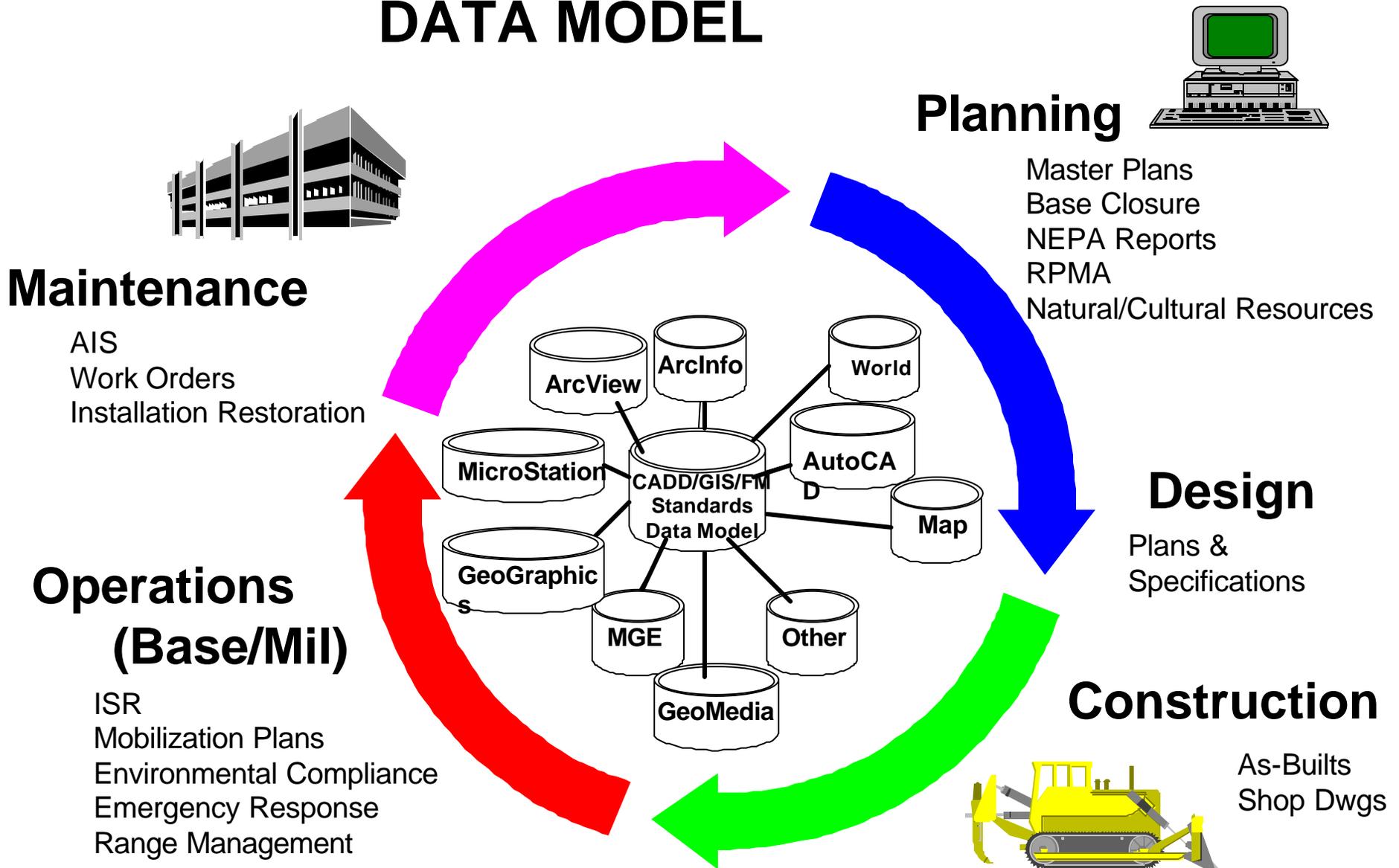


Linking/Integrating SDS and AEC

February 7 - 8, 2000 Standards Committee Meeting

PROJECT LIFE-CYCLE DATA MODEL

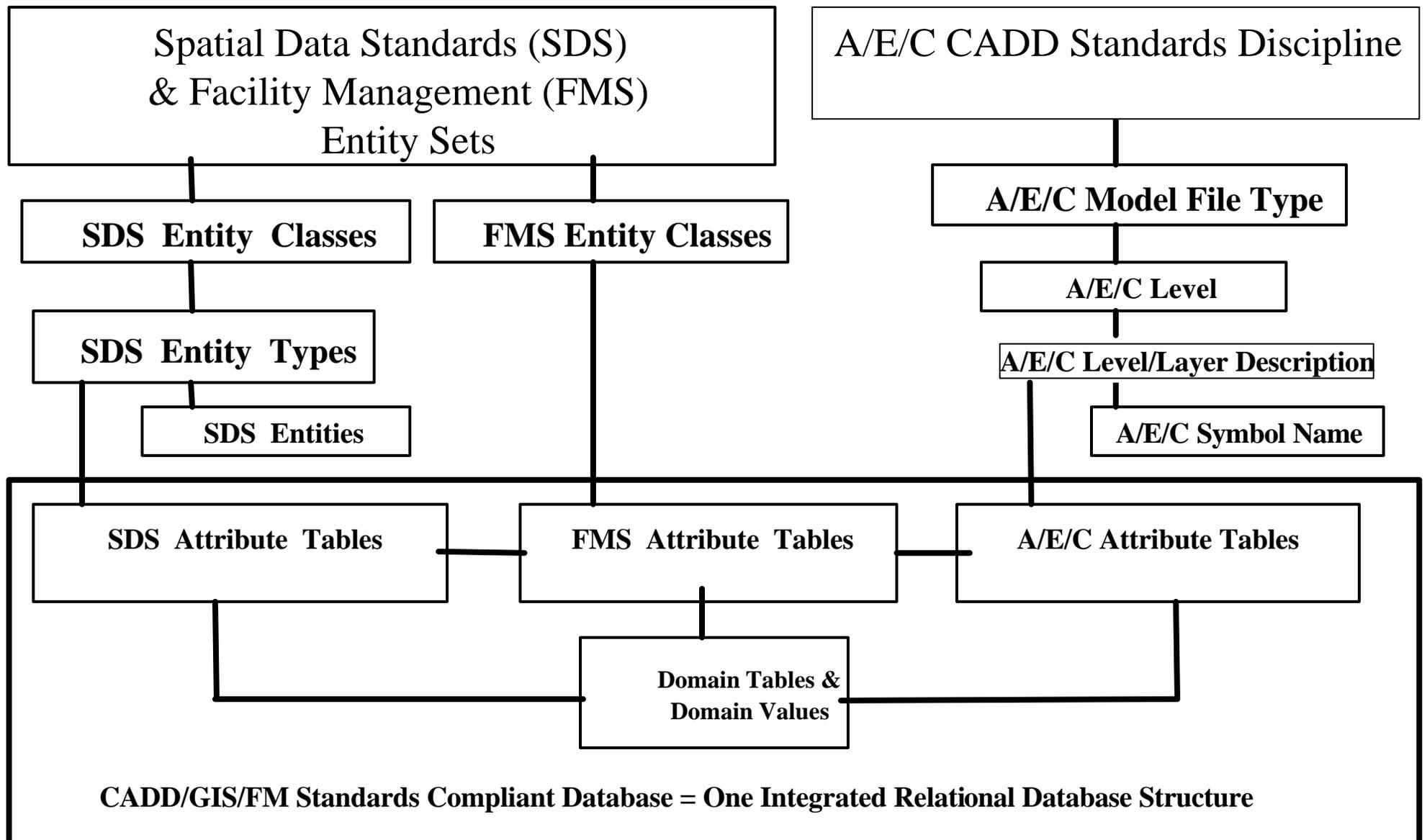


- **Provide a CADD Standard for design/construction/demolition project drawings.**
- **Emphases are on:**
 - **A. A graphic standard (colors, line types, fonts, and symbols).**
 - **B. CADD level/layer assignments.**
- **The CADD drawings typically have a project/drawing specific origin which is not geographically referenced.**
- **For example: the A/E/C CADD standards would be used to prepare drawings for construction of a building, it's parking area, and it's interior and exterior utilities.**

Spatial Data Standards Focus

- **Provides a standard for CADD/GIS drawings and maps where all features (real-world objects) are geographically referenced (geospatial, the location of each object is referenced to a geographic coordinate system).**
- **Emphases are on:**
 - **A. Geospatial referencing of each feature.**
 - **B. Collection and maintenance of accurate data concerning each feature, which is stored in database tables.**
- **For example: the SDS would be used to:**
 - **A. Depict the graphic locations (using GIS or CADD software) of all buildings, parking areas, and exterior utilities at a military installation or civil works project.**
 - **B. Generate a database schema for geospatial feature attribute data.**

CADD/GIS/FM Standards Data Model



Integration of A/E/C & SDS

- **A/E/C Attribute Tables are being designed to fit into the same database schema as developed for SDS.**
- **Where A/E/C Objects and SDS Features overlap, the SDS attribute tables will be used, with additional attributes added as required for A/E/C.**
- **Attribute tables for each A/E/C Discipline are integrated in the SDS Data Model by being equivalent to a SDS Entity Class.**

Integration of A/E/C & SDS

| | |
|--------------------------------------|---|
| • A/E/C Discipline | SDS Entity Set/Class |
| • Civil/Site | Boundary/Civil Site |
| • Architectural | Buildings/Architectural |
| • Electrical | Buildings/Electrical |
| • Equipment-Security | Buildings/Equipment&Security |
| • Fire Protection/Suppression | Buildings/Fire Protection |
| • Interior Design | Buildings/Interior Design |
| • Mechanical | Buildings/Mechanical |
| • Plumbing | Buildings/Plumbing |
| • Structural | Buildings/Structural |
| • Telecommunications | Buildings/Telecommunications |
| • General | Common/General |
| • HTRW/Environmental | Environmental Hazards/HTRW |
| • Survey and Mapping | Geodetic/Survey&Mapping |
| • Geotechnical | Geology/Geotechnical |
| • Landscape Architecture | Land Status/LandscapeArchitect |
| • Utilities | Utilities/General |

Project 98.125 - Integration of CADD & GIS Standards & Digital Data

- **Demonstration by Denise Martin**

Questions?