Problem
Mismarked / Unmarked Utility Lines
Accidents Lead to Loss of:
- Lives
- Time
- Money
According to the Pipeline and Hazardous Materials Safety Administration (PHMSA) an average of 21 lives, 87 serious injuries, $170M in property damages every year over the last 20 years.

Background
Fall 2007 – Augmented Reality
- Informational commercial virtual reality device
Spring 2008 – Augmented Reality
- 3-D hardware & software
Fall 2008 – Enhanced Vision Systems
- 2-D top down view; hardware & software

Solution
A Software Product
- Graphical Map
- Location of buried utilities
- Position of Equipment

Used By
- Construction Equipment Operators
- Utility Marking Services

Benefits
- Shows location of utility lines
- Updates location in real time as the user move.
- Displays the user-selected safety range
- Alert the user of danger and do not dig zones

Case Study
Place: Bridgeport, Alabama
Time: January 22, 1999, 10:02 AM
Cause: Gas leak from a 3/4” steel gas line from contact of excavation equipment.
Result: 3 fatalities, 6 seriously injured.
$1.4 million of property damage & loss.