key Drivers of Modern Network Management:

- 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

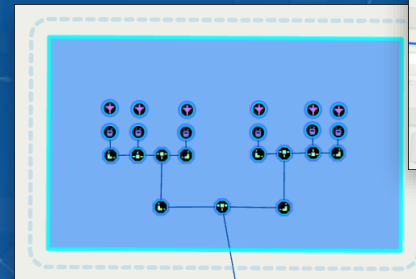


Key Drivers of Modern Network Management:

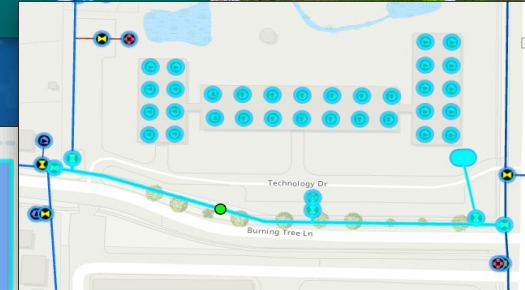
Asset Modeling Capabilities

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

Treatment Plants



Meter Vaults



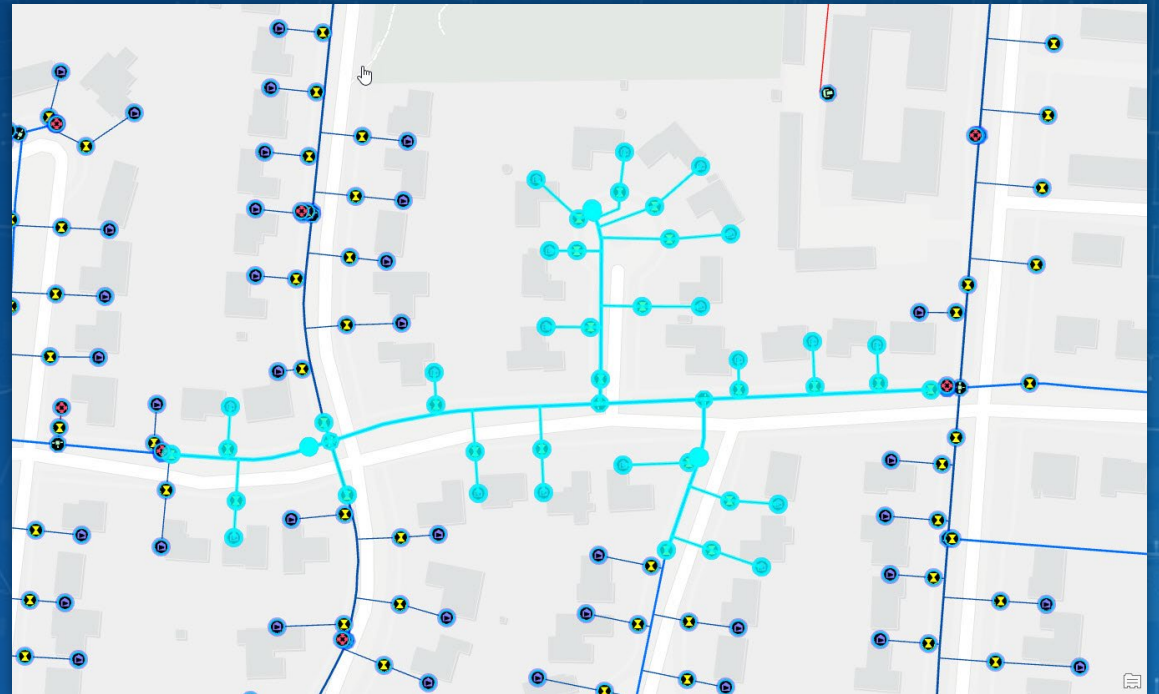
Apartment Buildings

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



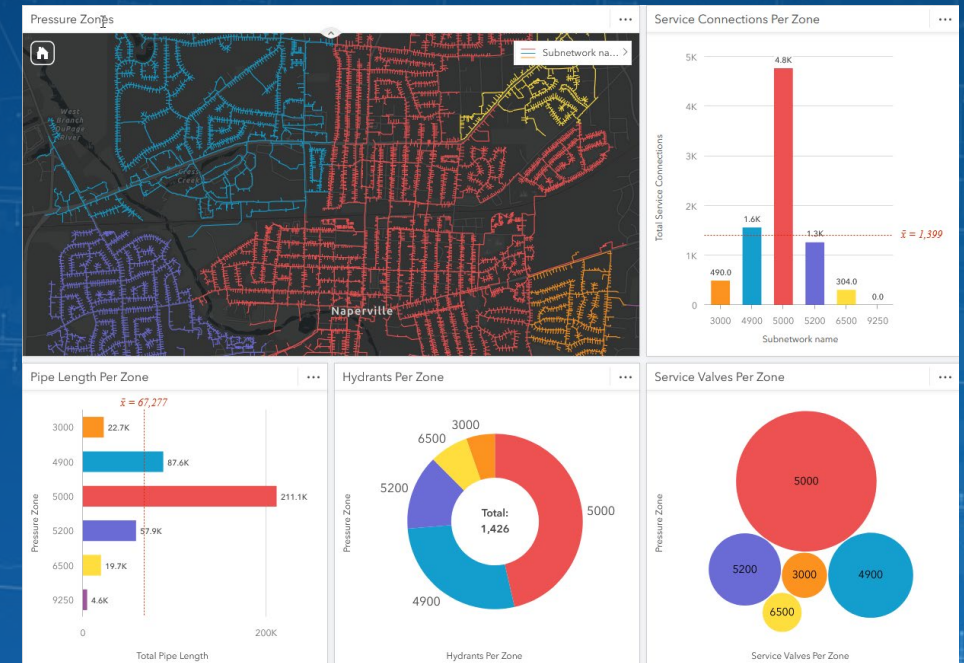
Key Drivers of Modern Network Management:

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...

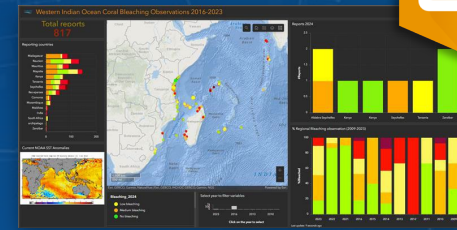
Key Drivers of Modern Network Management:

Configuration Instead of Customization

Does more out of the box

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

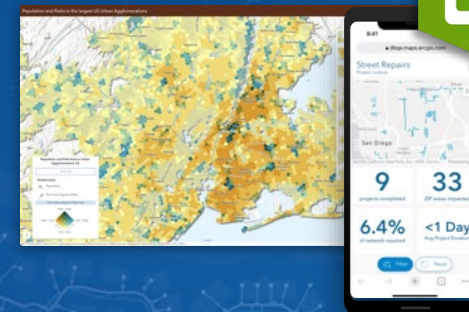
Dashboards



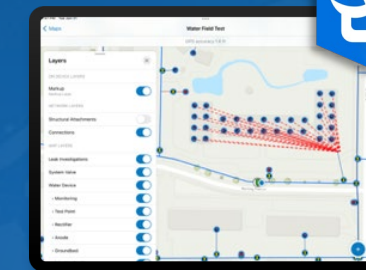
Experience Builder



Instant apps



Field Maps



ArcGIS Solutions

Solutions support network modernization

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

Sewer
Utility Network Foundation



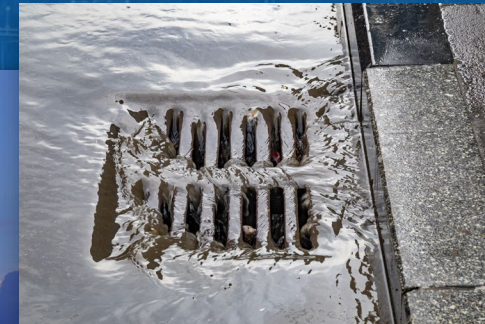
Combined Sewer
Utility Network Foundation



Water Distribution
Utility Network Foundation



Stormwater
Utility Network Foundation



Implementation Support

Resources and Services

Esri Consulting

- Data Readiness Assessment
- Implementation Planning
- Pilot/Proof of Concept
- Data Migration
- Implementation
- Workflow and application development



Esri Training

- Instructor Led Training
- Self Paced Web Courses
- Learn Lessons



Esri Community

- Esri Blogs
- Esri Community
- Technical Papers
- Help Documentation
- Webinars
- Conferences



Esri Partners

- Implementations
- Cloud Hosting Services
- Network Management Specialty





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