



Michigan Geographic Framework (MGF)

Technology Upgrade Project

August 4, 2016

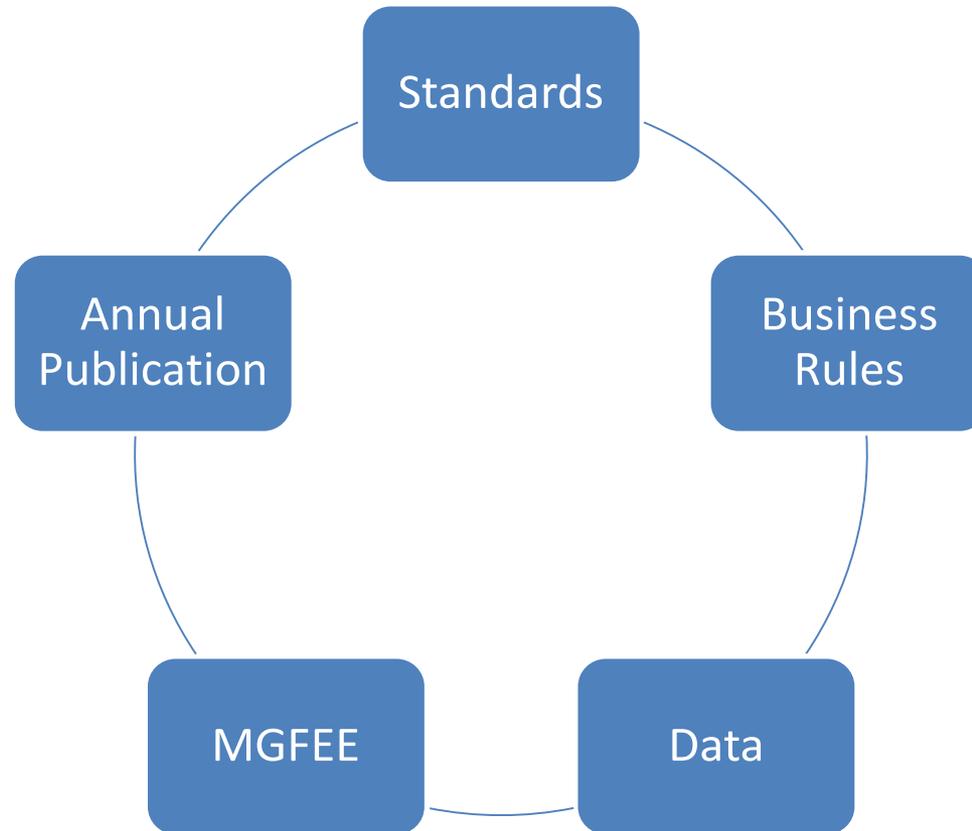
Michigan GIS User Group Meeting



MGF Background

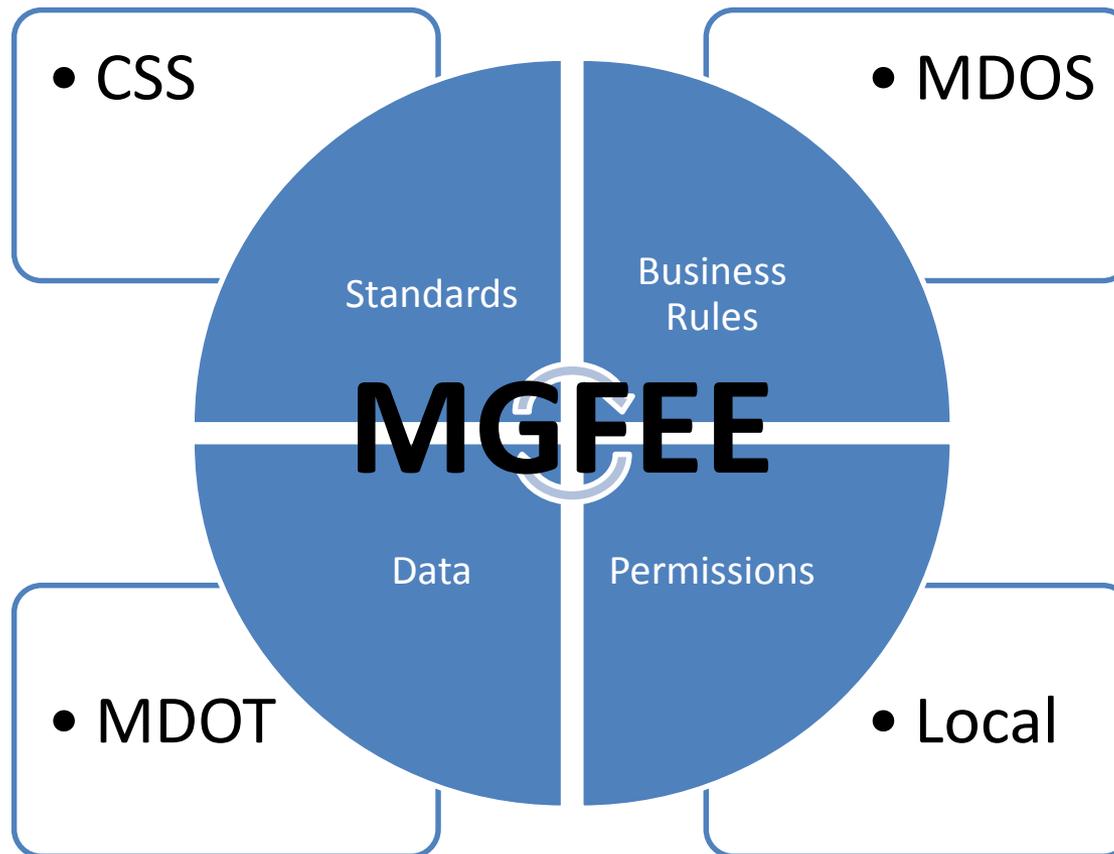
- MGF began in the 1990s
 - Produced 16 annual versions to date
 - Framework modeled after national Framework concepts
 - Modeled using Census Tiger topological model
 - Initially used ArcInfo Coverage Data Format
 - Integrated boundary geography, roads, hydrology, rail
 - Integrated Linear Referencing System for all roads
 - Annual versions are made publicly available
 - Seen by federal agencies and other states as a model integrated state framework

Components of Today's MGF



Components of Today's MGF

Michigan Geographic Framework Editing Environment (MGFEE)



MGFEE 2010-Present

- Uses Oracle Spatial Topology model
- Custom solution – Aquis Data Editor
- Web interface for editing
- Role based permissions
- All edits need to be made through MGFEE system

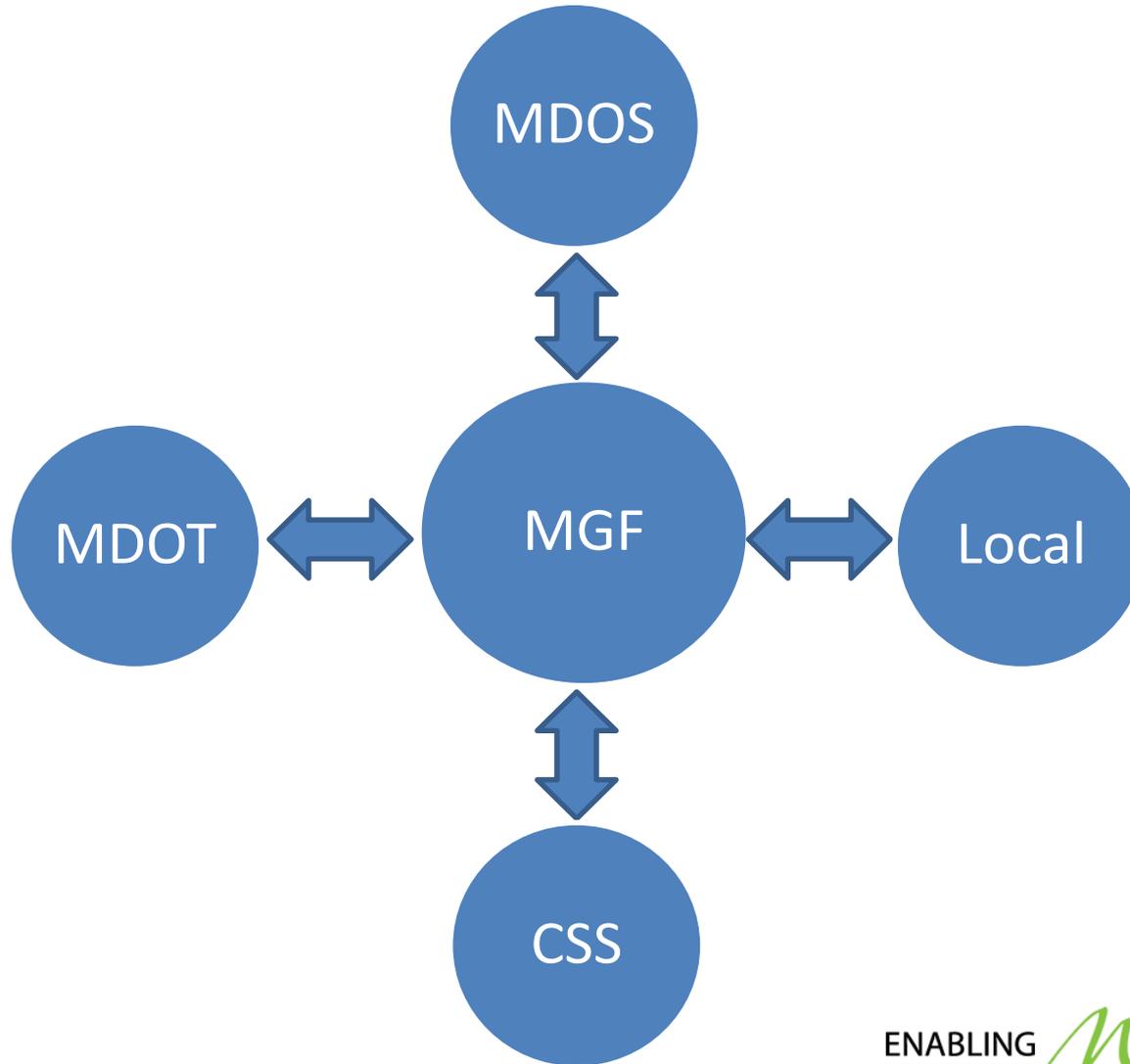
Reasons for change

- MGFE system is end of life
 - Older programming technology
 - No longer being supported through new version releases
 - Delivery generation tools use old technology and data formats
- Develop new federated model using distributed architecture
- Data stewards use their own editing tools to manage their authoritative data then provide changes back to MGF master GIS repository – State Spatial Data Infrastructure model
- Leverage Server Oriented Architecture to provide access to MGF data more frequently

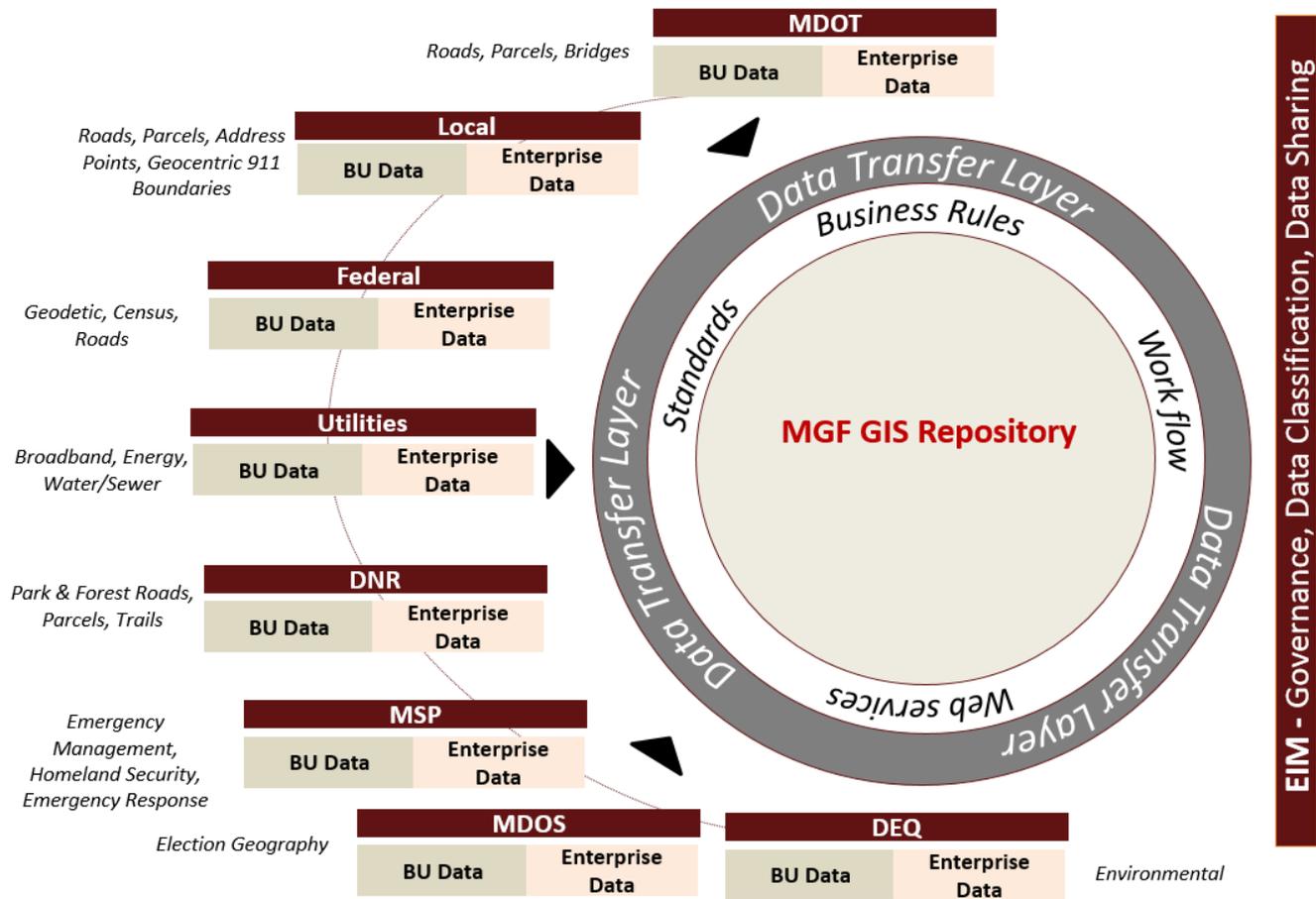
New Technology

- Rather than a MGF Editing Environment, MGF will have a robust data management system to manage data integration and workflows for the MGF repository
- New data management system will be a COTS solution allowing for the configuration of business rules to manage data standards, topology rules and quality control acquired through procurement process
- MDOT is implementing ESRI Roads and Highways for LRS management. CSS and MDOT coordinating workflows integrating edits back into MGF repository

New Technology



MGF Federated System



What to expect

- Version 17 to be delivered in current MGF format
- Version 18 will be a transitional delivery, LRS will be produced from ESRI Roads and Highways
- Anticipate some changes to current deliverables
 - No .e00 export
 - Files as shapefiles or feature classes
 - Some fields that are no longer used may be removed
- Migration table is planned to be produced from ESRI Roads and Highways
- More outreach and communication as project begins

Questions

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