MAGIC 2.0 – Development Plan for Map Reading Room

With an increasing number of materials within the Map and Geographic Information Center's (MAGIC) collection becoming available in digital format, the possibilities for utilizing geospatial resources for professional and personal research has increased dramatically. With every new digitized item, the range of possible uses increases as researchers begin to create customized map mash-ups of data provided by MAGIC with personal datasets. It is now conceivable for researchers and students alike to research topics and problems from new perspectives by challenging past assumptions and analysis with the ever increasing number of geospatial data sets thus enabling MAGIC to support original research in ways not conceivable just a few years prior.

With the transition from print to digital continuing to thrive and accelerate, MAGIC wishes to develop resources and services that enhance and support research for the 21st century. To improve access to our users, we are proposing some cutting-edge applications for geospatial data access which will strategically place MAGIC as one of the premier geospatial data providers in the country. Outlined below are three phases of development that will enable us to increase access to geospatial data and provide resources which balance content with educational opportunities.

Phase I

University of Connecticut

When visitors enter MAGIC they first encounter the Map Reading Room which is presently focused upon providing access to print maps and atlases. As our users, especially undergraduate students, begin utilizing our digital resources, this space does not meet the current or future needs of our core users. We envision a space which provides users with collaborative learning spaces where 5 or more users can view a digital resource, create and edit geospatial data sets, develop customized map mash-ups utilizing geospatial data from MAGIC and beyond, as well as developing web, video and other resources which integrate maps for education and presentation purposes. This would create a geo-focused learning commons environment which would expand upon the offerings within the Homer Babbidge Library and provide resources and technology which are not currently available to our users. Phase I would include the addition of the following to this space:

- Addition of 2 large LCD screens (46" min) which would be connected to computers with specialized software and include laptop connectivity.
- Access to specialized software which includes Adobe Creative Suite, Google Earth, ESRI's ArcGIS, Google SketchUp, Audacity, and other equivalent packages which provide mash-up opportunities.
- Collaborative tables to which enable 5 or more people to easily collaborate while viewing the large LCD screens.
- Comfortable, casual seating which is movable, and ergonomically designed to facilitate both short and long term usage of computers within the space
- 1 computer connected to one of the large LCD screens which include specialized software.

- Installation of 2 gigabit connections for computers connected to LCD screens.

Phase II

University of

Within the initial development of the MAGIC geo-focused learning commons space complete, the power and data needs of our users continue to expand beyond our current capabilities. With cloud computing, laptops and real-time connectivity becoming increasingly important this phase focuses upon enhancing and expanding our current infrastructure to meet these ongoing demands. As more users begin to utilize our resources throughout the state virtual collaboration becomes a key component of our mission to support the growing needs of K-12, UConn, state agencies, and researchers throughout the region. Outlined below are the key elements which are part of phase II:

- Installation of additional electrical outlets to provide power for laptops and other mobile devices
- LCD projector which can provide HD playback for group presentations, collaboration, and training opportunities.
- 12 mobile computers which enable geospatial, video, web, audio, word processing, and presentation development opportunities.
- Expand capabilities to include real-time collaboration with users across the state and the world through web conferencing equipment and include recording capabilities for future playback/archiving.
- Portable GPS, navigation, video and audio recording equipment to enable original research with a geospatial connection.

Phase III

Immersive learning is a key element of understanding, interacting, and conducting research within a geospatial context. With geospatial data becoming increasing important to researchers in the humanities, social sciences, and sciences the need to develop an immersive learning experience becomes increasingly valuable. Outlined below are the key elements which are part of phase III:

- Develop a CAVE which provides a researcher the ability to recreate a space based on a temporal context or even project development of a space within the future. This 3D immersive learning environment would allow research using MAGIC's geospatial data and data from throughout the world to provide a realistic interpretation of culture, climate, vegetation, terrain and other possibilities which would benefit from a 3D vantage point.
- Provide digitization equipment to enable geospatial data creation by providing access to flat-bed scanners, large format scanner, microfilm scanner, film/slide scanner, and OCR capabilities for text/print based geospatial descriptions.



Potential Layout for the MAGIC GeoCommons - Phase I



Examples of Collaboration Spaces with Large Video Displays



University of Connecticut – Learning Commons – Level 1 Homer Babbidge Library





Yale University – Sterling Library Map Collection Reading Room

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