HARNESSING DATA TO PRIORITIZE PIPELINE REHABILITATION AND REPLACEMENT
TAKING STOCK

**Geographic Information System (GIS)**

**Sewer Pipe CCTV Inspection**

**Water Loss Tracking**

**Computerized Maintenance Management System (CMMS)**
FORMULATING A PRIORITIZATION PROCESS

Probability of Failure (PoF) Factors

- AGE
- LEAK HISTORY
- CCTV GRADING
- SOIL CORROSIONIVITY

Consequence of Failure (CoF) Factors

- FLOW
- PRESSURE
- NUMBER OF SERVICES IMPACTED BY OUTAGE
- NUMBER OF HYDRANTS IMPACTED BY OUTAGE
- PROXIMITY TO WATERCOURSE
- PROXIMITY TO OTHER MAJOR UTILITIES
- LAND USE
- PUBLIC IMPACT TO ROADWAYS AND RAILWAYS
- ACCESSIBILITY
- COST

Priority = PoF x CoF
## Tailoring the Process to Each System

### PoF Factors

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CRUNCHING THE NUMBERS
INTERPRETING AND VISUALIZING RESULTS
REFINING THE PROCESS

- Analyze Data
- Prioritize Assessments
- Assess Condition
- Identify Projects
- Update Process
USING THE RESULTS FOR PLANNING

[Graphs showing data trends over time]
Questions?

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