Safety Assurance and Incident Causation in Propane Gas Pipeline Facilities

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Piping between Structures

- Can be in any possible routing
- Can be made of many different materials or combination of materials
- May be inaccessible from the surface

- steel pipes
- copper pipes
- yellow brass pipe
- ductile iron
- aluminum pipe
- PVC pipes
- PE pipes
There are only Four Ways to get Utility Information
Questions to be answered

• Who has access to the information?
• How good is the information?
• When do they have access?
• How do they have access?
• How do we communicate the need for the information?
• Where is access available?
Recent Technologies /Practices can provide answers

- SHRP2 R01, R01A, R01B, SAULT
- PHMSA Automated Excavator Notification / Electronic White-lining
- Mobil Cloud Real-Time Visualizations / Augmented Reality
- RFID
- ASCE 38 Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data
- ASCE XX (in development) Standard for Recording and Exchanging Utility Infrastructure Data (a.k.a. "Utility Infrastructure As-Built Standard")