

GIS in Action 2015



Spatial Connections

Oregon & Washington GIS Conference

May 4-6, Hilton Vancouver Washington Conference Center



Conference at a Glance

Monday	Tuesday	Wednesday
<p>Registration 8 AM-4 PM</p>	<p>Registration : 8 AM-4 PM Vendor Exhibits: 8:30 AM-4:30 PM</p>	<p>Registration: 8 AM-1:30 PM Vendor Exhibits: 8:00 AM-1:30 PM</p>
<p>8:30-12:00 Morning Workshops</p>	<p>7:00-8:00 Women in GIS Breakfast</p>	<p>6:30-7:15 Annual Fun Run</p>
	<p>8:30-10:00 Plenary Session Introduction Keynote: Steve Ressler</p>	<p>8:30-10:00 Technical Presentations</p>
	<p>10:00-10:30 Break</p>	<p>10:00-10:30 Break</p>
	<p>10:30-12:00 Technical Presentations</p>	<p>10:30-12:00 Technical Presentations</p>
<p>12:00-1:00 Lunch (On your own)</p>	<p>12:00-1:30 Lunch The Voices of Vanport Concordia University and Beaumont Middle School</p>	<p>12:00-1:30 Lunch WAURISA Board Meeting ORURISA Board Meeting</p>
<p>1:00-4:30 Afternoon Workshops</p>	<p>1:30-3:00 Technical Presentations</p>	<p>1:30-3:00 Technical Presentations</p>
	<p>3:00-3:30 Break</p>	<p>3:00-4:30 Closing Plenary Session Summary and Problem Solving</p>
	<p>3:30-5:00 Technical Presentations</p>	
<p>6:00-9:00 Pre-Conference Social at Woody's Tacos</p>	<p>4:30-6:00 Exhibitor Social</p>	
	<p>6:00-9:00 Evening Social at South Pacific Rum Bar and Grill</p>	

ESRI Learning Lab 10:00-4:30

ESRI Learning Lab 8:0-3:00



#GISinAction
@ORURISA
@OrURISAYP
@WAURISA

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Presidents' Message

On behalf of the Columbia River Region ASPRS, Oregon and Southwest Washington chapter of URISA, and the Washington State chapter of URISA we are happy to welcome you to the GIS in Action 2015 "Spatial Connections" Conference!

The GIS in Action conference is a unique opportunity to learn from industry leaders on a wide variety of topics including program management, data modeling, asset management, photogrammetry, and state/city cooperative projects. The workshops at GIS in Action provide a very economical way for all of us to improve our technical skills and learn about the latest software enhancements. Please consider attending one of the workshops or technical sessions at the conference.

The GIS in Action conference is also a great way to connect with our peers and share successes and opportunities that we can carry back to improve our organizations. This is important because we often have little time in our day to day busy schedules to collaborate or make contact with others in our field. This year we have a unique opportunity to connect with our partners in the field of photogrammetry and remote sensing but also our colleagues in the State of Washington. The Northwest encompasses a strong professional community, please use this conference to share, connect and make new friends!

Finally, we would like to thank the GIS in Action committee for developing a great conference agenda and our many sponsors for supporting us.

Presidents,

Ian Madin—CRR-ASPRS

Dean Anderson—ORURISA

Heather Glock—WAURISA





Steve Ressler

Founder and President of
GovLoop.com

Steve Ressler is the Founder and President of , the “Knowledge Network for Government” which connects and fosters collaboration among over 150,000+ members of the government community. On GovLoop, members learn and discuss best practices on key topics in governments through blogs, forums, free online trainings, and research guides.

Mr. Ressler is a 3rd generation public sector leader and spent 6 years in roles at Social Security Administration, Department of Education, Department of Homeland Security Inspector General, and DHS Immigrations and Customs Enforcement. He has won the 2010 GovTech Top 25 Doers, Dreamers, and Drivers Award, the 2007 and 2009 Federal 100 Award, and the 2009 AFCEA Bethesda Social Media Award. Additionally, he has been featured in many publications and conferences including the Washington Post, Harvard Kennedy School, World Economic Forum, Wall Street Journal, Fox News, Huffington Post, among others.

Mr. Ressler is also the co-founder of Young Government Leaders (YGL), a professional organization of over 9,000 government employees across 12 local chapters in the U.S. He is a Master's graduate from the University of Pennsylvania where he received the Department of Homeland Security Fellowship. Outside of work, he spends his time with his wife, his son, and two cats.

ORURISA Board

PRESIDENT: Dean Anderson

TREASURER: Keith Massie

COMMUNICATIONS DIRECTOR/SECRETARY: Zac Christensen

PAST PRESIDENT: Amy Esnard

SELECTION BOARD MEMBERS :

Nels Michaelson, Amy Esnard, Mark Scott, Colleen Miller, Stacy Galleher, Lesley Hegewald,
George Day, Karim Naguib, Jeff Stump, Chris Wayne

SPECIAL INTEREST GROUP BOARD MEMBERS:

Dean Anderson, David Percy, Rotates, Young Professionals

At Large Board Members:

John Sharrard, Cy Smith, Molly Vogt, Eric Bohard

The Board of Directors meets approximately every two months.
The meetings are open to any interested individual. The meetings are informal and usually deal
with business related issues as well as setting policy for the local chapter.

The Columbia River Region of the ASPRS

PRESIDENT: Ian Madin

NATIONAL DIRECTOR: Marcus Glass

VICE PRESIDENT: Dave Christenson

SECRETARY/TREASURER: Erik Brewster

STUDENT CHAPTER LIAISON COMMITTEE CHAIR: Dan Craver

PAST PRESIDENT: Chris Aldridge

The CRR-ASPRS ExCOM meets bi-monthly and as needed.
Updates are presented on region and national activities and the ExCOM acts as the steering
committee for all region activities.

WAURISA Board

PRESIDENT: Heather Glock	BOARD MEMBER: Joshua Greenberg
VICE PRESIDENT: Ian Von Essen	BOARD MEMBER: Josh Sisco
SECRETARY: Sarah Myers	BOARD MEMBER: Cort Daniel
TREASURER: Don Burdick	BOARD MEMBER: Dana Trethewy
PAST PRESIDENT: Ann Stark	BOARD MEMBER: Renee Opatz

Board Meetings

Board meetings are held the second Tuesday of every month at Noon via conference call. Updates are presented by each committee.

It is an excellent way to find out what is happening, what will be happening and how to get involved.

Everyone is welcome to attend!

1-800-944-8766

Passcode #: 20311

Leadership Meetings

Wednesday, May 6 12:15 p.m. - 1:15 p.m.

WAURISA Board Meeting — Discovery A

Bring your lunch and join us for our annual Leadership Meeting on Wednesday – everyone is welcome! We'll share a brief chapter overview, announce election results and highlight several specific volunteer opportunities (big and small) where you can contribute to WAURISA and the Washington geospatial community. We'll then open the floor up for discussion and feedback. We're very interested in hearing your ideas for improving WAURISA's relevance for you and your professional development.

ORURISA Board Meeting — Cedar

The ORURISA Chapter will hold its annual business meeting at Lunchtime on Wednesday in the Cedar Room. Topics to be covered will be the board update, treasurers report, action items from this past year, what it means to part of ORURISA, review of Officer's duties, election of open board positions and officers, and review of action items for the coming year. This is a public meeting and everyone is invited to attend.

Be sure to vote...

Ballots due Wednesday, May 6 1:00 p.m.

Map Contest (vote for your favorite/best map)

View posters and engage in a competition by voting, which includes prizes for creators in different poster categories for contestants. Details about competition are below.

Judging: Maps will be judged by conference attendees according to the following categories by a ballot.

Cartographic - the quality of the visual display

Analytic Presentation - communication of meaningful patterns in data.

Data Integration - combining data from different sources.

Online Mapping App/Digital Map - displayed by web address.

Student Map - map or poster created by student.

Scripting/Geoprocessing Tool - time saving processes performed on large data with numerous records, using VBScript, Python, JScript, Pearl or other.

Map Social: Presenters will have an opportunity to stand by their work during the vendor social and share with everyone your motivation and interest behind your work.

Award: Awards will be divided amongst the winners of the categories after ballots are counted.

Pickup: Please pick up poster afterwards to avoid loss of your creative efforts. Posters cannot be removed prior to 1:00 p.m. on Wednesday, May 6th.

If you have question regarding the poster display and competition, please contact [<mapcontest.gisinaction@gmail.com>](mailto:mapcontest.gisinaction@gmail.com). Participation in the contest gives individuals an opportunity to present their work, skill, and knowledge. The organizers look forward to seeing many outstanding posters.



Let's get social

Something fun every day!

Monday Night Pre-Conference Social on May 4th 6:00-9:00 PM

Join us at Woody's Tacos as we kick off the start of GIS in Action 2015! There will be free appetizers while they last!

210 W Evergreen Blvd #700
Vancouver, WA 98660
<https://goo.gl/maps/nNO87>



Women in GIS Breakfast on Tuesday, 7:00– 8:00 AM May 5th

Following the great success of last year's Women in GIS Breakfast at the Washington GIS Conference, we decided to do it again this year at 2015 GIS in Action. Ladies, start your conference off right by joining your sister geospatial professionals for breakfast at the Hilton's Gray's at the Park in the Washington Room. Check out their mouth-watering scrumptious menu (PDF). This is an informal chance to network and get to know other women in GIS careers in Washington and Oregon. Please RSVP with Amanda Taub if you are coming. You can join us even if you are not attending GIS in Action. Gray's does offer complimentary valet parking for its guests.



Exhibitors Social Tuesday Night, May 5th, 4:30 – 6:00 PM

Walk around the exhibitors' area and enjoy a free drink and some appetizers. Learn about their products and services while completing your Vendor Passport. Turn in your Passport by Wednesday at 2:00 p.m. for an opportunity to win a great prize at the closing session.

Evening Social Tuesday Night, May 5th, 6:00 – 9:00 PM

Join us at the South Pacific Rum Bar and Grill to share great food, games, and prizes. There will also be delectable adult beverages available for purchase.

1109 Washington St
Vancouver, WA 98660
<https://goo.gl/maps/ZyQc1>



Join the Annual Fun Run on Wednesday, May 6th

Jump start your Wednesday morning with a casual fun-run through Vancouver! Heather Glock, outgoing President of WAURISA, will lead an easy-paced 3 mile run along the waterfront and through historic Fort Vancouver and the downtown core. Meet at 6:30 AM outside the Hilton conference hotel - we'll be back at the hotel by 7:15 a.m.

Esri Hands-On Learning

Tuesday, May 5 10:00 AM - 4:30 PM
Wednesday, May 6 8:00 AM - 3:00 PM

What is the Hands-On Learning Lab?

The HOLL (Hands-On Learning Lab) is a training resource provided and developed by Esri Training Services. The lab is an excellent way to introduce ArcGIS® software users to a variety of Esri® solutions and training opportunities while learning to use Esri software.

How does the HOLL work?

The HOLL consists of a group of laptops with headphones where students can work through lessons at their own pace. A lesson consists of a recorded presentation followed by a hands-on exercise. Each lesson typically takes from about 45 minutes to one hour to complete, and students can generally come and go as they please. Training Services instructors are on hand to answer questions and discuss Esri products, other training opportunities, and Esri Technical Certification.

Lessons offered at the HOLL

- ◆ Getting Started with GIS 1: Understanding the ArcGIS Platform
- ◆ Getting Started with GIS 2: Using ArcMAP™ to Explore GIS Data
- ◆ Getting to Know ArcGIS® Pro
- ◆ Advantages to Storing Your GIS Data in the Geodatabase
- ◆ Creating Presentation Quality Maps in ArcMap
- ◆ Editing GIS Data in ArcMap
- ◆ Multi-user Editing Using Versioning
- ◆ Editing and Maintaining Parcels Stored in a Parcel Fabric
- ◆ Geocoding Street Addresses to Create Map Points
- ◆ Importing and Preparing CAD Data for Use in ArcGIS
- ◆ The Importance of Spatial Reference in Tactical Applications
- ◆ Exploring Health and Epidemic Patterns Using Spatial Statistics Tools
- ◆ Optimizing Transportation Routing Using ArcGIS® Network Analyst
- ◆ Modeling Time and Distance Along Networks Using Linear Referencing
- ◆ Working with Geometric Networks to Manage Utilities and Water Runoff
- ◆ Interpolating Sample Points to Create Rasters Using Spatial Analyst Tools
- ◆ Geoprocessing GIS Data Using Python
- ◆ Sharing Maps and GIS Content Using ArcGISSM Online
- ◆ Understanding Web Services Using ArcGIS® for Server
- ◆ Generating Web Applications for the GIS Novice
- ◆ Getting Started with the Community Maps Data Preparation Tools
- ◆ Mapping Excel Data Using Esri® Maps for Office®

8:30 PM— 12:00 PM WORKSHOP SESSIONS

INCORPORATING LOCAL GIS DATA INTO HAZUS FOR HAZARD ANALYSIS & MITIGATION PLANNING

OAK

Cathy Walker

USING THE NEW TRIMBLE R1 WITH SMARTPHONE OR TABLET TO COLLECT HIGH ACCURACY DATA

HEMLOCK

Jim Lahm, Electronic Data Solutions

INTRODUCTION TO AIRBORNE LIDAR

CEDAR

Andrew Walker, GeoCue Group

GIS PROGRAM MANAGEMENT— PART 1

PINE

Cy Smith, State of Oregon

ARCGIS PRO - AN INTRODUCTION

Alder

Leah Saunders, Esri

1:00 PM— 4:30 PM WORKSHOP SESSIONS

JUST ENOUGH POSTGIS - AN INTRO TO THE WORLD'S MOST
POPULAR SPATIAL DATABASE

Darrell Fuhriman

OAK

UNMANNED AERIAL SYSTEM FUNDAMENTALS

Michael Wing, Jon Burnett, and Seth
Johnson, Oregon State University

HEMLOCK

DIGITAL COAST – IMPROVING COASTAL RESILIENCE

Tim Doherty, NOAA Office for Coastal
Management - Baldwin Group
Jamie Carter, NOAA Office for Coastal
Management - Baldwin Group

CEDAR

GIS PROGRAM MANAGEMENT– PART 2

Cy Smith, Statewide GIS Coordinator, State of Oregon

PINE

EXTEND ARCGIS TO YOUR MOBILE WORKFORCE

TJ Abbenhaus , Esri

Alder

10:30 PM— 12:00 PM TECHNICAL SESSIONS

PAPER/PRESENTATION: B1- COLLABORATION

DISCOVERY A

Analyzing Public Participation Data for Transportation
Planning in the Mt. Baker-Snoqualmie National Forest
Alexa Todd, David Banis

Angling for a Successful Public - Private Partnership
Jon Bowers

Report Card on the NSDI
Cy Smith

VENDOR PRESENTATION: B2- TECHNICAL TRACK 1

DISCOVERY B

Use Story Maps to Inform and Inspire Your Audience
TJ Abbenhaus

Where will ArcGIS Pro Take You?
Leah Saunders

PANEL DISCUSSION: B3- PARCEL FABRIC

DISCOVERY C

Parcel Fabric Overview
Tim Hodson

Polk County Control Mapping in the Parcel Fabric
Christi Pontier

Integrating Parcel Fabric into the ArcMap Environment
Dean Anderson

12:00 PM— 1:30 PM LUNCH PRESENTATION

The Voices of Vanport

Heritage DCA

Shawn Daley, Matt Blanchard, Kirsten Parrott, and the Students of Beaumont Middle School

1:30 PM— 3:00 PM TECHNICAL SESSIONS

PAPER/PRESENTATION: C4- GIS PROGRAM MANAGEMENT

DISCOVERY A

Making GIS an IT Solution Platform

DON BURDICK

CITYIQ - KEEPING A CITY GOVERNMENT MAP APPLICATION CURRENT AND RELEVANT

ANN STARK, JAMES VAN DYK

VENDOR PRESENTATION: C5- DATA COLLECTION

DISCOVERY B

Trimble Positions – ArcGIS Compatibility with Trimble and Esri
Field Data Collection Software for

JIM LAHM

Asset Inventory Using Street-level Imagery

Mellisa Christie, Hedvig Fahlbert

PANEL DISCUSSION: C6- ADAPTING TO THE EVOLVING GIS WORLD

DISCOVERY C

Adapting to the Evolving GIS World

Aaron Paul, David Howes, Joanne Markert,

David Wallis, Blair Deaver, Bridget Brown

PAPER/PRESENTATION: CX- VEGETATION MANAGEMENT

CEDER

Digital Mobile Sketch Map: Offline Airborne Mobile Mapping
Solution for Forest Health Monitoring

Kerry Halligan

(Continued onto next page)

(Continued from last page)

Integration of Mobile Technology to Support Remotely Sensed Vegetation Mapping Efforts

Tyler Bax

Vegetation Management Using Digital Surface Modelling Analysis

Marcus Glass

3:30 PM— 5:00 PM TECHNICAL SESSIONS

LIGHTNING TALK: D7- SHORT TAKES; BIG IDEAS

DISCOVERY A

Polk County Geospatial Application – PCMaps2

Bryce Choi

Master Title Plats in ArcGIS: Mapping Federal Rights, Title and Interest throughout History

Frank P. Lahm III

Scrubbing Portland's New Property Model

Jake Brown

OpenDataKit & OpenStreetMap = OpenMapKit

Jubal Harpster

How stressful is your bike network? Moving beyond traditional Level of Service Metrics

Kim Voros

Choosing the right web GIS technology for a local government

Masao Matsuoka

PAPER/PRESENTATION 3: D8- TECHNICAL TRACK 2

DISCOVERY B

The CLOUD for the everyday GIS person

Blair Deaver/GeoEngineers

Don't Copy Data! Instead, Share it at Web-Scale

Mark Korver

VENDOR PRESENTATION: D9- ASSET MANAGEMENT

DISCOVERY C

Integrating Field Data Collection, Document Management and
Enterprise GIS for Natural Resources

Brian Grass

Implementing Asset Management in the Cloud using Ground
Based LiDAR

Chet Hagen, Lauren Woodruff

Clark County Sign Inventory Project

Matt Deitemeyer

VENDOR PRESENTATION: DX- Masters of Science at UW

Cedar

What will you achieve in a one year long Master of Science
In Geospatial Technologies at UW Tacoma?

Greg Lund

8:30 PM— 10:00 PM TECHNICAL SESSIONS

PAPER/PRESENTATION: E 10- DATA MANAGEMENT

DISCOVERY A

Maintaining Mission Critical Data in an NG9-1-1 Environment

John Joseph

A Brief History of GIS Data Distribution at Pierce County

WA – 8mm tape to ArcGIS Open Data

Cort Daniel

PAPER/PRESENTATION: E 11- WEB MAPPING

DISCOVERY B

Don't call it GIS! Rethinking how to deliver information at a local government in an era of raised expectations for information access

Preston Beck, Nathan Shaub

Research Oriented Web Mapping in Clark County

Bob Pool

Pacific Northwest Environmental Response Management Application (ERMA®): Web Mapping and Visualization Application

Nicolas Eckhardt, Benjamin Shorr

PAPER/PRESENTATION/LIGHTNING TALK: E 12- INDUSTRY UPDATE

DISCOVERY C

A New Standard for a New Era: The New ASPRS Positional Accuracy Standards for Digital Geospatial Data

Doug Smith

Geography as an Educational Foundation

Cy Smith

The National Map, US Topo and USGS Historic Quadrangles in the Pacific Northwest

Tom Carlson

The State of GIS in 2015 in Washington & Oregon
Greg Babinski

SOCIETY PRESENTATION: EX- Dick Thomas Student Competition

Cedar

WAURISA Student Competition

EX – Dick Thomas Student Competition

May 6, Wednesday 8:30am - 10:00am, Cedar



Join us for the 9th annual Dick Thomas Memorial Student Presentation Competition & Award. This award was established in 2006 to honor Washington State GIS pioneer and mentor Richard 'Dick' Thomas. The intent of this award is to honor Dick by continuing his work of encouraging students to excel in their studies and transition successfully into careers in the field of GIS.

10:30 PM– 12:00 PM TECHNICAL SESSIONS

PAPER/PRESENTATION: F13- SHORELINE MANAGEMENT

DISCOVERY A

The Coastal Change Analysis Program: Tracking Changes
in Coastal Land Cover Over Time

Jamie Carter

Oregon Tidal Shoreline: Update on Process to Create and Standardize

Randy Dana

Classifying Oregon Estuary Habitats with CMECS

Andy Lanier

PAPER/PRESENTATION: F14- MANAGING GIS PROJECTS

DISCOVERY B

How to Manage GIS Projects, Contractors and Everything Else

Sarah Myers

How to tackle a failing GIS Project

Rachel Smith

VENDOR PRESENTATION: F15- TECHNICAL TRACK 3

DISCOVERY C

What is the ArcGIS Platform & Where does Portal/portal Fit?

Heather Glock

Imagery: A Core Component of your ArcGIS Platform

TJ Abbenhaus

PAPER/PRESENTATION: FX- 3D MODELING

CEDER

3D Modeling for BIM

Bijoy Nair

3D Modeling for GIS

Marcus Reecy

1:30 PM— 3:00 PM TECHNICAL SESSIONS

PAPER/PRESENTATION: G16- ENVIRONMENTAL ANALYSIS

DISCOVERY A

Building Capacity for Climate Change Adaptation: Land Suitability and Cost-Path Analyses

Melissa Watkinson

Exploring Prehistoric Movement and Land-Use in The Old River Bed of Western Utah

Traevis L. Field, MA, RPA

Geostatistical Estimation of Current and Target Sediment Cap Conditions at the Wyckoff/Eagle Harbor

Erik Strandhagen, Susan FitzGerald, L.G.

PAPER/PRESENTATION: G17- PHOTOGRAMMETRY

DISCOVERY B

Applying GIS in Public Water System Source Protection; Oregon DEQ experiences

Steven Aalbers

Mapping the Oregon King Tide Photo Project

Andy Lanier

Data Capture from Street Level Imagery

Chris Aldridge

PANEL DISCUSSION: G18- STATE TO CITY COOPERATION

DISCOVERY C

Government Agencies Working Together: State-to-Local Collaboration Panel

Cy Smith, Melissa Crane, Sue Blohm, Joy Paulus, Jason Eklund, Don Burdick

10:30am - noon, Discovery A

May 5, Tuesday

Analyzing Public Participation Data for Transportation Planning in the Mt. Baker-Snoqualmie National Forest

The Mt. Baker-Snoqualmie (MBS) National Forest is among the most visited national forests in the country with more than 2,500 miles of roads providing access to trails, campgrounds, rivers, timber and other recreational, commercial and non-commercial activities. However, the system is too large for the Forest Service to maintain at current levels, given its declining budgetary trends. The 2005 Travel Management Act requires national forests to develop a sustainable roads strategy; to meet those requirements, MBS anticipates that it will need to shut down 75% of the existing roads. In 2013, a coalition of grassroots organizations collaborated with MBS in a series of mapping workshops aimed at collecting data about road uses and values that could inform the road closure planning process. The Center for Spatial Analysis and Research at Portland State University was contracted to create spatial data and analyze public participation data from workshops and an online survey. Without input on the data collection or a specified product, the data analysis was experimental in nature. Challenges included combining individual input into comparable data, producing results that identify management priorities, and integrating varying forms and quality of data. Several methods were developed. Workshop roads were digitized and density was calculated as the count of overlaps. Density of workshop destination points were identified using kernel density. Because diversity of uses is emphasized in the mission of the USFS, a diversity Index was developed for activities and values based on existing models. To create spatial data from written input of the online survey that could be compared with the spatial data from the workshops, destination areas were identified by creating Thiessen polygons around clusters of points. Results from the analyses enable MBS to view the spatial connections between people and the road system in the national forest from a variety of perspectives.

Alexa Todd, Research Analyst

Center for Spatial Analysis and Research—Portland State University

Alexa Todd has been a research analyst for the Center for Spatial Analysis and Research since 2011, working on a variety of projects for academic research and state and federal agencies. She received the Masters of Science in Geography from Portland State University in 2014; her thesis evaluates public participatory mapping for natural areas planning. Alexa has worked for the City of Portland and Metro on projects related to transportation planning and natural area management. She has served as the stewardship coordinator of Mt. Tabor Park since 2010 where she plans and leads volunteer-based environmental restoration.

David Banis, Associate Director

Center for Spatial Analysis and Research—Portland State University

David Banis has managed the Center for Spatial Analysis and Research at Portland State University since 2006, working with a variety of partners including federal, state, local agencies, and PSU faculty in other departments. David's teaching focuses on geographic information systems and cartography. He has a number of research programs that employ public participatory mapping to explore how cultural values and human perceptions of places and landscapes might be used in land management. Other recent work includes database development for Oregon emergency response, spatial modeling of volunteered graffiti reports, geovisualization of foreign investment data, and creating a cultural atlas of Portland.

10:30am - noon, Discovery A

May 5, Tuesday

Angling for a Successful Public - Private Partnership

Not only are Oregon's sport fishing regulations complex, they are published only on paper or in PDF format. This approach has failed to capitalize on available mobile technology for improving access to this information and to reduce barriers to fishing. State fish and wildlife agencies are working to reverse downward trends in sport fishing participation. In order to better serve the angling public, the Oregon Department of Fish and Wildlife set out to create a mobile application to facilitate improved access to sport fishing regulation information. One big problem stood in the way as there was no money to pay for the development of the application. Some creative thinking led to an RFP that specified the project would be completed at no cost to the department. Fortunately there are business models out there that meshed well with this approach and an agreement was reached with a private contractor to move forward with the project. Not every contractor can work on "spec" to build mobile applications, but they do exist and the price was right. Due to anticipated ad revenue, the project was viewed positively by the contractor as there are hundreds of thousands of anglers with potential interest in such an application and they are a sought after demographic. The advantages and disadvantages of this approach will be described.

This partnership, between a state government agency and a private corporation, which utilizes spatial data at the core of the application, serves as a unique example of creating connections that provide solutions for success. Additionally, it enables ODFW to better connect with its angling constituents, giving them what they have come to expect, ready access to map-based regulation information while plying their favorite Oregon lakes or rivers.

Jon Bowers, GIS Coordinator

Oregon Department of Fish and Wildlife

Mr. Bowers joined ODFW in 1998 as a GIS Analyst and focused primarily on aquatic resource data development until 2007. Since 2007 he has worked as ODFW's GIS Coordinator, supporting enterprise GIS development. His passion for fishing helps when it comes to data QA. Previous to ODFW, he worked for Interrain Pacific to develop the capacity of community based conservation organizations to use GIS as a decision support tool. Jon has a B.S. degree in Resource Sciences from the University of California at Davis.

Report Card on the NSDI

The Coalition of Geospatial Organizations (COGO) recently released a major report on the status of the U.S. National Spatial Data Infrastructure (NSDI). The report is in the form of a Report Card, with grades for the seven nationally recognized Framework data themes. The report was prepared by an expert panel for COGO, led by Jim Geringer, former Governor of Wyoming. This presentation will summarize the Report Card and discuss the implications and next steps relative to the NSDI. The spatial connections we are all creating to support government and private sector organizations in the Pacific Northwest relies on a strong foundation of standardized Framework data. As the Report Card indicates, there is significant work to be done to fully develop that foundation.

Cy Smith, State Geographic Information Officer

Oregon Department of Administrative Services

Cy has been the President of URISA, President of NSGIC, Chair of the Coalition of Geospatial Organizations and has been the State Geospatial Information Officer for Oregon for the past 15 years. He has also been the President of the Oregon Chapter of URISA and is currently on the Board of that organization, and is currently the Secretary of the Coalition of Geospatial Organizations.

10:30am - noon, Discovery B

May 5, Tuesday

Use Story Maps to Inform and Inspire Your Audience

Story maps combine interactive maps and multimedia content into elegant user experiences. They make it easy for you to harness the power of maps to tell your stories. Story maps use geography as a means of organizing and presenting information. They tell the story of a place, event, issue, trend, or pattern in a geographic context. They combine interactive maps with other rich content—text, photos, video, and audio—within user experiences that are basic and intuitive. Please join us to learn how story maps use interactive web maps created with ArcGIS Online, Esri's cloud-based mapping and GIS system. We will show how ArcGIS web maps let you combine your own data, including spreadsheets and GIS data, with authoritative content and thematic maps from Esri and the GIS community, on top of our beautiful basemaps. The web maps support visualization, queries, analytics, and pop-ups for map features with rich content including photos and graphs.

TJ Abbenhaus, Solution Manager

ESRI

TJ Abbenhaus is a Solution Engineer on the sales team for the Esri Olympia regional office. TJ has specialized in Imagery and LiDAR solutions. Currently working for the State and Local government sales team and has extensive experience with workflow and outcomes desired for State and local GIS.

Where will ArcGIS Pro Take You?

The ArcGIS Pro application is fast, modern, familiar, and powerful. ArcGIS Pro complements your existing ArcGIS Desktop applications (ArcMap, ArcCatalog, etc). It is a productive application used to solve problems and answer questions. ArcGIS Pro is a fully 64-bit application that incorporates advanced rendering technology for very high performance in 2D/3D across multiple display panels and frames. ArcGIS Pro is part of the Desktop 10.3 release and is included with all license levels of Desktop at no additional charge. This presentation will cover all that you need to get started with ArcGIS Pro.

Leah Saunders, Solution Manager

ESRI

Leah has been involved in GIS for over 19 years, over 13 of which she has worked at Esri as an Instructor, Training Coordinator and currently a Solution Engineer. During her time in GIS, Leah has worked on solutions and projects in various industries including; public safety, planning, land management and transportation. She also has been able to work in many different technology areas of GIS such as: analysis and geoprocessing, scripting and automation, web application development and database design.

10:30am - noon, Discovery C

May 5, Tuesday

Parcel Fabric Overview

ESRI's Parcel Fabric provides a robust data model and tools for maintaining property records. This session will provide a short overview of what the parcel fabric data model is and tools available for maintained property records. This short session provides a good overview of ESRI's Parcel Fabric environment.

Tim Hodson, Software Product Engineer

ESRI

Tim has been a software product engineer at Esri since 1998, working on technologies that support parcel data maintenance, cadastral land records, and surveying. Tim lives and works in Olympia, WA.

Polk County Control Mapping in the Parcel Fabric

Polk County has been looking for the best way to implement ESRI's Parcel Fabric into its work environment. Parcel Fabric allows for new ways to archive historic data as well as many new possibilities in implementing spatial adjustments. It will be important to consider how best to get existing data into the fabric and how best to extract it again into ArcMap to meet Oregon DOR mapping standards. How existing data is converted, new data is created, old data is archived, and how Polk County plans to take advantage of the different adjustment options will be presented.

Christi Pontier, GIS Survey Technician

Polk County Oregon

Christi Pontier has worked as a GIS Survey Technician at Polk County Oregon for eight years. Previously, she graduated from Western Oregon University with a bachelor's degree in Mathematics. The focus of her job at the county is to do control mapping for the county Assessor maps following Oregon DOR mapping standards.

Integrating Parcel Fabric into the ArcMap Environment

The Parcel Fabric contains great tools for managing property records. However, the Parcel Fabric has a different data structure than the ArcMap map maintenance environment used at Polk County. This session will identify some of the differences between the Parcel Fabric data model and the Polk County property record mapping environment. Simple models will be presented that can be used to transfer the Parcel Fabric features to the ArcMap environment.

Dean Anderson, IT Director

Polk County Oregon

Dean is the IT Director at Polk County, Oregon and has broad GIS experience in local, state, and private industry. Dean has managed the Land Information Services program at Polk County for the past 25 years and the Information Services program for approximately 15 years.

12:00am - 1:30, Heritage DCA

May 5, Tuesday

**The Voices of Vanport, Matt Blanchard, Kirsten Parrot, Shawn Daley, and the students of
Beaumont Middle School**

The Voices of Vanport project was the winner of the 2014 Christa McAuliffe Prize, awarded by the National Council for the Social Studies and the Fund for the Advancement of Social Studies. It was designed to help middle school students hone and advance their historical thinking skills through civic engagement and training with multimedia tools. To this end, the project team used the story of Vanport, a city destroyed by a 1948 flood, to teach 8th graders how to use photography and video in order to capture the story of survivors, and then apply location-based augmented reality to "rebuild" Vanport via the Metaio/Junaio software platform and mobile application.

Shawn Daley, Assistant Professor of Education

Cocordia University

Shawn Daley is an assistant professor of education at Concordia University, teaching courses in educational technology, social studies education, and school reform and ethics. He developed the Vanport project as a way to field test the integration of project-based learning with technology and civic engagement through the collection of oral histories. His current research examines the educational utility of augmented reality, wearable technologies, and digital fabrication.

Matt Blanchard

Matthew Blanchard has worked in a wide variety of leadership, clinical, training & operations, and project leadership & management positions in both the military and the medical field. His research interests include 21st century warfare, militarism, comparative politics, social justice, the American Presidency, emerging technologies, educational equity, and educational technology. He is a 2015 graduate of Concordia University's Master of Arts in Teaching program during which he taught AP World History, Contemporary World Problems, and a project on Vanport history that incorporated oral history, video production, GIS, augmented reality, and graphic design with an 8th grade Humanities class.

Kirsten Parrott

Kirsten Parrott has taught at Beaumont Middle School in the Portland Public School district fulfilling many capacities. These include instructing Special Education, 7th grade Language Arts and Social Studies, as well as 8th grade humanities. During her career, she has been involved in the Portland State Writers' Festival numerous years, as well as presenting for and serving on the board for the Oregon Council of Teachers of English. In addition, she was nominated for PPS Teacher of the Year for the 2008-2009 school year. Her research interests include the integration of the visual arts and music into poetry and literature.

1:30 - 3:00pm, Discovery A

May 5, Tuesday

Making GIS an IT solution platform

The City of Bellingham has used GIS intensively as a spatial connection to business solutions for over two decades. Staff and the public use information rich applications to help in the analysis and decision process. These applications provide a wealth of information through the integration with other business systems. GIS is now a common and comfortable tool and is a cornerstone IT solution. In this presentation we will discuss how the use of GIS has expanded in a wide variety of business processes. We will talk about how GIS is evaluated with impacts mitigated and processes managed to provide the solutions. We will explore how we take advantage of the ArcGIS platform and the integration we have built with other business systems and processes. And we will look at how we leverage our services and delivery through ArcGIS server, ArcGIS Online and Geocortex to provide those solutions. The presentation is directed toward the GIS program manager, project manager and analysis staff interested in identifying strategies for leveraging the investment in GIS.

Don Burdick, GIS Project Manager

City of Bellingham

An accomplished GIS manager with extensive experience coordinating GIS activities, integrating workflow and business systems with GIS in local government and managing computer infrastructure and business systems within public works. Proven track record of highly successful management of multiple mapping and application development projects for an award-winning team of GIS and technical professionals. A 20-year history in the GIS/CAD and survey fields. Specialties: Skilled in project management, strategic planning, enterprise GIS system design, database design and conversion, business model analysis, application development, JavaScript, HTML/CSS, Visual Basic.

CityIQ - Keeping A City Government Map Application Current And Relevant

CityIQ (www.cob.org/cityiq) is the City of Bellingham's one-stop-shop for GIS data. Many departments have come to rely on having a large quantity of data at their fingertips to better do their work and to better serve their customers. CityIQ has evolved as mapping technologies have evolved over the last two decades (the first version was available in 1997). In this presentation we will look at the latest and, what we hope will be, longest serving incarnation of CityIQ. The City switched from a custom developed application using legacy web components and a heavy reliance on SOAP web services to now using Geocortex software with HTML5 viewers offered by Latitude Geographics. We will look behind the scenes at ArcGIS Server components and how we leverage the workflow building blocks to create great custom tools and reports, and how we've worked to make CityIQ compatible with multiple browsers and mobile devices. Workflow tools also allow us to respond quickly to enhancement requests and business process changes. We will show examples of connecting GIS data to business data in the form of a document management system, related tables (subdivisions, projects, street vacations), a surveyor's monument report, record of survey links, and a parcel report that nearly includes, but stops just short of, the kitchen sink.

Ann Stark, Senior GIS Analyst

City of Bellingham

Ann is a Senior GIS Analyst at the City of Bellingham. She received her M.S. in Geography at Oregon State University and has 20 years of experience in natural resource and government applications of GIS. Her interests include automating GIS tasks with Python and cartography. She was a technical editor of the recently published "Programming ArcGIS 10.1 with Python Cookbook" and blogs about python related things at GISStudio.wordpress.com. Ann is also an active member of the GIS community, coordinating local user group meetings and is the past President of the WAURISA.

James Van Dyk, Account Manager

Latitude Geographics

Since 2008 James van Dyk has been the Pacific Northwest Account Manager for Latitude Geographics. Founded in 1999, Latitude Geographics is an Esri Platinum Partner with 1,000 clients around the world that use Geocortex software to quickly deploy feature-rich, off-the-shelf mapping applications using ArcGIS.

1:30 - 3:00pm, Discovery B

May 5, Tuesday

Trimble Positions – ArcGIS Compatibility with Trimble and Esri Field Data Collection Software

This presentation introduces new features and field software options when using ArcGIS and Trimble Positions. Prior to the introduction of new features to the Trimble Positions workflow, the two main options available for field data collection were ArcPad or ArcGIS Mobile with ArcGIS and Trimble Positions Desktop, or Trimble TerraSync and GPS Pathfinder Office. Either solution was effective, but it determined a very specific workflow that some found limiting and cumbersome from both sides of the process; field and office. With new features recently introduced in Trimble Positions Desktop, the user can now choose any Trimble or Esri field data collection software program and make effective use of Trimble Positions capabilities, including the ability to produce highly accurate elevations. A new wizard was introduced that allows seamless compatibility between ArcGIS-Trimble Positions Desktop with TerraSync, TerraFlex, ArcPad and ArcGIS Mobile. All four field software choices now produce accurate three-dimensional positioning allowing the user to choose the ideal software for their application without sacrificing accuracy.

We will present the workflow options, provide a classroom demonstration on TerraFlex, the new cloud-based service from Trimble, and take questions to assist in the selection of the best combination of software for your application.

Jim Lahm, GPS-GIS Specialist

Electronic Data Solutions

Jim Lahm has been in the Global Positioning System (GPS) industry for 26 years. He began by selling Trimble Navigation products for a local survey supply dealer in Oregon in 1987. Within two years he became the GPS sales specialist, focusing on selling and supporting GPS hardware and software, including all survey and mapping products. Responsibilities consisted of contacting potential customers, providing field demonstrations and conducting seminars, assessing customer's equipment needs, providing procurement proposals, installing the equipment and providing hardware/software support and installation training.

Asset Inventory Using Street-level Imagery

Spatial Connection: This session will focus on live demos using CycloMedia's Street Level panoramic imagery working seamless inside of Esri's ArcGIS with 3D point data. By overlaying a users GIS layers directly inside new street imagery, one can edit features and attributes with more precision. Utilizing ArcGIS Online, one can share GIS layers with a group and adjust GIS features accordingly.

Mellisa Christie, Partner, Manager

CycloMedia Technology

Ms. Christie is a geospatial professional with 18 years of experience in the mapping industry. As Partner Manager for CycloMedia, she plays an integral part in driving communication between CycloMedia's management and development team and all current and potential partners for seamless product integration. Her knowledge of GIS gives her a competitive edge in helping to create solutions that deliver quality for the end user. She focuses on project expectations, client satisfaction and quality control. She has 10 years of experience in planning large-scale mapping projects for public utility companies, geospatial consortiums as well as federal, state and local government agencies. Her technical expertise is with managing 2D and 3D geospatial data collection and dissemination, spatial data processing, analyzing and manipulation. Melissa is an expert user of Esri, AutoCAD, Leica LPS and Datum software systems. She also has 15 years of experience completing FGDC compliant metadata for various data formats and has written quality control procedures for digital image handling. She holds a Bachelor of Science Degree in Geography with an emphasis in GIS from the University of Nevada, Reno. She is an active member of the American Society of Photogrammetry and Remote Sensing (ASPRS) and the Bay Area Automated Mapping Association

Hedvig Fahlbert, Technical Manager

CycloMedia Technology

Ms. Fahlberg is an experienced, high profile GIS professional with 15 years of experience managing and coordinating technical interactions between companies and customers. Hedvig is responsible for managing all technical support in the U.S., communicating with internal and external stakeholders. She is responsible for designing and implementing improved processes, QA review and approval of all US deliverables as well as training and support of all customer employees. Hedvig has designed

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C6 –Adapting to the Evolving GIS World

1:30 - 3:00pm, Discovery C

May 5, Tuesday

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processes for generating geo-referenced datasets to systems in military, government and the private sector. She has been acknowledge for her technical skills in GIS analysis and 2D/3D visualizations providing technical expertise. Her credentials include work as a Project Manager, Software Engineer and testing and training in both internal and external tools. Hedvig holds several related degrees in GIS from San Francisco State University, for their GIS Program as well as several universities in Sweden, with degrees in Engineering and GIS with an emphasis in Virtual Modeling

Adapting to the Evolving GIS World

The world of GIS is evolving at an unprecedented and increasing rate, with web GIS, open data, and the app revolution constituting major factors in this change. As a result, GIS professionals are constantly being challenged to enhance their capabilities and must find effective and efficient ways to adapt as the field advances. In this session, a diverse group of GIS professionals will share their experiences and perspectives and engage the audience to collectively consider not only the accompanying technical trends, but also the associated professional development needs. The goal will be to contribute to an ongoing discussion on how to adapt to the evolving GIS world and help the GIS professional be successful in the coming years.

Aaron Paul, Solutions Engineer

First American Title

Aaron has been on First American Title's GIS team since 2007, and has been working in the industry for 15 years. Recently advanced from his GIS Manager position, Aaron is now a Solutions Engineer. Aaron is pioneering new uses of GIS Products and Services in the Real Estate & Title industry. He has implemented systems and applications in the areas of Land Development, New Construction, Customer Service, Commercial and Residential Real Estate. He thrives on contributing to the Community and employing GIS to assist company objectives and visions. Aaron holds degrees in GIS and Forest Resource Technologies.

David Howes, Geographic Information Scientist

David Howes, LLC

David specializes in the development of GIS tools, processes and supporting infrastructure for a variety of clients from small operations to multinational corporations. With 23 years of academic and private sector experience in the UK and US, including an M.Sc. in GIS from the University of Edinburgh and a Ph.D. in Geomorphology from SUNY Buffalo, David's background is well-suited to developing innovative solutions to spatial problems. He is the founder of the Lone GIS Professional Initiative, helping GIS professionals working on their own or in small groups help each other, and is a Washington URISA Board member.

Joanne Markert, Principal

Leon Environmental, LLC

Joanne has more than 16 years of experience leading and directing complex technology projects, including web-based solutions, database management and GIS applications. Her science-based background allows her to understand the technological and analytical issues that her clients face and recommend approaches that include technologically sound solutions. Joanne enjoys organizing complex GIS projects that require significant coordination, complex spatial analysis and implementing enterprise-wide GIS systems. These projects have included strategic planning, development of conceptual architectures, data design and application development. She has extensive experience managing and delivering large projects with subconsultants and a team of developers on time and on budget.

David Wallis, Information Technology and GIS Director

Cowlitz County

David Wallis, GISP, CMS, is the Information Technology and GIS Director for Cowlitz County, Washington. He has taught Legal Descriptions, GIS, and many other classes statewide for the Washington Department of Revenue for over 18 years. He is also the lead instructor for the Cowlitz County Learning Center and chairs the Principle-Centered Leadership Committee. David graduated Magna Cum Laude through the University Honors Program at Western Washington University with a Bachelor of Arts degree in

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C6 –Adapting to the Evolving GIS World

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Technical Writing and a minor in Spanish. He's worked in the Assessment/Mapping/GIS departments at Cowlitz County for 19 years. He earned his Geographic Information Systems Professional (GISP) designation in 2009. He also earned his IAAO Cadastral

Mapping Specialist (CMS) credential in 2012. David is a Washington State Department of Revenue (WADOR) Accredited Appraiser since 1997, and an International Association of Assessing Officers (IAAO) Certified National Instructor for all mapping and GIS courses and workshops. David and his wife, MaryAlice, have been married for 28 years and they have 4 children. David enjoys spending time with his family, writing and playing music in his recording studio, reading classic literature, and collecting Disney items.

Blair Deaver, Software Product Manager

SmartMine @ GeoEngineers

Blair has worked in the Geospatial Software and Information Technology industries for over 18 years. He manages the software development team within the SmartMine group at GeoEngineers. Blair has over five years experience using Cloud platforms such as Amazon AWS to build and deploy SaaS products and custom solutions.

Bridget Brown, Regional Geospatial Coordinator

HDR, Inc

Bridget is the GIS Business Class Lead for Alaska and Washington and the West Region Geospatial Coordinator for HDR Inc. She brings over 12 years of experience leading Information Management and GIS services integral to the successful delivery of engineering and environmental projects. Through the use of strategic GIS program implementation, Bridget leverages geographic information to visualize problems, design solutions, enhance communication, and make better decisions. Prior to working at HDR, Bridget was a biologist on the Chugach National Forest focusing on spatial and temporal interactions of recreation and wildlife.

1:30 - 3:00pm, Ceder

May 5, Tuesday

Digital Mobile Sketch Map: Offline Airborne Mobile Mapping Solution for Forest Health Monitoring

The Forest Health Protection (FHP) program of the USDA Forest Service faces a daunting task - to map forest health issues in all 50 states and US Territories through the use of aerial surveys from small fixed wing aircraft. To support this challenging work, MB&G has been working with FHP to develop their next generation mobile mapping solution - Digital Mobile Sketch Map (DMSM). Built upon Esri's ArcGIS Runtime SDK for Android and leveraging the latest in consumer-grade and ruggedized tablets, the DMSM application pushes the limits of mobile mapping by providing support for: display of high resolution base maps, collection of large and complex field data sets, rapid updates to map orientation under high speeds and changing directions, and operation in a disconnected, direct-sunlight environment. This presentation will cover the DMSM application, its underlying technology and some of the challenges and successes in developing the prototype solution.

Kerry Halligan, Senior Geospatial Specialist

Geospatial Group of Mason, Bruce, and Girard, Inc.

Kerry Halligan has 16 years of experience in the GIS industry and earned a Ph.D. from UC Santa Barbara's Geography Department. He is a software architect and developer and has a passion for creating innovative solutions to complex geospatial problems. He is currently a senior member of the Geospatial Services Group at Mason, Bruce & Girard, a 90+ year old natural resources consulting firm based here in Portland. In that capacity Dr. Halligan develops enterprise GIS and data management solutions as well as mobile and web applications for a wide range of clients.

Integration of Mobile Technology to Support Remotely Sensed Vegetation Mapping Efforts

The Fort Apache Indian Reservation (FAIR) in eastern Arizona is approximately 1.4 million acres in size and supports a wide variety of ecological systems. The White Mountain Apache Tribe is currently in the process of updating the forest management plan for the FAIR. A critical step in this process is the creation of an Existing Vegetation Map (EVT) map that can be used for stratification of vegetation to assess the natural resources currently available on the landscape. This presentation will focus on the creation of the EVT map which is an object based remote sensing classification product derived from aerial and satellite imagery, as well as readily available GIS data. The discussion will also highlight the use of mobile technology (MB&G MobileMap) and web based platforms (ArcGIS Online) for real time coordination and management of the field data collection campaign, which consisted of multiple field crews collecting data over many weeks in remote areas throughout the reservation.

Tyler Bax, GeoSpatial Specialist

Geospatial Group of Mason, Bruce, and Girard, Inc.

Tyler Bax has over nine years of experience with geospatial technologies and ecological models to inform natural resource management decisions. He specializes in spatial analysis and land cover classification of remotely sensed data to support forestry, wildfire planning, and watershed management activities. His expertise includes managing vegetation mapping projects within a wide variety of terrestrial and estuarine ecological systems and excels at automating geoprocessing workflows and creating custom GIS prioritization tools. Tyler has a strong background in spatial analysis and multivariate statistics, classification of remotely sensed imagery, LiDAR processing and analysis and integrating GIS data with ecological models.

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Vegetation Management Using Digital Surface Modelling Analysis

A large California utility contracted with GeoTerra to develop a new approach to ROW vegetation management. The project was deemed critical by the utility and State of California Office of Emergency Management and was executed within a 60 day schedule. Our presentation will provide the details of this project, methodology and final outcome.

Marcus Glass, Director of Business Development

GeoTerra - Business Development

Mr. Glass is involved with creating strategic partnerships for GeoTerra. He has +18 years in the geospatial services market and has experience with aerial mapping, LiDAR, Photogrammetry and Asset Management Solutions.

Molly Jackson, GIS Manager

GeoTerra - GIS

M.S., Geological Sciences, University of Oregon, B.A., Geology, Whitman College, Washington, Certified Geographic Information Professional (GISP)

3:30 - 5:30pm, Discovery A

May 5, Tuesday

Polk County Geospatial Application – PCMaps2

Polk County, OR has been developing an ArcGIS Runtime WPF (Windows Presentation Foundation) application to make it easier for county employees to serve public such as finding property information quickly. The application supports various GIS functionality from basic map control tools such as pan, zoom, and navigation to sophisticated spatial analysis tools like drawing, querying and buffering. It consumes services from local packages containing GIS resources such as maps and data so that users can work while being disconnected to the Internet. In addition, several key settings such as paths of map files and layer names are defined in an XML document, and its information can be passed to the application. This allows the application to be adopted by other organizations with simply having an XML modified. Even though it requires ESRI license to develop and use the application, we believe we can make the application highly functional and easy to use it.

Bryce Choi, GIS Programmer/ Analyst

Polk County Oregon

I came to Polk County in January, 2013. Before coming to Oregon, I worked as GIS analyst at a GIS consulting company in San Diego. I have about 5 years of working experience in GIS and programming.

Master Title Plats in ArcGIS: Mapping Federal Rights, Title and Interest throughout History

For more than 229 years, the federal government has been mapping, surveying, disposing and acquiring lands. Tracing its history back to the original General Land Office in Oregon City, OR, the Land Records Team for the Bureau of Land Management in the Oregon State Office is charged with maintaining the Master Title Plat (MTP), Historical Index (HI), and official copies of the original land tenure documents for Oregon and Washington. These records have found new life in a project converting the MTP to an ArcGIS format. Along the way, we are tackling the difficult issues of mapping actions that can date back to the time of the Oregon Compromise of 1846. This presentation will discuss the development of the new GIS land records system, and how we are attempting to reconnect planning efforts and decision making with these important historical spatial records.

Frank P. Lahm III, Geographer

Bureau of Land Management, Land Records Team

My name is Frank P. Lahm III. I am a geographer for the Bureau of Land Management. I work on the Land Records team maintaining the official federal land records tracking public land ownership in Oregon and Washington. I am also the data steward for the BLM's ownership data and the lead GIS specialist for the CadNSDI, the Public Land Survey System (PLSS) GIS data. I like dogs and jokes about banjos.

Scrubbing Portland's New Property Model

Portland has created a Master Address Repository integrating address points, building and tax lot polygons. Because this property data was derived from multiple sources, there is a large amount of error in the data set. A series of tests have been created to find errors and create a score for a feature's spatial accuracy and attribute content. Python is used to query commercial web services and provide additional indications of error. These scores are used to direct editors cleaning up the data.

Jake Brown, GIS Coordinator

City of Portland Bureau of Development Services

Jake Brown is the GIS coordinator for the City of Portland's Bureau of Development Services. He has a degree in Computer Science with an emphasis in GIS from the University of Wisconsin Eau Claire. During business hours he spends his time working on diverse projects ranging from cartography to architecting and implementing web mapping solutions. When he's not at the office, you'll find Jake enjoying the Pacific Northwest with his family, friends, and dogs. Jake's favorite activities include hiking, sailing, and sampling craft beers.

OpenDataKit & OpenStreetMap = OpenMapKit

After Typhoon Haiyan the American Red Cross conducted an assessment and ground truthing of OpenStreetMap data, the results we're not great. One of the key findings was the need for a tool that would improve both the quality of the original data and increase the ground truth teams' ability to rapidly gather data in the critical hours after a disaster.

3:30 - 5:30pm, Discovery A

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A collaboration between USAID, the International Red Cross, Humanitarian OpenStreetMap team, Ona, and SpatialDev have now developed this tool. Built on OpenDataKit and other Open Source components, the application allows users to build and answer survey questions that include physical features in the environment from OpenStreetMap. This includes buildings, roads, agricultural areas or any other feature that can be mapped. The mobile application can ultimately be used for post-disaster physical assessments as well as monitoring and evaluation, and other baseline surveys. This talk will go over the need for the application, various design decisions, system architecture, and demonstrate a prototype of the application.

Jubal Harpster, Principal

Spatial Development International

Jubal Harpster is the principal and co-founder of Spatial Development International based in Ballard, Washington.

How stressful is your bike network? Moving beyond traditional Level of Service Metrics

With a growing population, cities across Washington and Oregon are looking to increase the number of people who can walk and bike for everyday trips. In order to travel from point A to B, a person requires a connected facility network and not all streets feel the same for walking, riding or driving. Recent research is changing the way transportation planners envision and discuss bicycle networks. The common sense idea espoused is that networks are only as strong as their weakest link – if a user hits conditions that are too uncomfortable and the detour is too long, the trip won't be made. Come see how new research, improvements in data tracking and increased visualization add up to new best practices for use of GIS in active transportation planning.

Kim Voros, Senior Planner/GIS Manager

Alta Planning + Design

Kim has worked in diverse communities from Washington to New York assisting people transform their communities into locations where walking and cycling are regular and common activities. Her professional work is focused in GIS-based modeling, infrastructure planning, network development, and implementation. Kim brings an array of skills in GIS, research, technical writing, policy analysis, and data analysis. Whether she is walking home in the rain or biking in the sun, Kim values the exercise, social experience, and joy of active transportation.

Choosing the right web GIS technology for a local government

Are you confused by many options available for implementing ESRI based GIS in the web recently? We have been hearing from the vendors about the ever expanding technology options, but it might be helpful to hear from the perspective of a local government about these options and how they might or might not work for us. I have recently been working on a project to replace our aging intranet mapping website for our county staff. Along the way we have considered many options available in the market and came to the solution that works for us. When we consider IT solutions, we have to consider factors such as user needs, internal resource availability, budget, and many others. I work for a county government, so we are not tiny, but not huge either. This means we have to support more than a few people, but our internal resource and budget are limited. ArcGIS Online might be perfect if our user base were smaller, but as an organization of 1000 plus staff we won't be able to afford the subscription cost for all users. In order to cut licensing cost we might go with custom or open source solutions, but we do not have enough internal resource to build and maintain such solutions. In the effort to hit somewhere in the middle, we have purchased a third party product that builds on top of ArcGIS Server technology and does not require us to purchase named user licenses. The objective of this talk is not to tell you what we picked is the best, but to briefly discuss the options we have considered and their pros and cons in the eyes of local government. Additionally I would like to share other lessons I have learned along the way.

Masao Matsuoka, GIS Analyst III

Thurston County

I am GIS Application Developer & DBA at Thurston County Geodata Center specializing in developing web and desktop tools that help users get most out of the GIS technology. When I am not coding, I design and maintain geodatabases on SQL Server. Prior to joining Thurston County, I have worked in both public and private sectors as a GIS implementer, programmer and geodatabase designer.

3:30 - 5:30pm, Discovery B

May 5, Tuesday

The CLOUD for the everyday GIS person

You make maps, you collect and manage data. Why should you care about the cloud? Utilizing Cloud infrastructures such as Amazon Web Services, Microsoft Azure, OpenStack, etc allow you to easily reduce operational costs and improve productivity. Simple cartography and GIS data conversion tasks can be improved by utilizing cloud compute resources. This presentation will cover five uses cases common to GIS staff which can be improved and augmented when using the Cloud:

- ◆ Basic base map tile server
- ◆ Data recovery and backup
- ◆ Data processing such as batch project imagery
- ◆ Simple web map application hosting
- ◆ Development Operations (devOps)

Attendees do not need to have any previous experience using cloud computing environments.

Blair Deaver, Software Product Manager

SmartMine @ GeoEngineers

Blair has worked in the Geospatial Software and Information Technology industries for over 18 years. He manages the software development team within the SmartMine group at GeoEngineers. Blair has over five years experience using Cloud platforms such as Amazon AWS to deploy SaaS products and custom solutions.

Michael August, GIS Analyst

SmartMine @ GeoEngineers

Michael supports geologists, engineers and other GeoEngineers scientists with maps, data visualization and database management. His work can take place in the office, through web-based applications, or in the field on a mobile device.

Don't Copy Data! Instead, Share it at Web-Scale

Since its start in 2006, Amazon Web Services has grown to over 40 different services. Amazon Simple Storage Service (Amazon S3), our object store, and one of our first and core services, is now home to trillions of objects and regularly peaks at millions of requests per second. S3 is used to store many kinds of data, including geo, genomic, and video data. The primary goal of this presentation is to illustrate best practice for open or shared data in the cloud. To do so, it showcases a simple map tiling architecture, running on top of data stored in S3 using CloudFront (CDN), Elastic Beanstalk (Application Management), and EC2 (Compute) in combination with open source tools, Leaflet, Mapserver/GDAL and Yas3fs. The demo uses the USDA's NAIP dataset (48TB), plus other higher resolution city data, to show how you can build global tile mapping services without pre-caching tiles by using the auto-scaling feature of EC2. Because the GeoTIFFs are stored in a requester-pays bucket allowing authenticated read access, anyone with an AWS account has immediate access to the source GeoTIFFs, and can bulk copy the data anywhere they desire. However, I will show that the cloud, because it supports both highly available and flexible compute, makes it unnecessary to move the data anywhere, allowing for one set of GeoTIFFs to service a world of application users.

Mark Korver, Geospatial Lead - Solution Architecture

Amazon Web Services

Mark Korver serves as the Geospatial Lead on the Solution Architecture team at Amazon Web Services and is based in Seattle. He is in his 8th year building cloud architectures both as a customer and employee of AWS. Before his current role, as the first Solution Architect on the State Local Government and Education team, he spent the AWS Public Sector team's formative years working on everything from Massively Online Open Courses (MOOCs), supporting big data research at tier-one universities, explaining security best practice at training events, and providing technical guidance to government mapping agencies.

3:30 - 5:30pm, Discovery C

May 5, Tuesday

Integrating Field Data Collection, Document Management and Enterprise GIS for Natural Resources

Enterprise GIS plays an essential role in many natural resource management organizations. To derive maximum benefit from these systems, the underlying data must be up-to-date, highly accessible to users, and easily related to essential non-spatial data and documents. Mason, Bruce & Girard's (MB&G) approach consists of two principal elements: First, the MB&G MobileMap application for Android provides access to enterprise GIS data and imagery in a disconnected environment, with GPS data collection and editing capabilities and the ability to sync seamlessly with ESRI's on-site (ArcGIS for Server) or cloud-based (ArcGIS Online) platforms. Second, is a spatial content management system that provides a convenient, one-stop interface for viewing, querying and editing GIS data through a dynamic map interface, storing and accessing related documents (photos, contracts, field notes) and generating custom reports from any web browser. This presentation will focus on wetland delineation and monitoring to demonstrate this technology in action

Brian Grass, Geospatial Analyst / Natural Resource Specialist Geospatial Group of Mason, Bruce, and Girard, Inc.

Brian Grass is a GIS Analyst and Natural Resource Specialist with 8 years experience in the GIS industry. He has earned a Master of Natural Resources degree from the University of Idaho and a Graduate Certificate in GIS from Oregon State. He currently serves as Environmental Coordinator in the Geospatial Services Group at Mason, Bruce & Girard, a natural resources consulting firm with an over 90 year history in Portland.

Implementing Asset Management in the Cloud using Ground Based LiDAR

It is rare case in our line of work that a majority of critical factors which push an organization towards an asset management paradigm fall in place concurrently. In the case of Multnomah County Road Services an opportunity for change was created by new staff and management, a brighter budgetary outlook, an aging Microsoft Access database with significant deferred maintenance, and evolving central IT policies. Utilizing a 3D mobile scan, which included panoramic imagery and high density LiDAR, all of Multnomah County's roads were driven in the summer of 2014 in order to connect our sign inventory to a GIS for the first time. The goal of the project was to develop a series of layers to manage our traffic signs using a GIS-centric Asset Management software package entirely in the Cloud. Working with our central IT partners, we have selected the Cartegraph Operations Management Software (OMS), and are in the process of diagramming our workflows, researching best management practices, and changing how our Traffic Aids group conducts their business. This presentation will focus on what conditions made this major change possible, the technology and process we used to scan our roads, the development of our sign inventory, and finally a discussion on why we chose Cartegraph OMS and our implementation status.

Chet Hagen, Sr. Data & GIS Analyst

Multnomah County DCS - Business Services

My educational background is a BS in Information Systems & Computer Science from the University of Montana-Missoula, and M.S. in Water Resources from the University of Idaho-Moscow. Prior to Multnomah County I worked in and around the Selway-Bitterroot Wilderness in Idaho on Salmon/Steelhead habitat restoration for the Nez Perce Tribe and US Forest Service as a Watershed Restoration Specialist and GIS Analyst. Currently for Multnomah County my job is split between pavement management, GIS, and Asset Management. In my free time I enjoy hiking, biking, trail running, and spending time with my wife and daughter.

Lauren Woodruff, GIS Technician Services

Multnomah County DCS - Business

Lauren Woodruff joined Multnomah County as a GIS Technician in 2013. She works largely on data extraction and maintenance of various county assets related to road services. Prior to joining the county, Lauren had previously worked on the Western Oregon Access Rights project for the Bureau of Land Management (BLM) as well as completed a GIS internship for Oregon Department of Transportation (ODOT). She holds a BA from Western Washington University as well as a Graduate Certificate in GIS from Portland State University.

(Continued onto next page)

3:30 - 5:30pm, Discovery C

May 5, Tuesday

(Continued from last page)

Clark County Sign Inventory Project

Clark County Public Works recently implemented a GIS centric sign inventory solution. Clark County GIS was asked to help make the field collection; efficient, intuitive, and spatially accurate. Several of the project requirements made this a challenge, including; the disconnected field application had to use existing hardware, allow multiple collectors, integration between state and local asset management systems, and get results in a compressed timeline. This presentation will discuss the key decisions, ArcMap VB.net add-ins, Python scripted processes, and Washington State County Road Administration Board (CRAB) resources; that made this project successful.

Matt Deitemeyer, GIS Analyst

Clark County GIS

DX—Master of Science at UW

Abstracts

3:30 - 5:30pm, Cedar

May 5, Tuesday

What will you achieve in a one year long Master of Science in Geospatial Technologies at UW Tacoma?

Our presentation fits into the 'Connections' theme because we are connecting our UW with potential students and our students with potential employers, in addition to our students with our school via Transportation.

This is a work in progress, and are open to suggestions from the reviewers so that this presentation works for the intended audience.

Six current Master of Science in Geospatial Technologies students will present their Final project topics (Mobile GIS, App Development, etc.) and progress in short 5 minute presentations to provide the audience with real life examples of the program. Student Research is ongoing and will not be complete until August.

Gregory Lund, Lecturer / Graduate Program Advisor

Urban Studies, University of Washington Tacoma

Gregory Lund is a Lecturer in the GIS Certificate Program at the University of Washington Tacoma, teaching Beginning, Intermediate and Advanced concepts in GIS. He is also the Graduate Program Advisor for the UW Tacoma Master of Science in Geospatial Technologies.

8:30 - 10:00am, Discovery A

May 6, Wednesday

Maintaining Mission Critical Data in an NG9-1-1 Environment

GIS map data with accurate location information is a core component for 9-1-1, and agencies will find that GIS map data has an even more prevalent role in 9-1-1 calltaking as they look towards the implementation of NG9-1-1. However, beyond preparing the GIS data ready for NG9-1-1, agencies must come up with a plan for on-going maintenance, responsibilities for maintaining the data, and processes for determining that a quality GIS map data set has been developed. Attendees will hear examples of successful planning and implementation, lessons learned, and specific approaches and methods currently being used for maintaining the data.

John Joseph, Regional Sales Consultant

Geo-Comm

John Joseph has worked in the GIS industry for roughly 17 years, supporting the needs of GIS Professional in the Public and Commercial sectors. After spending a significant amount of his career with ESRI, he pursued his passion for the Public Safety Industry. Throughout his career John has worked to find new and innovative ways for GIS to make a positive impact on the world around us. As a strong advocate for GIS in Public Safety, he's seen firsthand the challenges of implementing NG9-1-1 solutions.

A Brief History of GIS Data Distribution at Pierce County WA – 8mm tape to ArcGIS Open Data

Once upon a time Pierce County disseminated GIS data on a custom basis. Data requestors were sent by USPS, a "GIS Data Catalog" and other paperwork. The paperwork needed to be returned to the County and once received; it could take 1-2 weeks to get the data mailed. A web application was later developed called GeoData Express which greatly helped expedite the request process. GeoData Express eliminated the need for paperwork to be mailed, "GIS Data Catalogs" to be printed, made full metadata available, allow searching, and request tracking. The underlying process remained the same and it still might take 1-2 weeks for a data requestor to be sent the data. Fast forward to 2015 and Pierce County GIS is now using ESRI's Open Data portal. The County launched its "Pierce County Open GeoSpatial Data Portal" on GIS Day 2014. This site offers free production downloadable geospatial data to businesses, students, and the general public. It provides on-demand data to facilitate and improve communication and everyday decision-making. The site is still considered "beta" as Pierce County is gathering feedback and actively developing the site. The basics of developing an Open Data portal are straight forward. But as a large enterprise, there are requirements for customization, organizational workflows, and additional challenges to address to allow Pierce County GIS data to be acquired a better way!

Cort Daniel, GIS Programmer/Engineer

Pierce County IT/GIS

Cort has a bachelor's degree in mathematics from the University of Puget Sound. He started his GIS career in 1996 at Pierce County. Some of his first duties were parcel conversion, metadata documentation, and GIS data distribution. He moved on to teaching GIS, programming, maintaining enterprise GIS systems, and "other duties as assigned". In 2005 he earned a GISP and has been on the WAURISA Board since 2009. Since 2007 he has been a member of Seattle's CUGOS GIS group. He has volunteered for the Puget Creek Restoration Society and on the "Upper Methow Valley Douglas Fir Tussock Moth Project".

8:30 - 10:00am, Discovery B

May 6, Wednesday

Don't call it GIS! Rethinking how to deliver information at a local government in an era of raised expectations for information access

Face it, users of maps on the web are increasingly fickle. They have every right to be given the abundant and pervasive use of map gizmos on the web and in apps. What's a local government to do with its GIS to remain relevant in this new paradigm? For one, don't call it GIS! Does your mother know what that stands for? Our end users are also becoming increasingly tech savvy and impatient related to maps on the web. Anywhere, anytime, any device is now an expectation. Effortlessness is a mantra. For the City of Tigard, with limited resources, shifting to meet these demands requires some hard thinking, coffee, and creativity. Designing a solution that is scalable-extensible-configurable-repeatable-transitional, essential. Understanding our user needs –an imperative. While still only barely breaking over this cusp, the City of Tigard will share its journey and hopefully stir dialogue with its audience in this most interesting challenge. Join us.

Preston Beck, GIS Coordinator

City of Tigard

Preston Beck is the GIS Coordinator for the City of Tigard. Preston holds a Bachelor's degree in Urban Geography from the University of Washington and a Master's degree in Urban Planning from Portland State University's Nohad A. Toulan School of Urban Studies and Planning. Preston has worked in GIS for local governments in the Portland area for nearly 20 years.

Nathan Shaub, GIS Programmer/Analyst

City of Tigard

Nate Shaub is the GIS Programmer/Analyst for the City of Tigard. He holds a Bachelor of Science in Electrical Engineering from the University of Michigan and a Master of Science in Geography with a certificate in GIS from Oregon State University. Nate worked for over ten years in application and database development before turning his focus to geographic information systems. He has spent the past seven years doing GIS analysis and development for the City of Tigard.

Research Oriented Web Mapping in Clark County

Clark County's GIS home page has evolved over the years to be less about GIS and more of an online research and information resource. The most popular research applications on the GIS web site are the Property Information Center (PIC) and Maps Online. Maps Online is not a purposeful map; it is an interface to our GIS library. Maps Online contains over 200 layers, yet it is still only sharing a portion of our GIS library. Our users are not asking us for simpler maps with fewer buttons. They are asking for more features and access to more layers in the GIS library. This presentation will look at how we are reconciling the need for easy to use purposeful maps and the need to share the breadth of our GIS library.

Bob Pool, GIS Director

Clark County GIS

Bob Pool is the GIS Director for Clark County Washington. His two decades of leadership at Clark County has led to a GIS program that is nationally recognized for its innovative and collaborative approach to using GIS for local government. His collaborative approach to GIS expands beyond Clark County; he is a long time Board member, past President and Conference Chair for the Oregon and Southwest Washington URISA organization. His formal education includes a BS in Geology from the University of Illinois and a Masters in Public Administration from Lewis and Clark College.

8:30 - 10:00am, Discovery B

May 6, Wednesday

Pacific Northwest Environmental Response Management Application (ERMA®): Web Mapping and Visualization Application

The Pacific Northwest Environmental Response Management Application (ERMA®) is a web-based, spatial data discovery and visualization tool cooperatively developed by the National Oceanic and Atmospheric Administration (NOAA) and the University of New Hampshire (UNH) through the Coastal Response Research Center. Environmental responses to events such as chemical and oil spills, and natural disasters have the potential to be large and diverse both in terms of geographic scope and the number of different agencies involved. ERMA has the ability to seamlessly and securely connect these diverse and sometimes geographically disconnected personnel.

ERMA's purpose is to integrate and synthesize environmental data into a single interactive map via a web browser interface from any location without the need for specialized software. ERMA is built on open source tools including Open Layers, MapServer and PostGres/PostGIS databases. The ERMA mapping application provides quick visualization of spatial data and varying scales, improving communication and coordination among responders and environmental stakeholders. ERMA is able to display data from multiple sources including static baseline information, satellite feeds, real time observations and forecasts, and field team datasets.

ERMA was initially developed to support NOAA's work on environmental incidents. These activities are generally divided into four phases:

1. Planning and Preparedness
2. Incident Response
3. Natural Resource Damage Assessment (NRDA)
4. Post-Incident/Restoration

Not all incidents span every phase, but ERMA is flexible enough to support user needs across the spectrum of an environmental response by providing continuous access to critical environmental data for informed planning and decision making.

Nicolas Eckhardt, Spatial Data Analyst

NOAA | Office of Response & Restoration

Nicolas Eckhardt is a contractor who supports the NOAA Office of Response and Restoration in Seattle. Nicolas specializes in GIS and spatial data analysis of analytical chemistry and natural resource information. He helps to run and maintain the Environmental Response Management Application (ERMA). He is responsible for the Pacific Northwest ERMA, ensuring layers are working properly and information is current, adding new layers and coordinating with outside partners in adding additional information. Nicolas also provides geospatial support to NOAA case teams working on Natural Resource Damage Assessment (NRDA) cases.

Benjamin Shorr, Physical Scientist

NOAA | Office of Response & Restoration

Ben Shorr is a Physical Scientist with over 16 years of experience applying scientific and GIS principles to response, assessment and restoration of contaminants in the environment. Ben has a BS in Civil and Environmental Engineering from the University of Wisconsin, and has been with NOAA's Office of Response and Restoration for 14 years. Prior to coming to NOAA, he worked in EPA's Superfund Program and the Office of Water.

8:30 - 10:00am, Discovery C

May 6, Wednesday

A New Standard for a New Era: The New ASPRS Positional Accuracy Standards for Digital Geospatial Data

This lightning talk will provide a very brief overview of the recently published ASPRS Positional Accuracy Standards for Geospatial Data. Spatial accuracy standards provide an essential framework for many aspects of “spatial connections” – including integration of data from different sources to the determination of what applications the data will support. The new ASPRS standard received broad public review. It was adopted by the ASPRS Board in November, 2014 and published in final format in the ASPRS PE&RS journal in March, 2015.

The new standard meets a critical need for addressing new technologies. The National Map Accuracy Standard (NMAS), developed in 1947, is largely based on errors associated with hand-drafting a line on a map. While still used because it is simple, there is no correlation between the NMAS standard and what is achievable with current methodologies. The ASPRS 1990 Standards for Large Scale Mapping was a significant improvement over the NMAS. It addressed current technologies of that day, such as Forward Motion Compensation, analytical plotters, improvements to camera calibration and the early stages of digital mapping. However, the 1990 standard is still based on contour interval and map scale and does not correlate well with digital technologies such as lidar, orthoimagery and digital mapping cameras. Lastly, the National Standard for Spatial Data Accuracy (NSSDA) is only a reporting standard. It does not provide any accuracy thresholds or guidance on what accuracy is appropriate for intended applications.

The new ASPRS standard is designed to address these shortcomings. It provides for the higher accuracy levels achievable with the latest technologies (e.g. digital sensors, lidar, UAS and Mobile Lidar System), cross references NSSDA methodologies and provides flexibility for new technologies as they are developed. The new standard and supporting information can be found on the ASPRS standards page or at this direct link: <http://www.asprs.org/PAD-Division/ASPRS-POSITIONAL-ACCURACY-STANDARDS-FOR-DIGITAL-GEOSPATIAL-DATA.html>

Doug Smith, Vice President

David C. Smith & Associates, Inc.

Doug is Vice President at David C. Smith & Associates, Inc., a Pacific Northwest based small business specializing in photogrammetric mapping work. Doug is a certified photogrammetrist, registered professional engineer and registered professional photogrammetrist with a background in water resources engineering and photogrammetric mapping. As the immediate past Director of the ASPRS Photogrammetric Applications Division, Doug formed and chaired the Map Accuracy Working Group, an ASPRS working group tasked with replacing existing ASPRS Accuracy Standards for Large Scale Maps with new standards that better address current digital mapping and lidar technologies.

Geography as an Educational Foundation

Geography is more than memorizing trivia, capitols, and colored maps. Geography is the study of the patterns, processes, and connections that shape our world...the link between environment, people and culture. Geography isn't a discrete subject. It is a nexus between many subjects and disciplines. Being geographically literate means being an empowered citizen. It unlocks doors to experiencing the world more richly and more knowingly. This presentation includes a short video made at a school in Portland that demonstrates how geography can be used as the foundation for learning about most every other subject. The presentation will also briefly discuss how this concept is being advanced nationally.

Cy Smith, State Geographic Information Officer

Oregon Department of Administrative Services

Cy is the State Geospatial Information Officer for the State of Oregon.

8:30 - 10:00am, Discovery C

May 6, Wednesday

The National Map, US Topo and USGS Historic Quadrangles in the Pacific Northwest

This presentation will provide information on the U. S. Geological Survey's National Map, US Topo and Historical Quadrangle Scanning Projects. The National Map includes a variety of products and services that provide the Nation with access to base geospatial information to describe the landscape of the United States and its territories. The US Topo is the next generation of digital topographic maps from the USGS. Arranged in the traditional 7.5-minute quadrangle format, digital US Topo maps are designed to look and feel like the traditional paper topographic maps for which the USGS is so well known. At the same time, US Topo maps provide modern technical advantages that support wider and faster public distribution and enable basic, on-screen geographic analysis for all users.

(The Historical Quadrangle Scanning Project has scanned all scales and all editions of approximately 250,000 topographic maps published by the USGS since the inception of the topographic mapping program in 1884. This project provides a comprehensive digital repository of USGS topographic maps, and like the US Topo are available to the public at no cost. This project serves the dual purpose of creating a master catalog and digital archive copies of the irreplaceable collection of topographic maps in the USGS Reston Map Library as well as making the maps available for viewing and downloading from the USGS Store and The National Map Viewer.

Tom Carlson, Geospatial Liaison

USGS

Tom Carlson is a USGS Geospatial Liaison in the PNW Region. In this capacity, he is responsible for geospatial coordination with State, Federal, local, tribal and other partners and other USGS disciplines in the Region. He is also involved in supporting Geologic Mapping and Hazards activities and as a Project Manager for the International Charter Activation. Tom's office is located in the Washington Water Science Center, Tacoma, WA.

The State of GIS in 2015 in Washington & Oregon

This presentation will provide preliminary findings from the 2014-2015 GIS Management Institute 'GIS Metrics Survey.' This international survey will provide unique insights to the GIS community regarding the organization, staffing, funding, and performance of GIS operations around the world. For this presentation, I will focus on preliminary findings and analysis of GIS operations in Washington and Oregon states.

Greg Babinski, Finance & Marketing Manager

King County GIS Center

Greg Babinski, GISP, is the Finance & Marketing Manager for the King County GIS Center in Seattle, where he has worked since 1998. Previously he worked for nine years as GIS Mapping Supervisor for the East Bay Municipal Utility District in Oakland. He holds an MA in geography from Wayne State University. Babinski is Past-President of URISA and Past-Chair of URISA's GIS Management Institute Committee. In 2005 he founded The Summit – the Washington GIS Newsletter. In addition to GIS consulting, he is a GIS researcher, author, and instructor. He has spoken about GIS across North America, Europe, Asia and Australia.

10:30am - noon, Discovery A

May 6, Wednesday

The Coastal Change Analysis Program: Tracking Changes in Coastal Land Cover Over Time

Understanding current conditions and how land cover has changed over time is essential to improving our management of coastal resources. Through its Coastal Change Analysis Program (C-CAP) NOAA's Office for Coastal Management produces nationally standardized land cover data for the coastal areas of the U.S. These products inventory coastal intertidal areas, wetlands, and adjacent uplands and are updated every five years in order to document changes and track trends. The program has been in existence since the mid 90's, and now has four dates of information available (1996, 2001, 2006, and 2010) for the coastal areas of the contiguous U.S. This presentation will provide an overview of how this data is produced, some of the changes seen along the Pacific Coast from 1996 to 2011, as well as applications of this valuable data. In addition, it will provide a brief overview of NOAA's Digital Coast and highlight a higher resolution land cover project conducted in partnership with the Lower Columbia River Estuary Partnership.

Jamie Carter, Senior Remote Sensing Analyst

NOAA - Baldwin Group

Jamie Carter is a remote sensing analyst with NOAA's Office for Coastal Management works primarily in the Northeast Region. He has a bachelor's degree in Ecology from Tulane University, a master's degree in Physical Geography from Oregon State University, and over 10 years of experience developing and delivering geospatial decision support tools to strengthen coastal management and planning. Jamie's areas of technical expertise include lidar data analysis and digital image processing for topographic mapping, land cover mapping, and inundation mapping applications. He works with a variety of governmental and non-governmental organizations to bring geospatial technologies to bear upon coastal management issues.

Oregon tidal shoreline: update on process to create and standardize

For several years, the Oregon shoreline data working group has been working to create a standard data set of Oregon's tidal shorelines. This presentation will explain the impetus for the project, describe the data sets, models, and methods used to create tidal shorelines, show the results to date, and discuss unresolved issues.

Randy Dana, GIS Coordinator

Oregon Coastal Management Program

Graduate of Portland State University. Nearly 20 years providing support to the Oregon Coastal Management Program.

Classifying Oregon Estuary Habitats with CMECS

The Oregon Estuary Project of Special Merit was a 24 month project to produce standardized estuary and shorelands habitat geospatial information, using the federally adopted Coastal and Marine Ecological Classification Standard (CMECS). While no new geospatial information was collected as part of this project, many recently collected or published data sets were utilized to derive CMECS habitat data products. This presentation describes the approach used by the project team in the generation of Oregon estuary CMECS habitat products, and presents lessons learned about the classification system, the GIS production process, and areas for future work.

Andy Lanier, Coastal Natural Resources Specialist

Department of Land Conservation and Development

Andy is a Coastal Resources Specialist with the Oregon Coastal Management Program (a division of the state department of Land Conservation and Development). He is a graduate from the Marine Resources Management Master's Degree program at Oregon State University, where he earned his professional GIS certificate.

10:30am - noon, Discovery B

May 6, Wednesday

How to Manage GIS Projects, Contractors and Everything Else

In today's world having spatially accurate and timely data is critical to connecting with customers, neighbors and the world over. However, managing data collection projects efficiently and with a high degree of accuracy from beginning to end is easier said than done. From choosing a contractor, to wrapping up a project, there are key concepts and considerations to keep in mind. This talk will discuss the right questions to ask a prospective contractor, pitfalls in data collection, and maintaining standards throughout and beyond the project's life.

Sarah Myers, Senior GIS Systems Engineering Analyst

Peninsula Light Company

I have worked as an Analyst for nearly 10 years for the army and now at a customer owned electric company. I have a diverse range of experience managing data and projects on a small and large scale. I have a passion for 'getting it right' and always seeking the highest standard possible for my data.

How to tackle a failing GIS Project: Project Management 101

Are you new to project management? Have you been handed a project that someone else started? Is it failing? If you answered YES to any of these questions, you will be interested in this presentation. Early in my GIS project management career, I was given GIS tasks to manage that were part of a larger project, where my supervisor provided generous oversight. Then that progressed to managing small projects on my own, to eventually managing the GIS requirements for large, multi-million dollar transportation corridor studies. While these projects were successful and challenging at times, they do not compare to the difficulty of being handed a long-term project that has been failing. In the last few years, one of my primary responsibilities has been to bail-out, recover, salvage, etc... failing projects with deadlines and deliverables that seem impossible to achieve. If you find yourself in this situation or you're new to project management, this presentation will be applicable to you. I will use current and past projects as examples to cover the basic fundamentals and strategies for picking up a project that has been failing or limping along, as well as, the steps you will need to take to reach the end successfully. For new project managers or GIS users considering a management career path, this presentation will provide insight into common management mistakes and management tasks you should consider when starting a new project.

Rachel Smith, Environmental Services IT/GIS Project Manager

Washington State Department of Transportation

Rachel joined WSDOT in November, 2014. She is responsible for managing IT/GIS projects and providing GIS user and program technical support for the Environmental Services Office. Prior to working at WSDOT, Rachel was employed by the Oregon Department of Geology and Mineral Industries for 4.5 years as a Cartographer/GIS Analyst and Project Operations Manager. She also spent 12 years working in the private sector for URS Corporation as a Cartographer/GIS Analyst and Project Manager.

10:30am - noon, Discovery C

May 6, Wednesday

What is the ArcGIS Platform & Where does Portal/portal Fit?

ArcGIS empowers everyone, from line-of-business managers to executives, with timely, accurate information and a means of collaboration. You control where your location information is stored and who can access it. That portal technology which enables proper access can be deployed in two ways, or a mixture of the two: hosted in Esri's cloud and/or hosted within your own infrastructure. This presentation will define the role of portal technology and options for creating easily accessed maps, services, and apps to those who need.

Heather Glock, Account Manager

ESRI

Heather Glock is an Account Manager with Esri. She specializes in working with local governments to implement Esri-based solutions.

Imagery: A Core Component of your ArcGIS Platform

ArcGIS is a complete geospatial platform, where any employee, contractor, or member of an organization can create, share and use maps. Integral to the ArcGIS platform is imagery and raster data, please join us for a presentation and conversation about how the ArcGIS platform is the tool to be employed for managing large and small collections of imagery and raster data. Learn about the evolving and dynamic imagery solutions available for aerial imagery, satellite imagery, and elevation data. We will discuss the use of the platform approach with regard to imagery data management, dynamic analysis, field mobility, and dynamic dissemination. Store imagery and raster data once use it many ways dynamically while available to every employee, contractor, citizen, and decision maker on any device anywhere at any time.

TJ Abbenhaus, Solution Engineer

ESRI

TJ Abbenhaus is a Solution Engineer on the sales team for the Esri Olympia regional office. TJ has specialized in Imagery and LiDAR solutions. Currently working for the State and Local government sales team and has extensive experience with workflow and outcomes desired for State and local GIS.

10:30am - noon, Cedar

May 6, Wednesday

3D Modeling for BIM

i-TEN will demonstrate the use of terrestrial laser scanning, terrestrial and aerial photography to rapidly prototype and build 3D Models for Building Information Models and other uses in the Architectural, Engineering and Construction fields. Visualization techniques for this data using traditional desktop environments and augmented reality browsers will be explored.

Bijoy Nair

iTen Associates, Inc.

Bijoy is a civil engineer, and President of i-Ten Associates – a CAD, Mapping and Design Visualization firm based in Portland. He got his start in construction firm where working with Computer Aided Design software caught his interest. He has been working on supporting Architectural, Engineering and Construction projects using CAD, GIS, Aerial Mapping and Terrestrial Laser scanning for the past 14 years. He is a certified photogrammetrist and Project Management Professional.

3D Modeling for GIS

3D modeling has all but taken over the design process for vertical construction and is not far from taking over the design process for horizontal construction. As this grows, facility owners and municipalities are working to set up GIS systems to use this 3D information for operations and maintenance, and as record models to use as a base for future site modifications. The US Army Corps of Engineers has assembled consortiums for Building Information Modeling (BIM) and Civil Information Modeling (CIM) to prepare standard processes for the life cycle of their 3D models which includes GIS as the framework for long term storage and updating. Other facilities and agencies are continually finding more uses for their GIS data to be 3D. This presentation will go over the US Army Corps and other agencies efforts to leverage 3D models in the GIS environment.

Marcus Reedy, Vice President and Director of Survey and Geomatics

David Evans and Associates

Mr. Reedy is a vice president and the Director of Surveying and Geomatics for David Evans and Associates, Inc. (DEA). With over 24 years of experience, he has performed virtually every type of land survey. As an expert in 3D high definition laser scanning and mapping, Mr. Reedy has mastered the use of both static and mobile laser scanning methods. He has been successful in using this technology for a variety of applications including large structures, highways, railways, process/power facilities, buildings, historic preservation and other infrastructure projects.

Mr. Reedy has served as a project principal, project manager or quality manager for many land survey services contracts for clients such as ODOT, Marion County, and City of Salem. His project management experience includes developing/managing scopes, schedules and fees; coordination with various clients, public agencies, general public, survey staff and engineers; and management of survey field and office staff.

1:30pm - 3:00pm, Discovery A

May 6, Wednesday

Building Capacity for Climate Change Adaptation: Land Suitability and Cost-Path Analyses

Coastal Washington tribes are currently experiencing loss of land due to sea level rise, flooding, and land erosion as a result of global climate change. Their capacity to adapt to these impacts is further limited by the boundaries of their reservation. However, reacquiring fractionated land may build the capacity for tribal governments to make decisions regarding climate change adaptation. A case study of a Washington State coastal American Indian tribe will be conducted to address this spatial question. In the first phase of the study, a least-cost path of two potential evacuation routes will be conducted to determine the least costly alternative evacuation route. The costs associated with this process are a range in property values of the fractional lands that the evacuation routes would intersect, and the costs associated with building infrastructure along the routes. This analysis will use a multi-criteria evaluation to also consider cultural regions and climate change vulnerable areas. A second spatial analysis model will be conducted for land suitability of potential areas for future commercial or residential development. The multi-criteria evaluation of this analysis will consider areas outside of fractionated lands and climate change vulnerable areas, and will not intersect with the culturally identified regions. This study spatially connects climate change impacts and land ownership categories to build the capacity for adaptation strategies.

Melissa Watkinson, Student/Research Assistant

University of Washington Bothell

Melissa is a second-year graduate student in the University of Washington Bothell Master of Arts in Policy Studies program. She began learning the power of GIS tools this past fall. She currently works at Washington Sea Grant as a research assistant on the Marine Spatial Planning project. Her primary role is to analyze secondary quantitative and spatial data for social indicators of environmental conditions for four Washington State coastal counties. Her capstone research is focused on analyzing the impact of fractionated land on tribal reservations and the limitation it might have on adapting to climate change impacts.

Exploring Prehistoric Movement and Land-Use in the Old River Bed of Western Utah

Current models of prehistoric movement and land-use in the Old River Bed (ORB) of western Utah suggest that a wetland environment restricted Pre-archaic (pre-8,000 14C BP) occupants of the region to movement along a system of raised sand and gravel channels. This study evaluates these models using GIS-based methods for the analysis of lithic assemblage and stone tool attributes, site and projectile point locations, and geochemical sourcing data. The Analyses employed compare Pre-archaic and Archaic (post-8,000 14C BP) movement and land-use to test the hypothesis that pedestrian travel into and within the ORB during the Pre-archaic period was restricted to the basin's inverted, elevated channels due to the presence of an expansive wetland, whereas movement during the more xeric Archaic period was not. The results show little variance in ORB land-use between the two periods and suggest that the presence of a wetland may not have been a primary influence on Pre-archaic movement in the area.

Traevis L. Field, MA, RPA, Archaeologist

Stell Environmental

Traevis Field is an archaeologist practicing cultural resource management for Stell Environmental's western office. He earned his BA in anthropology at the University of Washington and his MA in anthropology at the University of Nevada, Reno. His research has focused on exploring prehistoric hunter-gatherer connections to dynamic landscapes through studies of mobility and land-use.

1:30pm - 3:00pm, Discovery A

May 6, Wednesday

Geostatistical Estimation of Current and Target Sediment Cap Conditions at the Wyckoff/Eagle Harbor East Harbor

Integral Consulting Inc. (Integral) performed three-dimensional geostatistical analysis to estimate current sediment cap thickness in Wyckoff/Eagle Harbor on Bainbridge Island, Washington, and estimate the volume of material needed to reach target cap thicknesses. Integral conducted a sediment cap field investigation utilizing videoprobe and vibracoring technology. A total of 46 locations were included in the 2014 videoprobe survey, where the observed stratigraphy and current cap layer thickness at each location were recorded on log forms and in video. The vibracore survey included eight sediment cores collected and processed from six of the videoprobed locations. Data from the 46 videoprobe recordings and 8 vibracore sediment samples collected for this investigation were combined with data from an additional 21 historical (2011) vibracore samples to compose the final data set of 75 locations of current cap thickness values.

The field collection data supported the geostatistical methodology for determining the required volume and distribution of current and proposed additional cap material. The approach involved three steps: 1) develop an input data file that contains the bathymetric elevation at the current cap thickness and target cap thickness scenarios (3-ft, 2-ft, and 1.5-ft) for each sample location, 2) develop a geostatistical volumetric three-dimensional model by interpolating two hierarchical surfaces that represent current conditions and conditions if a target cap thickness were present, and 3) subset the model to target cap thickness and calculate volume estimates for three different target cap thicknesses in six individual subareas. The resulting volume estimates provided a planning tool for the managing agencies to strategically determine where and how much supplemental cap material is needed to inform a cap reinforcement design.

Erik Strandhagen, Senior Scientist

Integral Consulting Inc.

Erik Strandhagen is a certified professional in geographic information systems (GIS), and an ASPRS Certified Map Scientist with 14 years of professional experience conducting spatial analysis and managing environmental data. Mr. Strandhagen specializes in advanced geostatistical gridding analysis and integrated calculations of chemical body mass and volume for groundwater and in geologic 3 dimensional subsurface site models. Mr. Strandhagen holds a master of science degree in geography with an emphasis in hydrology, and geomorphology.

Susan FitzGerald, L.G., Managing Scientist

Integral Consulting Inc.

Susan FitzGerald is a licensed geologist with 12 years of experience in the environmental field. Her experience includes planning and conducting investigations of sediment, soil, groundwater, and surface water quality at sites being evaluated under the Washington State Sediment Management Standards, Washington State Dredged Material Management Program (DMMP), Washington State Model Toxics Control Act, and federal CERCLA regulations, and managing tasks for these projects.

1:30pm - 3:00pm, Discovery B

May 6, Wednesday

Applying GIS in Public Water System Source Protection; Oregon DEQ experiences

Oregon's drinking water protection program operates as a unique team effort leveraging the resources of both the Oregon Health Authority and the Department of Environmental Quality. This cooperation creates opportunities to integrate water quality protection aspects of both the Safe Drinking Water Act (SDWA) and the Clean Water Act (CWA). GIS plays a major role in providing maps and analysis for both state agencies to protect public drinking water sources. Surface and groundwater water source areas were established in 1999. Technical assistance work began identifying potential contaminant sources (PCS). Existing GIS layers for PCSs were gathered and, based on available DEQ data, new datasets were developed by the drinking water program and are now widely used by both state agencies. The datasets have been included in state-wide watershed evaluations, basin TMDLs, and by other DEQ programs (such as UICs, and emergency response plans). New data layers encouraged development of tools using model builder to facilitate iterative geoprocessing and to automate delineation of small drinking water systems. The datasets provided a strong scientific background for identifying possible water quality issues. This GIS-based analysis approach leads to focused technical assistance contributing to successful improvement/implementation of protection activities and helps identify funding needs. Using either of the national water quality Acts can result in cleaner water for the public water systems; but using them in combination allows a two-pronged approach for protecting beneficial uses of water with technical assistance reinforced by regulatory implications. Integrating the SDWA and the CWA serves to strengthen the overall agency approach to water quality improvement and provides a model for intra-state agency cooperation for water quality protection. This paper describes the cooperation between two state agencies, the variety of PCSs used by DEQ, and some simple GIS tools used in analysis of potential contaminant source in public water systems.

Steven Aalbers, GIS Information Coordinator, Drinking Water

OR Department of Environmental Quality

Steve joined Oregon DEQ in 1994 focusing on Emission Inventory for Air Quality Division's Technical Services Section. Later, he worked as state-wide Air Quality Monitoring Coordinator and in 2002 he joined the Air Quality Modeling group. Steve moved to DEQ's Drinking Water Protection program in 2005 as the GIS Information Coordinator focusing on surface and groundwater public water systems. He is now responsible for distribution and maintenance of drinking water GIS layers, developing tools for potential contaminant source identification, finding and developing new spatial layers, and using GIS to analyze existing and potential contaminant source threats to public drinking water sources.

Mapping the Oregon King Tide Photo Project

The King Tide Photo Initiative is an international grass roots effort to document areas inundated by the highest projected winter tides. In 2011 Oregon joined in the project through a partnership of the Oregon Coastal Management Program, Oregon Shores Conservation Coalition, and the Oregon chapter of Surfrider Foundation. Much of the project is focused on outreach to citizens, and citizen participation in the effort to photograph areas impacted by the yearly high water levels. This past year, an effort was made to improve the geospatial information associated the project photographs, including the development of an online submission tool produced using the ESRI ArcGIS Geoform App to facilitate the submission of the photographs along with the other image capture information (location, time, photograph description). Through the use of geospatial technology the Oregon project leaders are hoping to facilitate improved project outcomes by increasing the quality of image capture process, documentation, and submission of the photographs - thereby increasing the quality and usefulness of the photographs over the life of the project.

Andy Lanier, Coastal Natural Resources Specialist

Department of Land Conservation and Development

Andy is a Coastal Resources Specialist with the Oregon Coastal Management Program (a division of the state department of Land Conservation and Development). He is a graduate from the Marine Resources Management Master's Degree program at Oregon State University, where he earned his professional GIS certificate.

(Continued onto next page)

1:30pm - 3:00pm, Discovery B

May 6, Wednesday

(Continued from last page)

Data Collection from Street Level Imagery

Making current infrastructure last longer is a challenge facing many agencies today and asset management has been steadily moving up on most priority lists. Managing and extending the life cycle of physical assets for transportation, water, electric, and transit networks begins with knowing the location, composition, and condition of the assets. David Evans and Associates, Inc. worked closely with the Asset Management Team at Snohomish County, WA to develop a plan to capture data for all of the County's roadway assets. Using the power of photogrammetry in a terrestrial environment, location and condition information can be captured in street level imagery and extracted at the desktop directly into GIS or CAD and linked to an asset management and maintenance system. This presentation will give an overview of the technology, process, and systems used to capture the imagery and how it helped the County to embark on their asset management program.

Chris Aldridge, Geospatial Manager

David Evans and Associates

Mr. Aldridge is the geospatial manager in the Surveying and Geomatics COE at David Evans and Associates, Inc. where he leads the AIMM program. Chris is an ASPRS Certified Photogrammetrist and a licensed Photogrammetrist in Oregon and Virginia. He has been active within the ASPRS for 15 years have recently retired from the Board of Directors and the Executive Committee.

1:30pm - 3:00pm, Discovery C

May 6, Wednesday

Government Agencies Working Together: State-to-Local Collaboration Panel

The states of Washington and Oregon have had GIS coordination programs for several decades. Progress has been made on many issues, but more work remains to be done. In particular, local governments in both states could participate more in statewide coordination efforts, and the states need to better leverage innovative technology to make participation easier. Together we all need to work more collaboratively to better support geospatial work all levels of government. This panel, comprised of state and local leaders, will briefly summarize the GIS coordination efforts in both states, articulate the shared geospatial needs in local governments, and discuss the efforts that have been made to meet those needs as a whole. The audience will be asked to help identify actions that could be taken by the states to better support local government GIS operations. The result of this discussion is expected to be a short list of actions that we can collaborate on going forward. Break down of time

Cy Smith, Statewide GIS Coordinator

State of Oregon

Cy joined the State of Oregon in 2000, with responsibilities for statewide coordination of all geographic information activities in state agencies, academic institutions, and regional and local governments, helping assure elimination of redundant activities. Cy was the GIS Manager for the City of Olathe, Kansas for four years, the Kansas State GIS Coordinator for three years, and a GIS consultant for PlanGraphics, Inc. of Frankfort, KY for four years. His background is land ownership mapping. He has been in the geospatial industry for 32 years. He has been President of URISA and NSGIC, and Chair of the Coalition of Geospatial Organizations.

Melissa Crane, GIS Program Manager

Lane County, Oregon

Melissa joined Lane County in 2010 and is responsible for coordinating GIS activities for all county departments. Melissa is also responsible for managing GIS and other information technology support contracts with numerous Oregon counties and cities as well as coordinating support activities throughout the Lane County Information Services Department. Prior to joining Lane County, Melissa was the GIS Coordinator for San Juan County, Washington for four years, a GIS consultant for MACTEC Engineering & Consulting for five years, and a GIS Anal

Sue Blohm, IT GIS Supervisor

City of Salem

Susan joined the City of Salem IT Department in 2004 where she is responsible for citywide coordination of all city GIS activities including strategy and management of hardware, software, data, people and policy that support GIS. Prior to joining the City, Sue worked for federal contractors on GIS projects for the U.S. Department of Energy and Department of Defense. At Vandenberg Air Force Base, Sue worked on NASA projects supporting launch operations. Sue also worked for ESRI while finishing her degrees in Geography and Environmental Science. Sue is a GISP and has been in the geospatial industry for 30 plus years.

Joy Paulus, State GIS Coordinator

State of Washington

Joy joined the State of Washington in 1985. As the state's Geospatial Program Manager she provides enterprise-wide leadership, governance, policy direction and oversight in Washington state government. As the state's GIS Coordinator she works with state agencies and academic institutions to ensure effective use of technology. She has 34 years of experience in the implementation and management of GIS technology in both state and private industry. She is the chair of the WA Geographic Information Technology (GIT) Committee, provides staff support to the WA Geographic Information Council (WAGIC) and is the state's representative on the National States Geographic Information Council (NSGIC).

(Continued onto next page)

1:30pm - 3:00pm, Discovery C

May 6, Wednesday

(Continued from last page)

Jason Eklund, GIS Coordinator

Kittitas County , Washington

Jason was hired as Kittitas County's GIS Coordinator in 2007. He manages the enterprise SDE database, is responsible for all County GIS related activities, and is active in building custom applications and extensions that allow county departments to maintain their own spatial information. Jason's prior job was with the Oregon Department of Water Resources as a GIS Developer/Analyst for 8 years. He graduated from Colorado State University with a degree in Natural Resource Management and minored in Spatial Information Systems. He has been in the GIS field for 17 years.

Don Burdick, GIS Program Lead

City of Bellingham

Don is an accomplished GIS manager with extensive experience coordinating GIS activities, integrating workflow and business systems with GIS in local government and managing computer infrastructure and business systems within public works. He has a proven track record of highly successful management of multiple mapping and application development projects for an award-winning team of GIS and technical professionals, with a 20-year history in the GIS/CAD and survey fields. Don's specialties include: Skilled in project management, strategic planning, enterprise GIS system design, database design and conversion, business model analysis, application development, JavaScript, HTML/CSS, Visual Basic.

Acknowledgements

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hundreds of hours of their time to the effort.
It would not be possible to bring you these fun
and educational opportunities without the
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for which we are
very grateful.

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The King County GIS Center provides quality service and exceptional value for our clients with one of the most capable GIS organizations in the Pacific Northwest. Unlike most consultants, our professional staff members are not merely theoreticians, but practicing users of the types of GIS solutions government and business require. Why do we offer our services to outside customers? We have a long-term interest in the success of GIS throughout the region. We know that our success depends on satisfied clients and we are committed to delivering quality GIS business solutions that provide value for our customers. Let KCGIS help you put GIS to work!

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The University of Washington Tacoma, Urban Studies Department offers a Master of Science in Geospatial Technologies degree consisting of a one year (Four Quarter) cohort model. Applications for Autumn Quarter 2015 will be accepted through June 15th, 2015. The twenty (20) student cohort will enroll in two courses per quarter from September 2015 through August 2016. The degree will provide advanced training in GIS, preparing students to use and apply geospatial hardware, software, and data in urban and environmental planning scenarios. It will also prepare students to become leaders in the management and utilization of geospatial technologies within the job market – public, private, and not-for-profit sectors. It will also offer training in the development and deployment of location-based mobile applications and management of web-based geospatial data. This program will maintain a theoretical/critical focus on the application of these technologies to urban and environmental problem solving. <http://www.tacoma.uw.edu/urban-studies/master-science-geospatial-technologies> or email Gregory Lund for more information: gwlgis@uw.edu .

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Our GIS solutions are scalable and ensure data integrity while providing access to data through a user-friendly interface. They increase efficiency, improve data quality, enhance safety, enable new users, initiate new services and decrease paper use. We have helped new users get started with GIS and implemented complex enterprise GIS systems.

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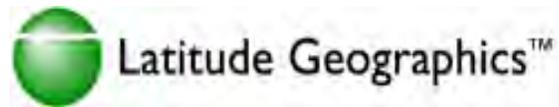
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Mason, Bruce & Girard, Inc. (MB&G) is a multidisciplinary consulting firm based in Portland, Oregon with expertise in environmental services, forestry and geographic information systems (GIS). MB&G has been in business since 1921 and provides services to a wide variety of public and private sector clients. Our dedicated staff is guided by our core values, focusing on providing collaborative results, sustainable solutions, and excellent service.

While MB&G has been providing GIS services to our clients and has been an Esri business partner since 1998, the establishment of the Geospatial Services Group (GSG) in 2010 confirmed the company's commitment to significantly enhance our overall geospatial capabilities. The GSG now includes software architects, developers, project managers, database analysts, GIS and image processing analysts, and technicians, who together have more than 80 years of combined experience working on projects that range from a few thousand dollars to millions of dollars. Our expertise includes a wide range of technologies and analysis methodologies such as geospatial needs assessment and requirements analysis; field and imagery data acquisition, Light Detection and Ranging (LiDAR) processing, remote sensing including automated image classification, geospatial information extraction, data and database management, spatial analysis; mobile, desktop, and web based enterprise software application development, environmental modeling, training, and on-site staff augmentation. We prioritize staying current with technology, specifically software technology for enterprise, mobile, and geospatial development, so that we can provide expert consulting in these critical areas to our clients.

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