A.I. Modeling:
Have Data Work FOR You!

LET YOUR GIS MAKE DECISIONS, REAL-TIME ... NOW!
What are today’s requirements with GIS

GIS should not just be a storage for data or an asset manager

GIS should not take hours or days to provide answers

GIS should not just provide tools to narrow down choices

GIS should make decisions, provide answers, automatically, real-time
WHY?

GIS is more prevalent in today’s business world, and at the control are non-technical, non-traditional GIS users.
How can this be Achieved?

With GIS now operating within Object Orientated environments, artificial intelligence becomes reality using…..
Real World Examples?

This is not a Future Concept, but a reality today!

**EXAMPLES:**
- Real Time Electrical Outage Prediction and Management
- Real Time, Field Operated, Valve Isolation Determination
- Sophisticated Underground Facility Placement Decisions
Advanced Modeling For Electrical Outage Management

1. Human Interaction
2. Advanced Automated Network Analysis
3. Automated Comprehensive Reporting
How is this Accomplished?

Web Based Call Entry

Call Location Mapped
(relationships, integration)

Recognition of Parent Protection Device, Phasing, and Position
(Geometric Network & Trace Weights)

Trouble Report Ticket sent to Field
(Software Integration)

Roll up outage through mathematical prediction algorithms
(Business Rules)
Advanced Modeling for Valve Isolation *in the Field*

Modeling Where and When it is Needed.
How is this Accomplished?

Determine Location of Pipe Requiring Isolation
(Human Input)

Auto locate Water Assets, and Water Sources
(Geometric Network)

Determine Operability of Valves
(Trace Weights)

Create Affected Customer List and Door Knockers
(Relationships)
So What Should you Expect

Human Input

GIS Automated Calculations

Multiple Answers, At Some Time

Real Answers, Real Time