



Campus
FM
Technology
Association

Facilities Geospatial Technologies Showcase

January – June 2015

10 Campuses
14 Webinars



*This event is approved for
GIS Education Points*

*Organized by:
The University of Kentucky*

Presentation Schedule

JANUARY

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- 20th (1pm) -- **Building a University Enterprise GIS from the Ground Up**, *University of Kentucky* 2

FEBRUARY

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- 19th (1pm) -- **LaRC Portal Based Spatial Data Management and Decision Support Environment**, *NASA Langley* 4

MARCH

- 3rd (1pm) -- **Sustainability Drives the Smart Campus: GIS is the Platform**, *UMass Amherst* 5
- 19th (11am) -- **BIM for Facilities Management**, *Western Michigan University* 6

APRIL

- 2nd (1pm) -- **BIM Standards and Contractor Submittal Requirements**, *University of Southern California* 7
- 14th (1pm) -- **BIM/GIS Convergence within a 3D Data Model Utilizing LiDAR Data**, *University of Chicago* 8
- 28th (11am) -- **Maximizing the Strength of GIS in Facilities**, *University of Calgary, Alberta* 9

MAY

- 12th (1pm) -- **Facilities Information Spatial Data Model (FISDM) Implementation**, *University of Washington* 10
- 26th (1pm) -- **Integrating GIS and IWMS to Create an Effective Space Planning Tool**, *UMass Amherst* 11

JUNE

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- 30th (1pm) -- **City Engine for Campus Planning and Visualization**, *University of Southern California* 14

Spatial Data Infrastructure Program at the University of Chicago

Scott Stocking

Spatial Data Interface Analyst

UNIVERSITY OF CHICAGO

Facilities Services

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Date: January 6, 2015

Time: 1pm - 2pm

Summary:

The University has CAD files that represent the built environment on campus. New data is now coming in from BIM/LiDAR, and GIS layers of campus grounds and utilities. With this gauntlet of data sources, how will the University know what data source is the correct representation of reality to support operations? To address this situation the University has embarked on a SDI Program to create a 'single version of reality' via an innovative central data repository. The repository supports systems of record on both data harvesting and models in BIM/GIS/CAD used in enterprise applications.

To register, visit: <https://attendee.gotowebinar.com/register/4896330150740592897>

Building a University Enterprise GIS from the Ground Up

Michelle Ellington

GIS Coordinator

UNIVERSITY OF KENTUCKY
Facilities Information Services
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Date: January 20, 2015

Time: 1pm - 2pm

Summary:

There are key ingredients to deploying a successful university geospatial systems department and they begin with a well planned organizational structure, IT integration, multi-departmental workflows, and effective data development processes.

During this overview, the University of Kentucky will share their journey and demo custom mapping solutions for effective campus planning and navigation. Their approach of “smashing silos with GIS” connects systems through one single interface and is built on a foundation of Lean best practices. This will be demonstrated through discussion of the UK enterprise database design, robust map template libraries, and one-piece-flow procedures that are becoming intertwined throughout multiple Facilities Management areas.

To register, visit: <https://attendee.gotowebinar.com/register/1332333578050680321>

Immersed 3D Visualization of University of Chicago Campus

Scott Stocking

Spatial Data Interface Analyst

UNIVERSITY OF CHICAGO

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Date: February 3, 2015

Time: 1pm - 2pm

Summary:

A main objective of the University's SDI Program is to take full advantage of the 3D data within immersed visualization systems. This will enable all users of the SDI to take full advantage of the 'virtual campus' to evaluate planning and design proposals, engineering studies, other spatially intensive activities that would be enhanced utilizing advanced visualization technology. The University partnered with research labs developing advanced visualization technology using our spatial data to explore what is possible today and providing future direction of development efforts.

Presentation Outline:

- 1) Objectives of the Project
- 2) Data Utilized
- 3) Methods Used to build the Model
- 4) CAVE2 Visualization Environment
- 5) Tricks/Lessons Learned
- 6) Next Steps

To register, visit: <https://attendee.gotowebinar.com/register/3675378563190058753>



NASA Langley Research Center's (LaRC) Portal Based Spatial Data Management and Decision Support Environment

Brad Ball

GIS Team Lead and Developer

NASA LANGLEY

Center Operations Directorate GIS Team

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Date: February 19, 2015

Time: 1pm - 2pm

Summary:

Live demonstration of various Portal tools used to support Real Property, Space Management, Operations and Maintenance, and Planning for NASA Langley with discussion of what led to the current configuration.

To register, visit: <https://attendee.gotowebinar.com/register/1255662433222980354>

Sustainability Drives the Smart Campus: GIS is the Platform

Niels La Cour

Senior Physical Planner

UNIVERSITY OF MASSACHUSETTS AMHERST

Campus Planning

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Date: March 3, 2015

Time: 1pm - 2pm

Summary:

A Smart Campus is generally defined as having the ability to make intelligent adjustments and decisions in response to changing circumstances based on real time data from multiple sources. Many universities are developing smart systems that automate specific functions such as financial and human resources, traffic, course assignment, space management, building HVAC and MEP performance, people access and control, or maintenance work flow management. These systems generally support the administration of the campus and are separate from one another along organizational boundaries. The boundaries exist primarily because of the complexity of each domain within the campus environment, yet also because they often overlap with each other or compete for the same resources.

To register, visit: <https://attendee.gotowebinar.com/register/7936955890078318338>



BIM for Facilities Management

DeVon C. Miller

Building Commissioning Administrator

WESTERN MICHIGAN UNIVERSITY

Engineering Division | Facilities Management

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Date: March 19, 2015

Time: 11am - 12pm

Summary:

Utilizing BIM in Facilities Management for new and existing buildings on campus, and linking shared parameters between our models and computerized maintenance management system (CMMS).

To register, visit: <https://attendee.gotowebinar.com/register/1382260202045553666>

BIM Standards and Contractor Submittal Requirements

Jose Delgado

Program Manager

UNIVERSITY OF SOUTHERN CALIFORNIA

Engineering CAD Services

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Date: April 2, 2015

Time: 1pm - 2pm

Summary:

Review of the the current life-cycle based BIM requirements and deliverables in effect at the University of Southern California.

Discussion Topics Include:

- 1) During each stage
- 2) Who does/delivers what, when, why, and how

To register, visit: <https://attendee.gotowebinar.com/register/2987293191412632065>



BIM/GIS Convergence within a 3D Data Model Utilizing LiDAR Data

Scott Stocking

Spatial Data Interface Analyst

UNIVERSITY OF CHICAGO

Facilities Services

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Date: April 14, 2015

Time: 1pm - 2pm

Summary:

The University of Chicago is currently in the planning stages for a renovation program of the buildings located on Main Quadrangle. Since these buildings were built in the 1890's, design drawings were not available to assist in program development. The University completed a LiDAR acquisition of both the interior and exterior buildings, and then utilized this data with existing GIS data to inform the planning process using a 3D spatial model. This model will then support program work efforts in space optimization, evaluation of design alternatives, and implementation management.

Presentation Outline:

- 1) Review Quad Capital Review Program
- 2) Approach for Building the Spatial Data
- 3) Data Acquisition Process – LiDAR/BIM/CAD
- 4) Data Development Process
- 5) Next Steps
- 6) Lessons Learned

To register, visit: <https://attendee.gotowebinar.com/register/3845140959495503361>

Maximizing the Strength of GIS in Facilities

Tom McCaffrey

Director, GIS and Records Management

UNIVERSITY OF CALGARY, ALBERTA

Facilities Development

tmmccaff@ucalgary.ca



Date: April 28, 2015

Time: 11am - 12pm

Summary:

At the University of Calgary we focus on how we can maximize the use of GIS within the facilities group:

- 1) What can be gained by involving daily workers in the GIS process?
- 2) How do we improve the Quality Control of our data?
- 3) How does GIS save us money?

Our presentation will briefly cover our role within the campus 'community' as well as our function within Facilities Development and Maintenance. Our approach to GIS in the facilities group covers the many different scopes related to data mapping and GIS systems development (systems used to transfer knowledge from our workers to our GIS). The immediate need for this data capture is driven by the fact that 55% of our facilities staff will retire within the next 5 years. By using GIS as a daily tool our workers help verify the data accuracy while inputting new changes as they happen. We also hope to show how we automate the many processes we have and how we use the power of the computer to help improve our quality control while speeding up our process. Programming in Python allows us to use GIS to view errors in data that may otherwise get overlooked (ie room numbering). To complete this overview a discussion on the use of worker involvement and how it allows us the opportunity to save money by stream lining work processes, preventing potential disasters and improving health and safety standards.

To register, visit: <https://attendee.gotowebinar.com/register/4415073911265952002>

Facilities Information Spatial Data Model (FISDM) Implementation

Aaron Chevront

CAD/GIS Program Manager

UNIVERSITY OF WASHINGTON

Capital Project Office - Information Systems

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Date: May 12, 2015

Time: 1pm - 2pm

Summary:

As a member of the FISDM working group, the University of Washington is making the leap from an organization specific data structure to a more standardized system for interior space GIS. The UW implementation uses a non-CAFM CAD system to maintain floorplans in a traditional CAD environment while synchronizing the drawings with GIS every hour in a web Mercator coordinate system. The latest development is the introduction of an interior navigation infrastructure that ties together the interior of buildings with the campus exterior.

To register, visit: <https://attendee.gotowebinar.com/register/834663828994838274>

Integrating GIS and IWMS to Create an Effective Space Planning Tool

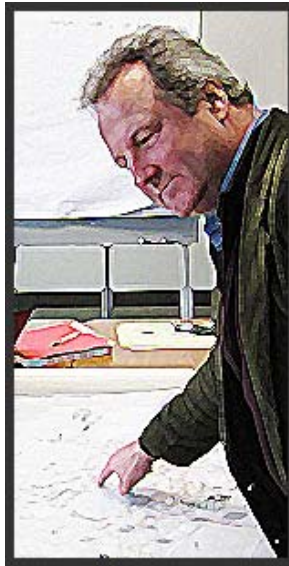
Niels La Cour

Senior Physical Planner

UNIVERSITY OF MASSACHUSETTS AMHERST

Campus Planning

nplacour@cp.umass.edu



Date: May 26, 2015

Time: 1pm - 2pm

Summary:

The University of Massachusetts Amherst recently began implementation of Tririga, IBM's Integrated Work Management System (IWMS), as an enterprise solution for Space and Asset Management. Campus Planning has been working to integrate the IWMS data with the Registrar's database (R25) and Finance (PeopleSoft) and bring them into the GIS environment to create more effective Space Planning tools. The analytical and visualization environment of GIS offers the opportunity to optimize space utilization and communicate that information to decision makers. This presentation will focus on the technology enabling that integration, Safe Software's Feature Manipulation Engine (FME), and the benefits to the organization of using GIS at a decision support system.

To register, visit: <https://attendee.gotowebinar.com/register/5221563491216020226>



Utilities Management with GIS

Ray Garrett

Senior Manager

UNIVERSITY OF MICHIGAN

Utilities Records Integration Department

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Date: June 9, 2015

Time: 1pm - 2pm

Summary:

The Utilities Department of the University of Michigan provides utility services for its Ann Arbor campus. Services provided include water, sewer, storm, chilled water, fire protection, medium and low voltage, steam, condensate return, compressed air, domestic hot water supply and return, a tunnel distribution system and Miss Dig administration. This presentation will focus on how the Utilities Records Integration department has brought together the information from the separate utilities into a single website for information distribution; how we got to where we are today, the technologies used and what we have done to achieve tradesman buy in.

To register, visit: <https://attendee.gotowebinar.com/register/3757865025018767106>



Your Perfect 3D World (BIM and GIS Integrated)

Larisa Kruger

Enterprise GIS Manager

OHIO STATE UNIVERSITY

Facilities Information and Technology Services / Physical Planning and Real Estate

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Date: June 23, 2015

Time: 1pm - 2pm

Summary:

Assets such as buildings, equipment, roads and bridges present local governments as well as big organizations with a number of asset management challenges. OSU is solving some of these challenges by integrating our BIM and GIS. Conversion tools were used to share the best parts of our BIM with both our web application and ArcScene. This approach enabled detailed spatial analysis that was not available in Revit and made BIM accessible to the masses through our intuitive web mapping application.

To register, visit: <https://attendee.gotowebinar.com/register/8745690672773482498>

City Engine for Campus Planning and Visualization

Jose Delgado

Program Manager

UNIVERSITY OF SOUTHERN CALIFORNIA

Engineering CAD Services

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Date: June 30, 2015

Time: 1pm - 2pm

Summary:

Review of the process creating a campus 3D Model at the University of Southern California University Park campus. Some potential planning and visualization uses will be explored.

Discussion Topics Include:

- 1) Process exploration
- 2) Uses

To register, visit: <https://attendee.gotowebinar.com/register/6988845913936042753>