

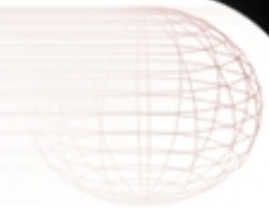


# Integration: Data Warehouse & GIS

GIS-T Conference  
April 6, 2009

**Presented by:**  
Jim Conlon & Dan Pratte  
Illinois Department of Transportation

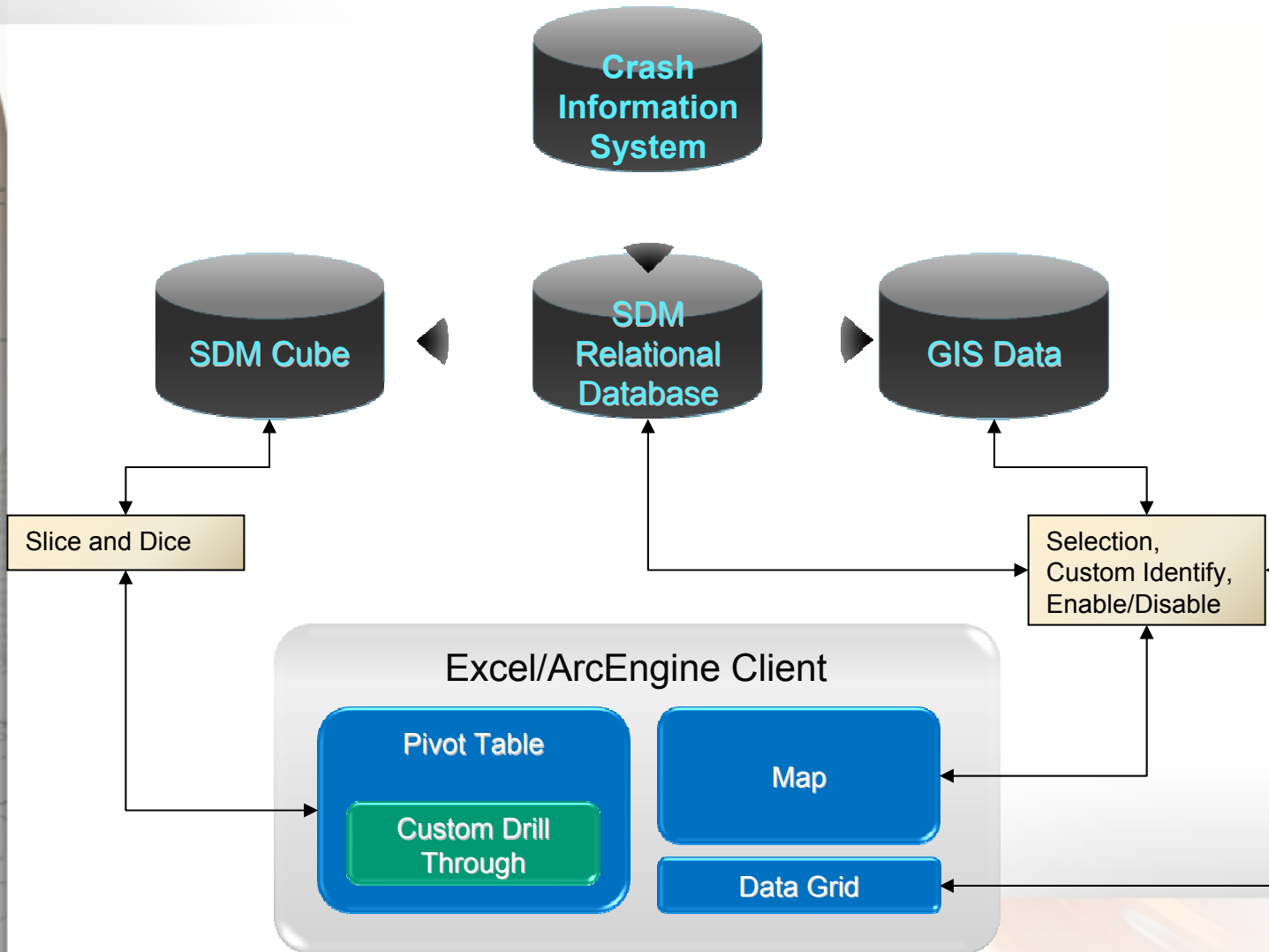
# Safety Data Warehouse



- Initial Release April 2007
  - Crash, Vehicle Person Data
  - Spatially Enabled Data
  - Tool Agnostic
- Purpose – Crash Analysis
  - Questions – Who, What, Where, When, Why

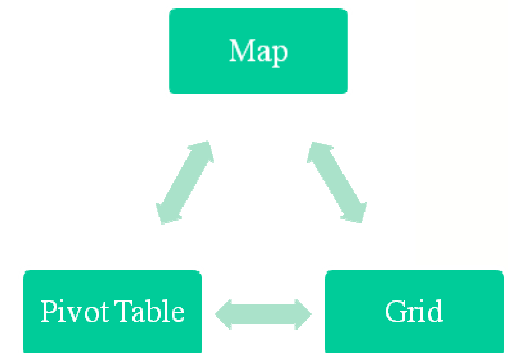


# Solution Architecture

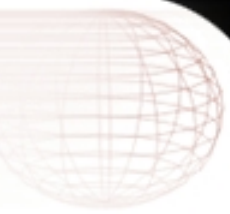


# SDM Excel Add-in Solution

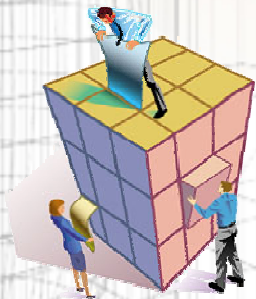
- Many users familiar with Excel 2007 functionality
- Tight Integration of functionality
  - Map in Custom Task Pane
  - Customizable Data Grid
  - Pivot Tables
- Excel extensibility – ESRI
- Crisp experience / performance



# Demo – Engineering Perspective

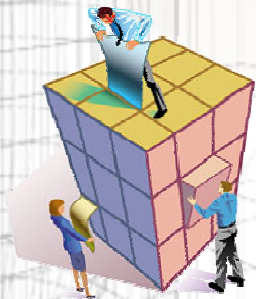


- Examine a known intersection or road segment.
- Navigate to see what the experience is there.
- The spatial location provides another dimension to data attributes that describe locations.



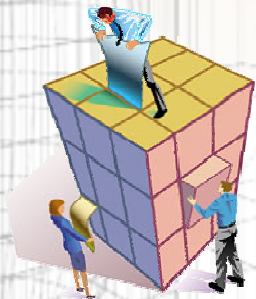
# Demo – Crash Factor Perspective

- Isolate the crashes based on ‘what’ happened... specific behaviors or events.
- See on the map “where” these are happening.
- Queries based on person on vehicle dimensions weren’t possible with just the map/grid.



# Successes & Challenges

- Success
  - In user testing
  - Integration is seamless
  - Response time is awesome
  - Supports all kinds of users (GIS oriented, Data Oriented, simple problems, complex analysis)
- Challenges
  - Deployment
  - Re-introducing tools
  - Data Quality
  - Training



# Q & A

