

# **53rd URISA Annual Conference for GIS Professionals (GIS-Pro 2015)**

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Volume 1 of 2

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## MONDAY OCT. 19

### GISPro & NWGIS 2015 IGNITE- AICP/CM Approved 1.5

Spiderwebs and the GIS Management Institute *Allen Ibaugh, AICP, GISP, Data Transfer Solutions*

Contributing to Open Street Map Using Field Papers in Tanzania *Emmor Nile, GISP, Oregon Department of Forestry*

Geospatial Crowd Sourcing Site Evaluation for Non Profit Public Outreach *Nicholas LaRue, HDR Engineering*

Modeling Erosion Potential along Trails Using LiDAR *Holly Eagleston, Virginia Tech*

Geography as an Educational Foundation *Cy Smith, GISP, Oregon Department of Administrative Services*

Mobile Voter Line Wait: A Story of Citizen Engagement, Partnerships and Panic! *Kevin Brown, GISi*

GIS Training: Taking our classroom into the community *Marilyn Nielson and Dave Stasney, Spokane Community College*

Mapping Nahiku History *Dawn Dionne, TerraMapping LLC*

Participating in the ArcGIS Living Atlas of the World *Seth Sarakaitis, Esri*

Young Professionals Making an Impact in URISA *Kari Chael, CDMSmith*

Once Upon a Time *Dr. Lesley Arnold, Geospatial Frameworks*

GIS Pros Can Affect and are Affected by Public Policy Issues *Bruce Joffe, GISP, GIS Consultants*

## TUESDAY OCT. 20

**Welcome & Keynote Address:** Using GIS to Map "Land for People" from the Main Streets to the Mountain Tops - AICP/CM Approved 1.5

*Breece Robertson, National GIS Director for the Trust for Public Land.*

### Agriculture, Landscape and Ecology - AICP/CM Approved 1.5

**Moderator:** *Bart Butterfield, Idaho Department of Fish and Game*

Supporting International Agricultural Research Projects using Open Source GIS *Karsten Vennemann, Terra GIS LTD*

Using Google Earth Engine to Create Large Scale Evapotranspiration *Stefanie Bohms, GISP, SGT Inc.*

Assessing Ecological Benefits for the California Department of Water Resources: Incorporating Landscape Pattern into Habitat Evaluation Models *JD McLandrich, GISP, AECOM*

### Coastal, Watershed and Flood Risk Management - AICP/CM Approved 1.5 - Moderator:

*Linda Davis, Idaho Dept of Water Resources*

Coastal Land Cover Change Data and Partnerships *Eric Morris, NOAA Office for Coastal Management*

Evaluating Flood Risk of Insured Facilities *Danielle Favreau, GISP, Idaho Department of Water Resources*

San Antonio River BATSIC *Misty Downing, San Antonio River Authority*

### State Custodianship of CadNSDI - the Cat's Meow? - AICP/CM Approved 1.5 - Moderator:

Land Records and State Government *Brent Jones, PE, PLS, Esri*

The Nine Lives of the Cat: Takeaways From the Montana CATSPAW Project *Maya Daurio and Stewart Kirkpatrick Montana State Library*

### GISP: The Road To And Through An Exam - Moderator:

*Bill Hodge, GISP, GIS Certification Institute*

GISP: The Road To and Through an Exam *Bill Hodge, GISP, Executive Director, GISCI, Des Plaines, IL*

GIS Professional Certification: Future Directions *Rebecca Somers, GISP, Somers-St.Claire GIS Management Consultants*

To Certify or not to Certify: Level of Acceptance by the Industry *Tripp Corbin, GISP, CFM, MCP, CTT+, eGIS Associates, Inc.*

### Understanding the Boundaries of Professional Practice, Part One -

**Moderator:** *Glenn O'Grady, GISP, URISA Past President*

Review of NCEES Model Law and Rules defining the boundaries of practice, and what constitutes GIS Professionals' practice? *Bruce Joffe, GISP, URISA*

What constitutes the Practice of Survey? *Curt Sumner, PS and Jon Warren PLS, National Society of Professional Surveyors (NSPS)*

What surveyors love and hate about GIS, and how surveyors use GIS in their practice. *Curt Sumner, PS and Jon Warren PLS, National Society of Professional Surveyors (NSPS)*

State licensure of practicing GIS professionals ... what every GISP needs to know! *Michael Zoltek, CP, LS, CFedS. GISP, ASPRS*

The need for national surveyor licensing? *Curt Sumner, PS and Jon Warren PLS, National Society of Professional Surveyors (NSPS)*

### Lunch Presentations

What's in the Neighborhood? Juvenile Reoffending and Supportive Organizations *Kendra Thompson Dyck, University of Arizona*

IDFG Interactive Map Applications Created using Esri StoryMaps & Javascript API *Pam Bond, Idaho Fish and Game*

Creating HAZUS User Defined Facilities with Assessor Data *Danielle Favreau, GISP, Idaho Department of Water Resources*

High Accuracy GNSS Alongside iOS and Android Devices for GIS Data Collection *Jackson Beighle, Electronic Data Solutions*

Young GIS Professionals & the URISA Vanguard Cabinet *Kari Chael, CDM Smith*

Experiences from the 2015 Research Experience for Teachers Program *Keota Silaphone, MCP, GISP, Salisbury University*

Master Plan Updates and GIS *Donna Phillips, GISP, City of Hayden*

Where the Sidewalk Ends: GIS as an agent of Community Development *Stephen M. Berry, GISP, Clark County GIS*

#### **Address Database Development - AICP/CM Approved 1.5**

**Moderator:** *Amy Esnard, MSc., GISP, PMBI, Elevation Solutions, LLC*

Addressing A Simple Task or a City Nightmare *Randal Krejcarek, P.E., GISP, City of Delray Beach (AICP)*

Building an Open National Address Database *Martha Wells, GISP, Spatial Focus LLC*

Developing a Community Engagement Component for Addressing Systems *Martha Wells, GISP, Spatial Focus LLC (AICP)*

#### **An Insider's View of Indoor Technology and Mapping - AICP/CM**

**Approved 1.5 - Moderator:** *Al Little, BES, GISP, City of Hamilton - Canada*

Using GIS for Space and Occupancy Management *Dan Jensen, OnLINE FM*

Indoor Mapping For Your Organization *Kevin Brown, GISi*

Creating A GIS Application for King Abdulaziz University Campus Planning *Abdulkader Murad, PhD, King Abdulaziz University, Jeddah, Saudi Arabia*

#### **Transportation Information Mapping Systems, Public Roads Network, and Transportation Organization Network Integration - AICP/CM**

**Approved 1.5 - Moderator:** *Allen Ibaugh, AICP, GISP, Data Transfer Solutions*

Enterprise Distinguished System - Transportation Information Mapping System (TIMS) *Ian Kidner, GISP, GIMS Systems Administrator, Ohio Department of Transportation*

State Route Prioritization *Paul Tanner, Assistant Georgia Department of Transportation*

Washington State Department of Transportation Washington All Public Roads Network *Pat Whittaker, and Allen Blake, Washington State Department of Transportation*

#### **GIS Management Practices and Innovation - Moderator:** *Ed DeYoung, Idaho Dept. of Lands*

Calculating the Long-term Return on Investment for a Web Mapping Application *Richard Daniels, GISP, Washington State Department of Transportation*

GIS Management Strategies: Improving Your Program and Practices *Rebecca Somers, GISP, Somers-St.Claire GIS Management Consultants*

PM Strategy Innovation for Municipal GIS *James Bates, GISP, and Curt Bynum, GISP, Louisville Water Company*

#### **Mapping Your Way into a GIS Career - Moderator:** *Jim Glassley, HDR*

**Panelists:**

*Wendy Peloquin, GISP, Geographic Information Services, Inc.*

*Diana Rodriguez, CDM Smith*

*Tripp Corbin, GISP, CFM, MCP, CTT+, eGIS Associates, Inc.*

*Stephen M. Berry, GISP, Clark County*

*Ashley Littell Hitt, GISP, Connected Nation*

*Kevin Mickey, GISP, The Polis Center-IUPUI*

#### **Understanding the Boundaries of Professional Practice, Part Two -**

**Moderator:** *Glenn O'Grady, GISP, URISA Past President*

GIS and Surveying: This Can of Worms May Not be as it first Appears *Kim McDonough, GISP, Tennessee Department of Transportation*

Overview of emerging technologies that affect GIS, photogrammetry, surveying and mapping; can surveyors survive without accuracy? *Brent Jones, PE, PLS, Esri*

How survey products can and should integrate with Enterprise GIS; what GIS Professionals need to know about geodetic and survey control *Bruce A Joffe, GISP, Principal, GIS Consultants*

Assimilating Survey Data into an Enterprise GIS: Resistance is Futile *Darrel Ramus, GISP, PLS, Ruen-Yeager & Associates, Inc. and Rich Waltrip, PLS, Waltrip Geomatics & Geospatial Services, LLC*

Applying GIS to Survey Monument Management *Anthony Leimeister, LSIT and Ed Wells, GISP, Washington Metropolitan Area Transit Authority*

#### **Are You Certifiable? - Moderator:** *Cindy Post, GISP, City of Leduc - Canada*

Tips and Tricks to Passing a Certification Exam *Tripp Corbin, GISP, CFM, MCP, CTT+, eGIS Associates, Inc.*

Development of an Open Source Geospatial Certification Model Based on the GTCM *Tanzeel Ur Rehman Khan, HFT Stuttgart, Germany*

#### **Big Sky Cures Pain Points in the Field - Moderator:** *Anne Johnson, GISP, State of Alaska*

DEQ Mobile: A DEQ GIS Integrated Data Collection Solution *Nat Carter and Chris Stump, Montana Department of Environmental Quality*

#### **ESIG Showcase Part 1 Moderator:** *Corey Halford, GISP, City of Airdrie - Canada*

**Single Process Distinguished System** Mobile Voter Line Wait Application *Tim Nolan, GISP, Collin County*

**Single Process Distinguished System** Calgary Automated Survey Plan Verification and Reporting (CASPER) *Arne Svedahl, Cadastral GeoSpatial Asset Management, City of Calgary*

**How Mature are You? - Moderator:** *Dianne Haley, BSc, MScGIS, GISP, DMH GIS Consulting - Canada*

**Presenters:**

Greg Babinski, Finance & Marketing Manager, King County  
Amy Esnard, MSc., GISP, PMBI, Consultants, Elevation Solutions, LLC

**Integrating ArcGIS Geoprocessing & Mapping**

**Capabilities into Office 365 -**

**Moderator:** Christina Boggs, Department of Water Resources

**Presenters**

David Howes, Ph.D., David Howes, LLC  
Eric Sant, Open Range Consulting  
Jason Pardy, Jason Pardy Consulting

**2015 Undergraduate Geospatial Technology Skills Competition -**

**Moderators:**

Adam Dastrup, GISP, Salt Lake Community College and Scott Jeffrey, GISP, Community College of Baltimore County

Shading out the Gun: How Baltimore City Greenspace Relates to 2013 Homicides Molly Finch, Freshman, Community College of Baltimore County

Toxic Mapping with Python and GIS: Exploring Relationships Between Carcinogen Dumping and Cancer Amy Halloran, Senior, DePaul University

The Syrian Conflict and Migration of Refugees Kevin McMahon, Freshman, Community College of Baltimore County

Identifying Wildfire Risk Areas in Western Washington State Matthew Seto, Senior, University of Washington - Tacoma

**WEDNESDAY OCT. 21**

**Awards & Recognition Breakfast**

Dr Lesley Arnold, Director, Geospatial Frameworks, Australia

**Assets, Records and Management Roadblocks - AICP/CM Approved 1.5**

- Moderator: Ian Von Essen, Spokane County

Managing a Wastewater System across Three Jurisdictions Donna Phillips, GISP, City of Hayden, Representatives of Hayden Area Regional Sewer Board & Their Entities

Implementing Asset Management in the Cloud using Ground Based LiDAR Chet Hagen and Lauren Woodruff, Multnomah County /DCS Business Services

As-Built: Proper Records Management Processes Aid Asset Management Elaine Eberly and Dean Noble, Seattle Public Utilities

**Map-21 What Does it Mean for Me and My Agency - AICP/CM**

**Approved 1.5 - Moderator:** Teresa Townsend, AICP Planning Communities

MAP-21 - What Does it Mean for me and my Agency? Allen Ibaugh, AICP, GISP and Trey Fragala, AICP, PMP, Data Transfer Solutions

**City Scope - Moderator:** Keri Brennan, GISP, The Schneider Corporation

Finding Return on Investment Using AVL Eric Svensen, GISP, City of Montrose

Mapping the Voice of the People Neal Fraser, B.S., Gateway Mapping, Inc.

**ESIG Showcase Part 2 - Moderator:** Corey Halford, GISP, City of Airdrie - Canada

**Enterprise Exemplary System** Boldly Know: York Region's Enterprise GIS Duncan Rowe, York Region, Ontario, Canada

**Enterprise Distinguished System** NPMMap Builder Nate Irwin, US National Park Services

**Single Process Exemplary System** Next Generation Permitting System Dennis Hanberg, Planning and Land Services Director, Pierce County

**Framework Themes: Metadata Standards and Data Processing**

**Optimization - Moderator:** Ryan Bowe, GISP, Quantum Spatial

Identifying and Defining The Best Available Danielle Favreau, GISP, Idaho Department of Water Resources

ISO Geospatial Metadata: The 411 on 19115 Lynda Wayne, GISP, ASLA, GeoMaxim

Save Time! Speeding Up Geoprocessing in ArcGIS Bruce Godfrey, University of Idaho

**The Art of the Helpful GIS Presentation**

**Presenters**

David Howes, Ph.D., David Howes, LLC

Parker Wittman, Aspect Consulting

Jason Pardy, Jason Pardy Consulting

Matt Stevenson, MUP, CORE GIS, Seattle, WA

**Implementing Map 21 All Road Network of Linear Reference Data**

**[ARNOLD] - AICP/CM Approved 1.5 - Moderator:** Alexandra Diana Rodriguez, CDM Smith

GIS-Transportation "ARNOLD"

Allen Ibaugh, AICP, GISP, Data Transfer Solutions

James Meyer, GISP, Arizona Department of Transportation

Ian Kidner, GISP, GIMS Systems Administrator, Ohio Department of Transportation AICP

**Knowledge & Power: Legal and Ethic Considerations for GIS and**

**Planning - AICP/CM Approved 1.5 (.5 L/1.0 E)**

**Presenters:**

Teresa Townsend, AICP, Planning Communities

Ed Wells, GISP, Washington Metropolitan Area Transit Authority (WMATA)

Kelly Alfaro Haugen, Thurston GeoData Center

### **Public Participation GIS (PPGIS) - AICP/CM Approved 1.5**

**Moderator:** *Judy Colby-George, GISP, Spatial Alternatives*

Where Y at? Using PPGIS to Study Street Lights in the Black Pearl of New Orleans *Graham Hayes, Entergy New Orleans*  
Participatory Geographic Information Systems: Mapping Nairobi Informal Settlement *Katie Pickett, University of Central Arkansas*  
GIS in Poverty Alleviation *Rania Qutieshat, Dr., Balqa Applied University, Amman, Jordan*  
*Mohammed Al Hiari, Hashemite Fund for Human Development, Amman, Jordan*

### **Cloudy all Over but Sunny Inside - Moderator: Jill Ballard, City of**

*Yakima*

Demystifying ArcGIS Online and the OpenData Portal *Randy Bonds, City of Yakima*  
Getting the most out of Web and Mobile GIS *Frank Roberts, Innovate! Inc.*  
Coordinating GIS-based Asset Management Information Maintenance: from the office to the field, and including those who need to know *Neal Fraser, B.S., Gateway Mapping, Inc.*

### **Standards? What Standards? - Moderator: Ryan Bowe, GISP, Quantum**

*Spatial*

Standardized Quality Control for Address Data *Martha Wells, GISP, Spatial Focus LLC, University Park, MD*  
*Matthew Yurman, Spatial Focus*  
Updated and Revised ASPRS Accuracy Standards for a New Era of Digital Mapping *Doug Smith, C.P., R.P.P., P.E., David C. Smith & Associates, Inc.*  
Report Card on the U.S. National Spatial Data Infrastructure *Cy Smith, GISP, Oregon Department of Administrative Services*

### **The Value of Coding for GIS -**

**Moderator:** *Keith Massie, GISP, Lane Council of Governments*

#### **Presenters**

*David Howes, Ph.D., David Howes, LLC*  
*Jeff Berry, Erlandsen, Inc.*  
*Aaron Paul, First American Title*

### **Calculating Walksheds and Crop Cover Changes - AICP/CM Approved**

**1.0 - Moderator:** *Donna Phillips, GISP, City of Hayden*

Developing a Process to Connect Remotely Sensed Crops to BMPs and Water Quality *Keota Silaphone, MCP, GISP, Salisbury University*  
Calculating Walksheds in Light Rail Station Areas: A Case Study in SeaTac, WA *Zinta Smidchens, GISP, City of SeaTac*

### **Decision Support Systems in Urban Planning - AICP/CM Approved 1.5 -**

**Moderator:** *Doug Adams, GISP, Baltimore County*

Establishing Measures and Data to Support Planning and Policy Decisions to Integrate Transportation and Health *Teresa Townsend, AICP, Planning Communities*

Decision Support Systems in Urban Planning Evaluating GIS in Municipalities *Rania Qutieshat, Dr., Balqa Applied University, Amman – Jordan*

### **Use of GIS to Facilitate Urban Sustainability - AICP/CM Approved 1.0 -**

**Moderator:** *Jochen Albrecht, Ph.D., Hunter College, City University of New York*

Characterization of Event-based Supply and Demand in an Urban Market *Christopher DiMaggio, PE, Pennsylvania State University*  
Urban Solar Energy Mapping and Geospatial Analysis: The Case of Philadelphia, PA *Kirby Calvert, PhD, Penn State University*

### **Adapting to the Evolving GIS World - Moderator: Luke Boggess, GISP,**

*URISA Alaska*

#### **Presenters:**

*Aaron Paul, First American Title*  
*David Wallis, GISP, Cowlitz County*  
*Randy Bonds, Jr., City of Yakima*  
*David Howes, Ph.D., David Howes, LLC*

### **Desktop and Mobile Application - Moderator: Bart Butterfield, Idaho**

*Department of Fish and Game*

Web AppBuilder & Collector: A Cohesive Multi-platform Strategy *David Yarnell and Dan Spinosa, Innovate! Inc.*

Effectively Leveraging Mobile GIS *Chris Doscher and Kari Chael, CDM Smith*

### **URISA's GISCorps – Giving Back with GIS - Moderators: Dianne Haley,**

*GISP & Allen Ibaugh, AICP, GISP*

*URISA's GISCorps Core Committee*

## **THURSDAY OCT. 22**

### **Community Health and GIS Initiatives - AICP/CM Approved 1.0 -**

**Moderator:** *Hilary Perkins, GISP, City of Maryland Heights*

Healthcare Associated Infections: Advancing CDC's Health Care Quality Protection Efforts through Geospatial Maps/Apps *Danielle Ayan, GISP, PMP, ICP, Centers for Disease Control (CDC) | Agency for Toxic Substances and Disease Registry (ATSDR) | Geospatial Research, Analysis and Services Program (GRASP)*  
Stress in New York City *Jochen Albrecht, Ph.D., Hunter College, City University of New York*

**GIS and Next Generation 9-1-1 in Washington State - AICP/CM**

**Approved 1.5 - Moderator:** *Kathrine Cargo, GISP, ENP, Orleans Parish Communication District*

Implementation of a Regional Public Safety GIS in Spokane County, Washington

*Shawna Ernst, Spokane County*

*Joe Sacco, City of Spokane*

GIS and Next Generation 9-1-1 in Washington State *Dan Miller, GISP, Washington E911 GIS Manager, Washington Military Department Camp Murray*

*Ian Von Essen, Spokane County GIS Manager, Spokane County*

*Lynn Palmer, RiverCom 9-1-1*

*Cathy Udenberg, Columbia County, Washington*

**Transportation: Project Management and Data Design- Methodologies -**

**AICP/CM Approved 1.5 - Moderator:** *Ed Wells, GISP, WMATA*

Geographic Information System (GIS) Project Data Management and Improvement *Pyung ho Kim, Long Island Rail Road*

Data and File Structure Design in Support of a Regional Light Rail DEIS *Jim Glassley, and Nicholas LaRue, HDR*

Applying GIS Database Design and Management for Survey Control Monuments, Preserving Historic Values Spanning

Multiple Spatial Reference Systems for Washington Metropolitan Area Transit Authority, United States National Capital Region

*Anthony Leimeister and Ed Wells, GISP, Washington Metropolitan Area Transit Authority (WMATA)*

**Geospatial Data Act of 2015 (S.740) - Moderator:** *Pam Bond, IGC-EC*

*Chair, Idaho Geospatial Council - Executive Committee*

**Panelists:**

*Bill Farnsworth, Idaho State GIO*

*Cy Smith, GISP, Oregon State GIO*

*Molly Vogt, GISP, NGAC Representative*

*Frank Roberts, Innovate! Inc.*

**LiDAR vs. PhoDar - Moderator:** *Betty Conces, Kootenai County*

Fusion of Multispectral Imagery and LiDAR for Classification of Oregon White Oak *Joe Gordon, Metro*

The Use of Photo Derived Surfaces to Monitor Landcover Change *Joshua Greenberg, PhD., GISP, Skagit County GIS/Mapping*

**Wide Open - Moderator:** *Ashley Littell Hitt, GISP, Connected Nation*

Building Apps on Open Source 3D Software *Carl Anderson, GISP, Create Real Estate*

OpenAddresses, OpenStreetMap and Local Data: Crowdsourced Address Data and You *Martha Wells, GISP, and Matthew Yurman, Spatial Focus*

Using Open Source GIS to Support Agricultural Intensification in Africa

*Matt Stevenson, MUP, CORE GIS LLC*

*Karsten Vennemann, TerraGIS*

**Closing Keynote: Building Healthy Communities - AICP/CM Approved**

**1.0**

**Presenter:** *Este Geraghty, Chief Medical Officer & Health Solutions Director, Esri*

**Poster Session**

Remote Sensing Burn Severity in Bark Beetle Affected Forests *Ryan McCarley, University of Idaho*

Using GIS to Automate Temporal Geomorphic Analysis on the Susitna River, Alaska *Aaron Kopp, PE and Bill Fullerton, PE, Tetra Tech, Inc.*

A Geodesigned Spatial Decision Support system for Water Quality Planning *Melinda Shimizu, Ph.D., Western Oregon University*

A Merger: Bathymetry and Photogrammetry *Scott Wilson, CP, GeoTerra*

Remotely Sensed Crops Connected to Best Management Practices and Water Quality *Keota Silaphone, MCP, GISP, Salisbury University*

Mapping Anadromous Fish Species in Oregon's Tualatin River Watershed *Benjamin Protzman, Clean Water Services*