# In Summary...





#### Overview

- Developed prototype illustrating data exchanges for entire bridge life cycle
- Utilized 3D bridge information modeling (BrIM) to accelerate project delivery and enhance life cycle management
- Demonstrate viability, efficiencies, and benefits of integrated bridge project delivery and life cycle management concept through one-half-day and two-day presentations





### **Project Scope**

- Large, complex, and a non-typical R&D project
- Many data exchanges and stakeholders
- A prototype not production software linking appropriate existing software, commercial or agency developed





### **Project Approach**

- 3D architectural blueprint using current automation and communications technologies
- Significantly improved 2D design and construction drawings,
- Addresses life cycle management





## Quincy Avenue Over I-25: Bridge Selected to Model







### **Quincy Avenue Over I-25**

- Recently built 3 span, continuous concrete bridge
- Represents 70%+ bridges in U.S.
- Modeled in steel and concrete

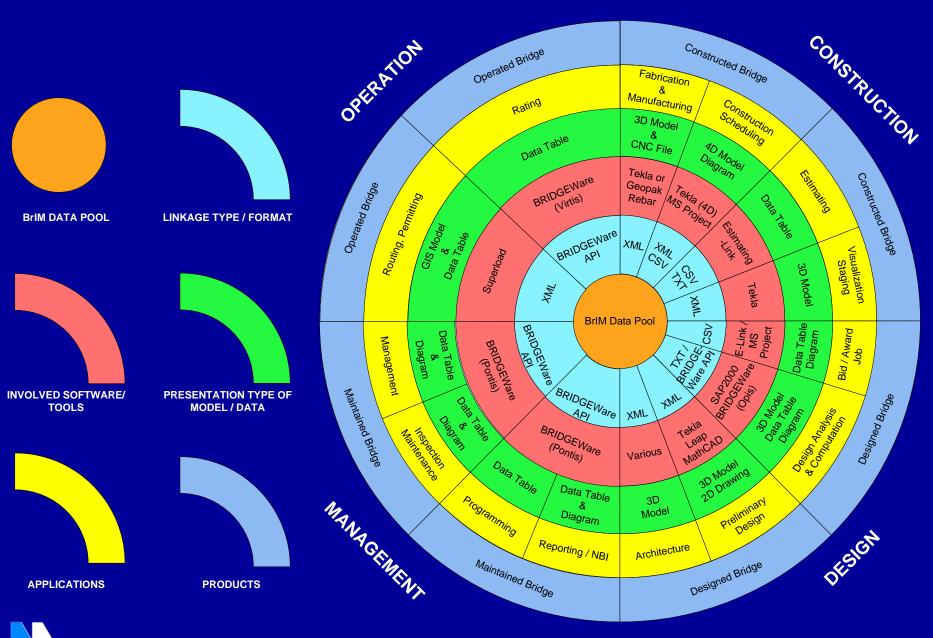




# Integrated System Model

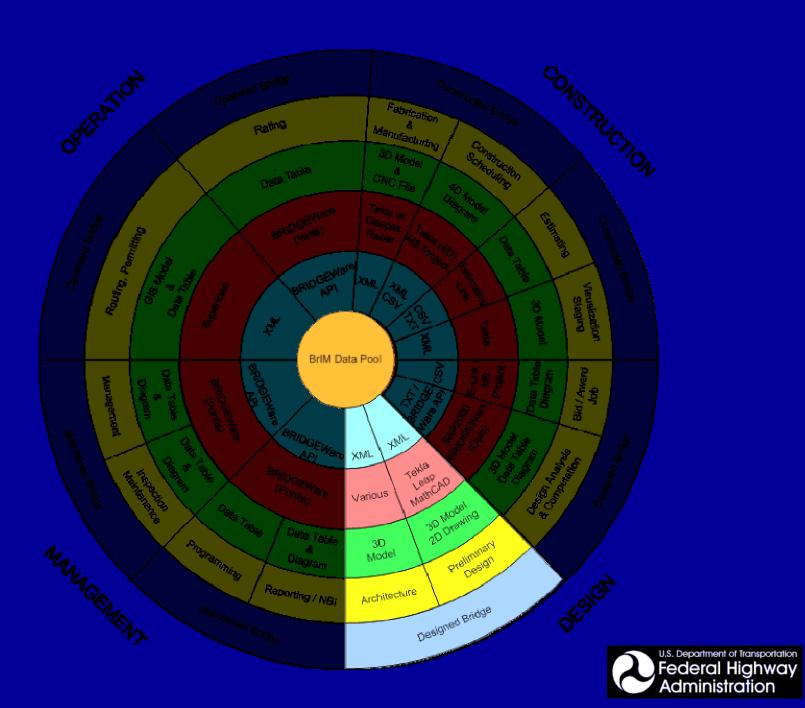




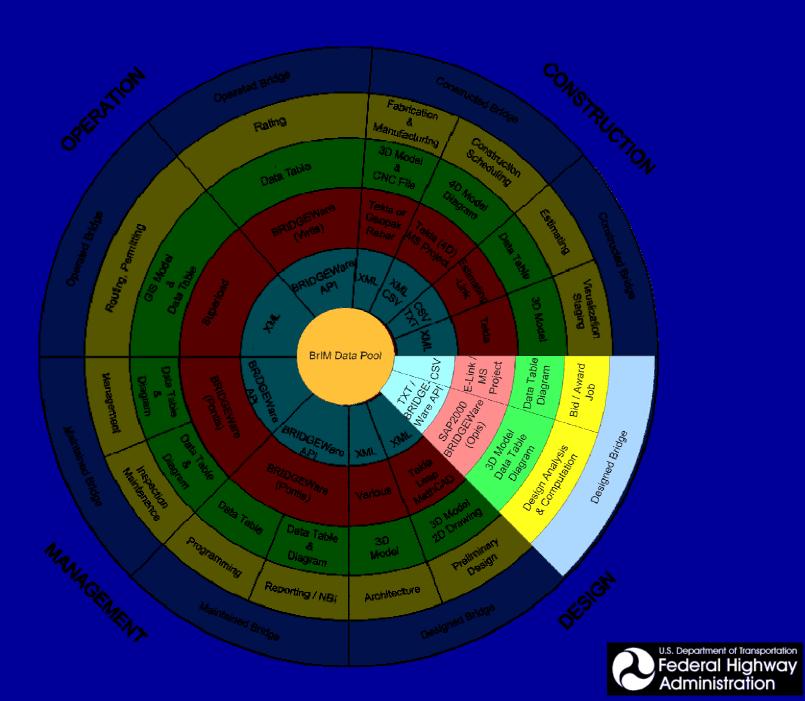




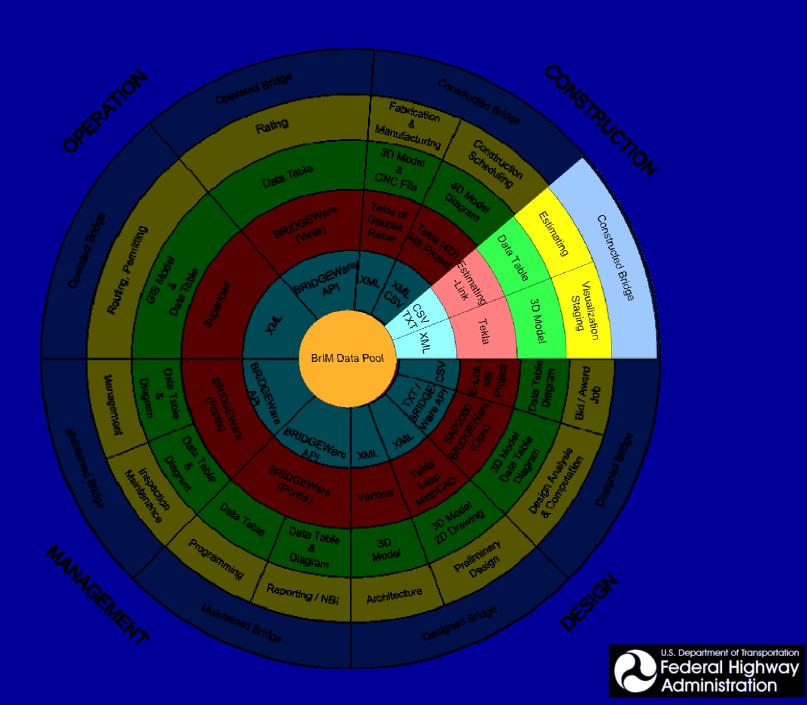




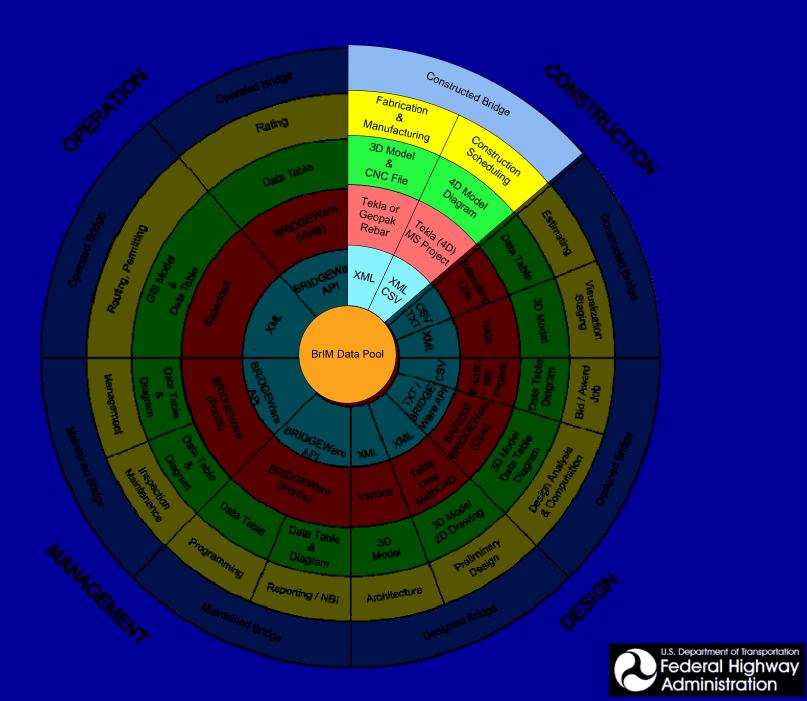




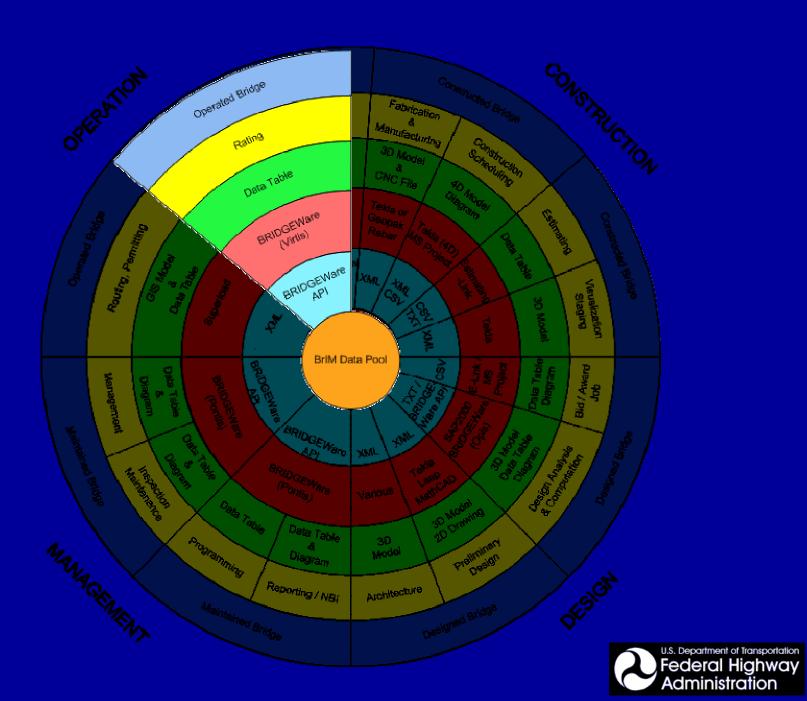




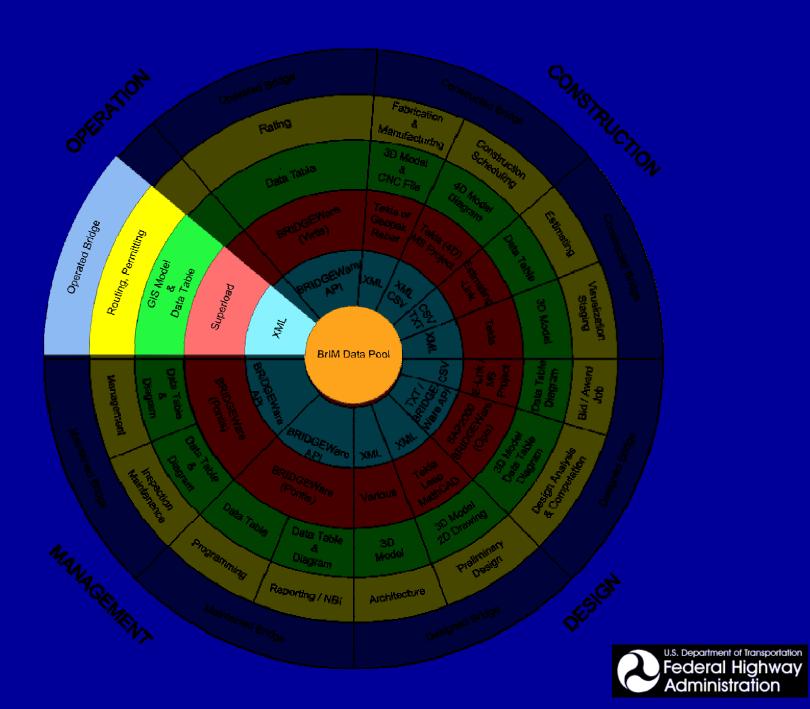




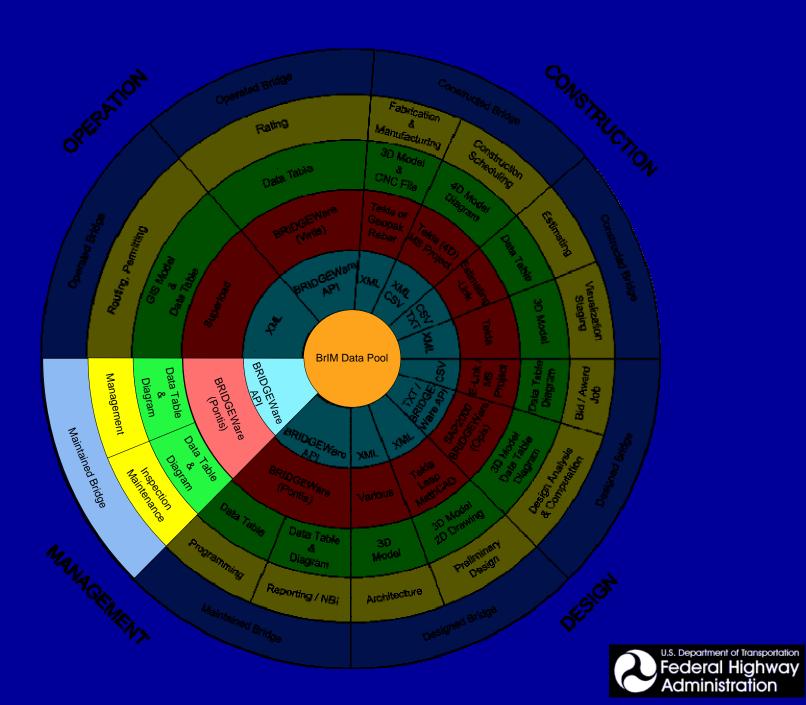




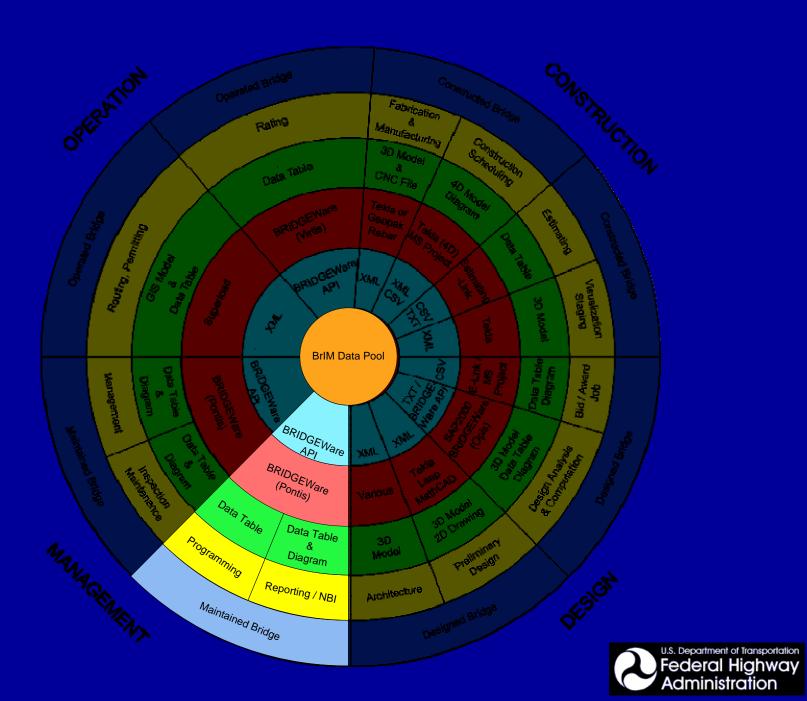














### **Recent Presentations**

- 2007 World Steel Bridge Symposium
- 2008 TRB Annual & Committee Meetings: General Structures, Design-Build, Bridge Management, and Steel Fabrication
- 2008 FHWA Accelerated Bridge Construction and Highways for Life
- 2008 National Concrete Bridge Conference2008 Annual Meeting of the AASHTO Sub-committee on Bridges and Structures
- 2008 IBC (International Bridge Conference)





#### **Recent Presentations**

- 2008 AASHTO Standing Committee on Highways (SCOH) Annual Meeting
- 2008 TRB International Conference on Bridge Management
- 2009 TRB Annual Meeting
- 2009 TRB 1st International Conference on Transportation Construction Management





### **Planned Presentations**

- Two-day workshops for demonstrations
- Illustrate use and benefits of the integrated system
- Provide CDs with presentations and linkage software that was developed
- Half-day workshops providing overview



