

Conference Room #3 10:00 am - 10:45am

GIS:

How to utilize and make it work for your campus.

Building a GIS for JMU's Campus

Planning, Development, and Maintenance

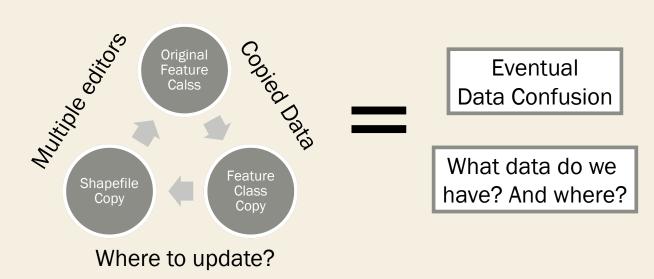
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Enterprise **Driven Apps** JMU's GIS Timeline: **Expand Systems Future** Integration Switch to Enterprise System Web Applications Increase # Start to Launch of Users 2016 **Confirmed Data** Server Planning Maintenance Idea Begins **GIS Coordinator Hired GIS Interns** 2015 Data Organization **Begins GIS** Technician Hired **Data Collection** Server Confirmed 2014 Expands and Ordered Start Expanding **Datasets** Purchase GPS Units 2007 First GIS User

Beginning Stage (2007 – 2014)

- Initial GPS data collected by a contractor in 2007
- First desktop user took over by the end of that year (Stormwater Coordinator)
- Primarily used for MS4 stormwater data
- Slowly expanded to track more utilities, boundaries and features
- Hired dedicated GIS position in 2014



Technical Stage (2014 - 2015)

- Need had grown to require a dedicated staff member
- Expected to
 - Collect campus data
 - Create basic maps
 - Assist engineering staff with mapping requests
- Quickly identified expanding role of GIS and it's capabilities
- Expansion planning began in early 2015



Evaluation/Design Stage (2015 - 2016)

- Started exploring where we would like our system to end up
 - Decision to migrate to Enterprise
- Permanent GIS Coordinator Position Created
- Server was spec'd out and equipment was ordered
- First Web Applications
- Data re-organization begins and planning for server migration gets underway
- Maintenance strategy developed

- Continued to maintain previous role:
 - MS4
 - Utilities
 - Map Requests
- Developed Internship positions for support

Deployment Stage (2016 - 2017)

- Finalize data structure and organization
- Install and setup ArcGIS for Server and Enterprise Geodatabase Configuration
- Start systematic update of all final datasets to get a baseline of maintained data
- Implement data update procedure for new construction
- Initiate expansion of GIS users

Future of JMU's Facilities GIS

- Sub-surface utilities collection
- Create commonly updated print maps for general infrastructure
- Expand Web Mapping Applications for use by Facilities Staff and/or general public
- Research GPS-to-Geodatabase data collection automation
- UAV (drone) quadcopter mapping updates for imagery mosaic
- Possible integration with additional JMU Building/Maintenance Systems
- Cloud resources and open data services portal

What are we doing differently?

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- Slow start but rapid recent expansion advantageous
- Increasing our web presence and dynamic mapping capabilities



- Student volunteers and Internships
- Working with classroom projects
- UAV mapping
- Mobile phone data collection
- ArcGIS Online Web apps







Questions?

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