



THE SUMMIT

News From and For the Washington GIS Community

GIS in Action: Conference Preview

By: Effie Moody, Contributing Editor

The Washington and Oregon chapters of URISA and the Columbia River Region of the ASPRS invite you to join your colleagues at the 2015 GIS in Action Conference. This will be a joint conference, combining the annual GIS in Action conference (sponsored by Oregon URISA and the Columbia River Region of ASPRS) with the annual Washington GIS conference (sponsored by Washington URISA). Our three organizations have joined forces this

year to host a single, combined conference that includes the best features of both of these well-established regional conferences! Mark your calendars for May 4-6, 2015 and join us in Vancouver, WA at the Hilton Vancouver Hotel and Conference Center for this year's theme - "Spatial Connections".

Read on to learn about three featured presentations, and register for the conference at <http://www.gisinaction.org>.

Choosing the right GIS technology and Implementing Esri-based web solutions in local government

Presenter: Masao Matsuoka, Thurston County

Are you confused by the many options available for implementing Esri-based GIS in the web? We have been hearing from vendors about their ever-expanding technology options. To determine the best solutions, you may like to hear the perspective of a local government regarding options and how

(Continued on page 4)



Also In This Issue:

Where is GIS in K-12 Education?	2
Western WA Regional Aerials Project	6
New Online Tool to Avoid Bridge Strikes	8
Bipartisan Geospatial Data Act	9
State GIS Office: New Imagery Services	13
Pierce County Open Data Portal	17
Changes to GISP Certification Process	21
Features	21-22

President's Column

By: Heather Glock

It's finally warming up in the Pacific Northwest – that means the annual GIS conference is right around the corner! I hope your plans are set to join your colleagues at the first-ever Washington and Oregon combined conference in Vancouver, WA May 4-6. The conference planning committee, comprised of volunteers from both states, led by conference co-chairs Sarah Myers and Bob Pool, have

been hard at work organizing the workshops, track sessions, special panel discussions, and networking activities that make up the conference. As I write this, I know most of the pre-conference workshops have already sold out. I think that is a testament to the engaging agenda the committee has developed for you! Please take a minute to review the agenda and register for the con-

(Continued on page 20)

Where is GIS in K-12 Education?

By: Anna Yost and Brian Devereux

The Community Engagement Committee (CEC) at WAURISA has been meeting on a monthly basis since the 2014 WAURISA conference, and during many of these meetings we have discussed ways that we, as a professional GIS organization, could help support GIS engagement at the K-12 level. CEC member Brian Devereux, the Planning Director at the Puyallup School District, learned that the Esri Statewide K-12 Education Site License Agreement providing ArcGIS Desktop and Server software and licenses available for free to educators at K-12 public and private schools is in the process of being extended past the July 2015 expiration date. In addition, educators throughout the country have access to free ArcGIS Online organization accounts as part of Esri's ConnectedED Initiative (see <http://connected.Esri.com>). From a small sample of anecdotal accounts from various CEC members with family, friends, or children in K-12 schools, we have not heard many examples of GIS technology being used or taught in the classroom. As CEC members we were interested to learn more about how GIS is being used in the classroom, and if it is not, why not.

Through his work as a GIS user at the Puyallup School District, Brian identified some contacts in the GIS K-12 education community who could shed some light on the level of utilization of GIS in Washington K-12 schools: Dennis Small, the Educational Technology Director at the Office of Public Instruction (OSPI) in Olympia, and Charlie Fitzpatrick, the Esri Program Schools Manager at Esri. We put together a series of questions for Dennis and Charlie about the role of their organizations with regards to GIS in K-12 education, and their opinion on the challenges for increasing the use of GIS in K-12 education.

Dennis has been working for OSPI for 25 years, and he says the goal of OSPI is to support "schools and educators as they work to make every student ready for career, college, and life". In Dennis's opinion, GIS technology is a good fit with the technical skills currently being taught "in Career & Technical Education (CTE) as well as STEM literacy (see <http://k12.wa.us/STEM/>). In addition, the geospatial skills taught through the use of GIS align with our state's science, social studies, integrated environmental and sustainability, and educational technology standards".

Charlie Fitzpatrick is the Esri Program Schools Manager and has been working at Esri for over 20 years. Charlie has an MA in Geography and "was a social studies teacher in grades 7-12

(mostly grade 8, mostly geography) from 1977-1992". During his teaching career Charlie "started working with computers and then helping other teachers to use computers" too. Charlie joined Esri in 1992 and has "been working on K12 education since Day 1...helping states and schools and projects use GIS".

What are the challenges of teaching and using GIS in K-12 classrooms?

Both Dennis and Charlie agree that there are technological and educational barriers that have hindered the widespread use of GIS technology in K-12 classrooms. Dennis observes that "the powerful workstation requirements for GIS desktop software have been a challenge for many schools" and have been a barrier to getting GIS in the classroom. This barrier is becoming smaller because the infrastructure requirements to use ArcGIS Online are modest. Additionally, Dennis observes that "other challenges include lack of training in GIS for educators, limited awareness of GIS (or the perception that it is too difficult for K-12 students), and lack of CTE frameworks

(Continued on page 3)



**Pacific Northwest Technology Leaders in
Survey, Mapping, and Construction Solutions**



GeoLine
www.geoline.com



Trimble
Authorized Distribution Partner

GeoLine Headquarters 13218 NE 20th ST. #400 Bellevue, WA 98005 800.523.6408	GeoLine Service Center 7800 SW Durham RD. #100 Tigard, OR 97224 503.620.5244
--	---

Additional Offices: Spokane, WA & Boise, ID

Where is GIS in K-12 Education?

(Continued from page 2)

for GIS courses”.

Charlie agrees that “there are technological barriers, of course, but the biggest barriers are human. Some schools have been able to do very powerful work with even modest tech; some schools have struggled to accomplish even modest work with very powerful tech. In the most exciting case studies, it's always a teacher introducing the students and then letting them dig into their own projects, with administrators helping to knock down barriers or at least not erect new ones. Given permission and encouragement to engage in ways that are meaningful for them, students constantly shock adults with what they can accomplish. The key is an appropriate intro, and then encouragement to use it in ways that interest the students. That's why fourth graders got a standing ovation in the opening plenary of the 2014 Esri Conference -- they had reached higher and farther and deeper on projects of value and interest, and showed that kids can do anything.”

Charlie observes “that many teachers have educational mandate overload and/or whiplash. But I think we can collectively agree that we want students to be insatiable learners who get to practice asking questions, solving problems, thinking independently, collaborating with others, seeking and integrating information, making decisions, analyzing and interpreting, and acting in a way that benefits others. Supporting this broad goal should be easy, and GIS is a tool that fosters all these processes, and can do it in every grade and nearly every topic.”

What actions can help overcome these challenges?

Charlie believes that “giving teachers the support they need...will go a long way”. Charlie describes how Esri is working to support educators with a variety of initiatives: “Esri runs an educator institute to help other educators understand why and how to engage GIS, has sponsored a series of teacher workshops across the country, constructed gently ramped learning resources to let people succeed quickly, and made these powerful online mapping tools that let teachers and students alike engage on any device, anytime, and anywhere”.

Dennis agrees that the “use of ArcGIS Online can help make it more accessible from student computers”, and that “training and awareness of educators is needed as well” and

GIS Resources

Home ▶ Courses ▶ GIS Resources ▶ GIS

NAVIGATION

Home

▶ Site pages

▼ Current course

GIS

■ Participants

▶ General

▶ ArcGIS Online Resources

▶ ESRI GIS Software for WA K-12 Schools

▶ GIS, Geography, and Earth Science in WA K-12 Learn...

▶ ESRI GIS in Instruction videos

▶ GIS Boot Camp Resources

▶ Additional GIS and Mapping web links

▶ 2010 Census Data

▶ Education, Environmental, Geographic & Transpo...

▶ Courses

OSPI's GIS Resources in the EdTech Moodle. Find it online here:

<http://edtech.ospi.k12.wa.us/course/view.php?id=12>

this could be promoted through the development of CTE frameworks for GIS courses. Currently GIS technical education is not specifically available in the CTE course offerings, and so is not a visible option for educators, but raising awareness of the value of GIS as a marketable skill may help encourage the inclusion of GIS in the CTE framework.

Esri Support of GIS in K-12 Education

Esri has a rich history of supporting education, environment, and non-profit initiatives through reduced-cost software licensing. Esri has been providing free ArcGIS Desktop licenses to K-12 schools for over 20 years, and Charlie shares that “over the last year Esri has been promoting the ConnectED Initiative where Esri has offered full professional ArcGIS

(Continued on page 18)

GIS in Action: Conference Preview

(Continued from page 1)

they may or may not work on a recent project we did to replace an aging intranet mapping website for county staff use. Along the way, we considered many available options in the market to derive the solution that best works for us. When considering IT solutions, there are things to consider, including user needs, internal resource availability, budget, and many other factors. The county government we represent is midsize which means we have to support several users with limited resources and budget. ArcGIS Online would be perfect if our user base were smaller, but as an organization of 1000 plus staff, subscription costs for all users are not affordable. In order to cut licensing costs, we could go with custom or open source solutions, but do not have adequate internal resources to build and maintain such solutions. In the effort to hit a middle ground, we purchased a less expensive third party product that uses ArcGIS Server technology and builds on top of it without additional requirements to purchase individual named user licenses. The objective of this presentation is not to convince you that our choice is the best for everyone, but to outline for you the pros and cons of options explored along the way from the viewpoint of local government. Additionally we would like to share other lessons we have learned along the way.

When considering IT solutions, there are things to consider, including user needs, internal resource availability, and budget.



Masao Matsuoka

A little bit about the presenter: Masao first encountered GIS while serving as an intern at a National Park by helping them compile vegetation and wildlife data using the ArcView Software for a project. Since Masao loves maps, technology and nature, the software was an instant hit! Later Masao moved onto a graduate school and studied geography with an emphasis in cartography and GIS. Masao is currently helping Thurston County to utilize GIS fully. The first project there included implementing an enterprise Geodatabase. Based on that foundation, Masao worked on various desktop and web GIS solutions for the county staff for GIS to be used by non-professionals as well.

CityIQ - Keeping a City Government Map Application Current and Relevant

Presenters: Ann Stark, City of Bellingham and James Van Dyk, Latitude Geographics

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, the 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

(Continued on page 5)

GIS TRAINING EXPRESS™
Professional GIS Training
in our Seattle facility or at your site

King County GIS Custom Classes Created and taught by working GIS professionals.

GIS Academy™ at King County, "Beyond the Basics."

Expert ArcGIS® Training Our teachers are Esri Certified Desktop Associates and CompTIA Certified Technical Trainers.

URISA's Pacific NW Education Center

GIS Certification Institute Qualified Earn GISCI points.

Veteran's GI Bill Benefits Selected programs of study at the King County GIS Center are approved for those eligible to receive benefits under Title 38 and Title 10, USC.

GIS training for federal, state, local, and tribal government employees in partnership with the **Washington State Department of Enterprise Services.**

King County GIS CENTER
www.kingcounty.gov/gis/training

We help you put GIS to work!
gistraining@kingcounty.gov

GIS in Action: Conference Preview

(Continued from page 4)

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.

We will also mention the ease with which we can spin up new applications that are targeted to specific business needs. While the kitchen sink model still has a useful purpose in City government, targeted applications are being used more and more as well.

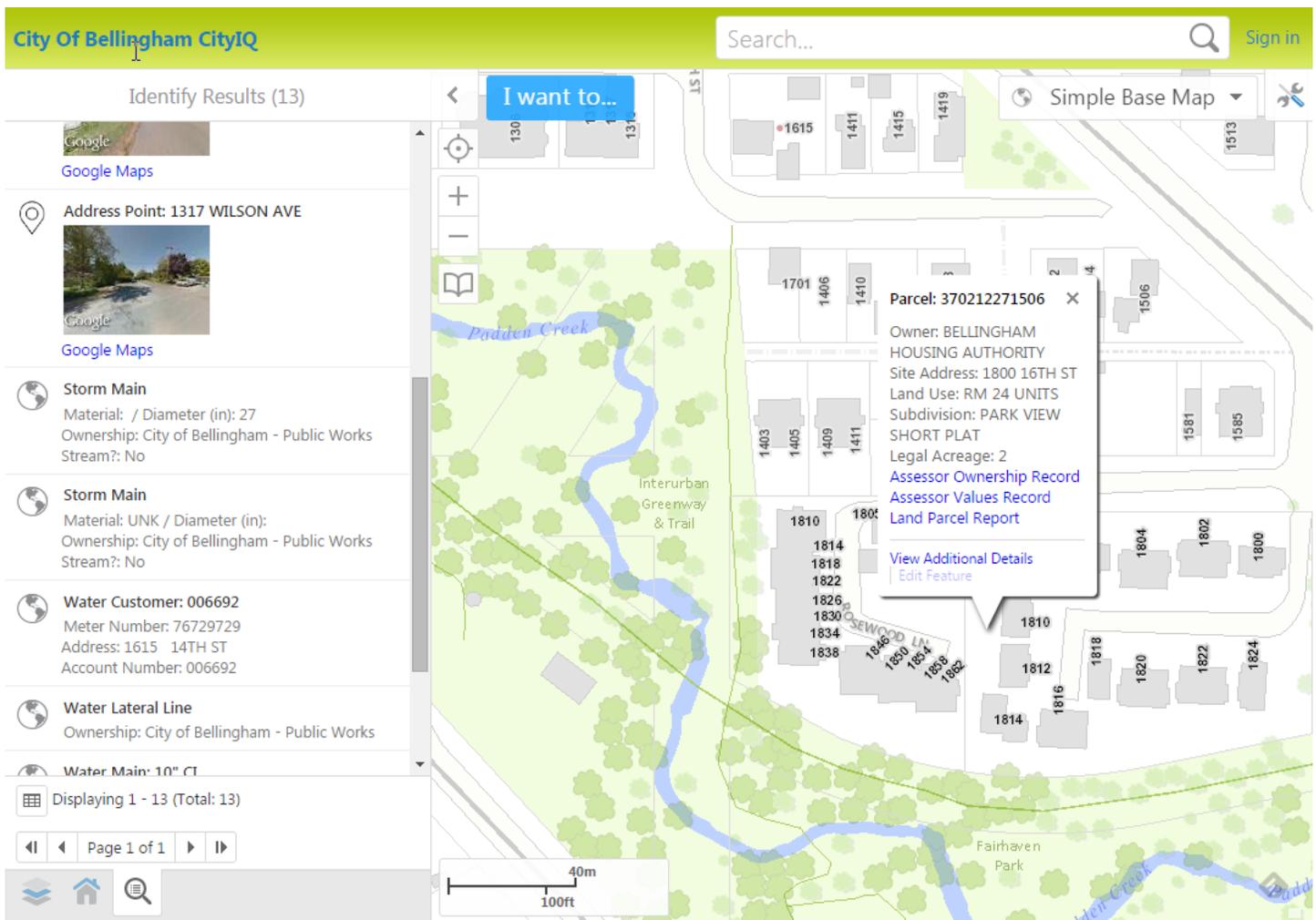
A little bit about the presenter: Ann first learned about GIS while at Oregon State University earning her Master's Degree. She was required to take a minor subject and it seemed the better of the two of her choices. Turns out she loved it and enjoys the combination of science and art. She is currently a Senior GIS Analyst at the City of Bellingham where they use GIS primarily to solve business issues in local government.

Angling for a Successful Public - Private Partnership

Presenter: Jon Bowers, Oregon Department of Fish & Wildlife

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.

(Continued on page 8)



CityIQ connects to Google Maps for a street view snapshot.

2015 Western Washington Regional Aerials Project: History, Goals & Challenges

By: Scott Lackey, Senior Project Manager

Every 2 to 3 years, like most large government entities, King County refreshes its GIS-related data, including digital aerial imagery and digital elevation modeling (DEM.) At King County there is the typically the option for County agencies to “opt in” and obtain upgraded digital terrain modeling (DTM) data suitable for use in the generation of 2’ contours.

2009 Project

By 2009, based on trends for other government agencies, King County and its neighbors began to realize there may be significant advantages to partnering together in a single joint regional project. King County had just kicked off an agreement with an acquisition vendor. After that agreement was in place, several other parties asked to join on as participants and the first iteration of this regional project was born, albeit with a very limited number of participants.

2012 Project

In 2012 the “Regional” in “Regional Initiative” became more structured. A group of 53 cities, counties, utilities and tribes joined together and contracted with a single acquisition vendor, with King County acting as the fiscal agent. The basic project execution assumptions were very straightforward:

1. The group would join together as a single collective to contract with an acquisition vendor.
2. Rather than the flat subscription pricing some government GIS initiatives were based on, in order to enable smaller parties to participate, the pricing would be based on the size of their area of interest (AOI), the requested resolution, and the number and extent AOIs of other

parties overlapped.

3. Each participating group would be responsible for their own quality assurance.
4. Each party could supply their own existing DEM data and the acquisition vendor would incorporate that information (if supplied) in the final set of deliverables.
5. King County would act as the fiscal agent.
6. King County would perform general coordination and project management.

The 2012 project ultimately met with mixed results, primarily because the quality of existing participant DEM data varied dramatically (causing both missed expectations and significant schedule slips due to unplanned vendor rework), and because different participating entities had dramatically different ideas of both how much QA was needed and how it should be performed – along with different time frames for QA execution. Ultimately these factors contributed to mixed levels of participant satisfaction and some deliveries that were late by 11 months or more for some parties.

Fast forward to 2015:

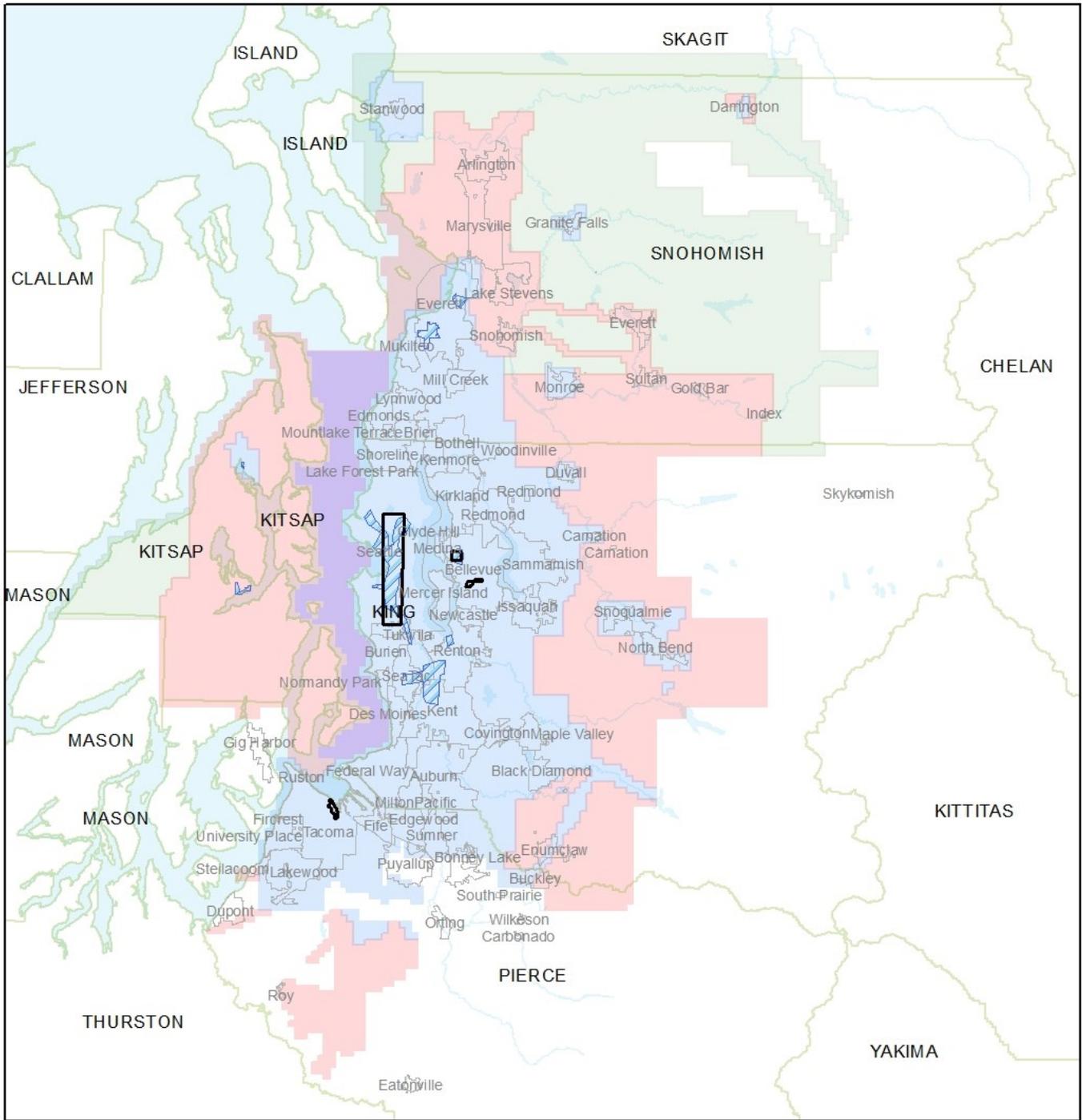
The County wanted to launch another regional effort as soon as possible, but realized it must start first by looking to the past, to identify lessons learned in 2012 and earlier. In doing so the County came to the following conclusions:

1. **Bargaining as a Single Group:** The general approach of a bargaining as a single party worked well – and would be repeated.
2. **Shared Pricing:** The “shared tiles” discount approach

(Continued on page 10)

2015 Project Snapshot

Number and type of participants:	Nearly 100 cities, utilities, counties, tribes and private companies
Geographic Scope	Approximately 4,000 sq. miles of western Washington ranging from north Pierce County to north Snohomish County, and east to west from Kitsap County to central or eastern King and Snohomish County
Project Deliverables	Standard: 3”, 6” and 12” aerial imagery; DEM data Optional: Impervious surface ID and categorization, DTM and contours
Pricing Model	Priced according to a participants square mileage and number of other participants sharing the same tiled area



2015 Western Washington Regional Aerials Project

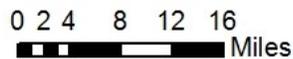
Proposed Resolution Areas,

Enhanced Acquisition Areas,

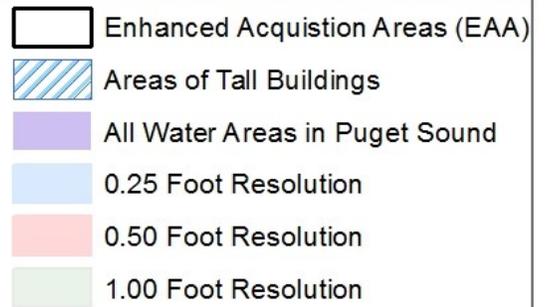
All Water Areas

and

Areas of Tall Buildings



April 15, 2015



GIS in Action: Conference Preview

(Continued from page 5)

ers 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: 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 advertisement 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



Jon Bowers

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.

A little bit about the presenter: Jon joined ODFW in 1998 as a GIS Analyst, 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.

New Online Tool to Avoid Bridge Strikes

Press release from http://www.wsdot.wa.gov/News/2015/01/15_newbridgemappingtool.htm

A new online tool allows truck drivers to more easily research bridge heights – and potential conflicts – before they hit the road.

The Washington State Department of Transportation was already updating its bridge clearance information at the time of the May 2013 Skagit River Bridge collapse. The bridge collapsed when an oversize commercial truck struck and damaged the upper bridge supports causing a section of Interstate 5 and two vehicles to fall in the river. The newly collected bridge data became a springboard to develop the [state route bridge vertical clearance trip planner](#) as part of WSDOT's overall response to the collapse.

“This innovation offers truckers a new tool to find the safest route for their trip,” said Gov. Jay Inslee. “It applies lessons learned from the Skagit River Bridge replacement, and it will reduce the risk of collisions throughout the system.”

Using GIS mapping, the trip planner shows drivers which bridges on their proposed route should be avoided or ap-

proached with caution because heights may vary by lane. While the ultimate responsibility for checking clearance levels remains with the truck driver, this tool makes it easier to fulfill that obligation when applying for [trip permits](#).

The trip planner database will be available to third-party developers who have expressed interest in creating navigation apps. This open data approach allows the private sector to use state-generated data to develop even more tools to improve highway and motorist safety.

“We’ve taken advantage of existing technology to help improve safety on our roads,” said Transportation Secretary Lynn Peterson. “Sharing this data through private-public partnerships will help get this information into even more customers’ hands.”

The trip planner was developed in consultation with the Washington Trucking Association, whose members conducted beta testing on the tool.

(Continued on page 10)

Senators Hatch and Warner Introduce Bipartisan Geospatial Data Act

Press release from <http://www.hatch.senate.gov/public/index.cfm/2015/3/joint-release-hatch-warner-introduce-bipartisan-geospatial-data-act>

Washington, D.C.— U.S. Senators Orrin Hatch, R-UT, and Mark Warner, D-VA, issued the following statements after introducing the bipartisan Geospatial Data Act.

Sen. Hatch said, “The federal government wastes vast amounts of taxpayer dollars by not properly managing and coordinating our federal investments in geospatial data. This commonsense legislation will improve coordination, reduce duplication, and promote data transparency.”

“Geospatial data has endless possibilities for transforming both the private and public sectors — from helping local governments develop emergency preparedness plans to fueling the creation of apps that let you find parking spots, restaurants, and even homes for sale based on where you’re standing,” said Sen. Warner. “The federal government is the largest purchaser of geospatial data but some very basic questions about how and where agencies are already investing in this data can’t be answered. Our bill would bring transparency and accountability to the collection

of this data and ensure that taxpayer dollars are not being wasted on duplicative efforts.”

Shelby D. Johnson, President of the National States Geographic Information Council (NSGIC) said, “People believe that the United States of America has a robust system of maps and digital data. We don’t, but we should. The federal government was never given the tools to do the job right.

“People believe that the United States of America has a robust system of maps and digital data. We don’t, but we should”.

This Act is a good step toward solving the problems, and our members strongly support it. We also applaud Senator Hatch and Senator Warner for their foresight in dealing with this problem.”

Matthew Chase, executive director of the National Association of Counties, said, “GIS data is an important tool for counties when it comes to making land use decisions, maintaining infrastructure, and responding to emergencies. We support this bill because counties need accurate, modern mapping data to perform key duties and deliver services to their residents. We commend Senators Hatch and Warner for introducing this legislation and urge their colleagues to join them in supporting it”.

Background

Geospatial data is the information that identifies the geographic location and characteristics of natural or constructed features, such as wells, roads, or forests. The federal government has recognized the need to organize and coordinate the collection and management of this data since at least 1990, when the Office of Management and Budget (OMB) most recently revised Circular A-16 to establish the Federal Geographic Data Committee (FGDC) and to promote the coordinated use, sharing, and dissemination of geospatial data nationwide. Unfortunately the progress made over the last two decades has been inadequate. The federal government needs to improve management of geospatial data across the board.

The Geospatial Data Act will codify and strengthen OMB Circular A-16 and require federal agencies to implement international consensus standards, assist in eliminating duplication, avoid redundant expenditures, accelerate the development of electronic government to meet the needs and expectations of citizens and agency programmatic mandates, and improve the efficiency and effectiveness of public manage-

(Continued on page 11)



Valtus

Professional Content for Industry Professionals

HEXAGON

Valtus.com

2015 Western Washington Regional Aerials Project

(Continued from page 6)

was of tremendous benefit to all parties, especially to the smaller parties who otherwise could not have afforded to participate. This too would be retained.

3. **Parties doing solely their own QA:** This was a major stumbling block for 2012. The informal method, combined with limited issue tracking meant that QA was performed at different times in different ways by persons at different levels of GIS knowledge, and sometimes duplicate data went to the vendor, creating unfortunate delays in their delivery. This issue would have to be addressed in the next project.
4. **Option to build on existing participant DEM or vector data:** This general concept was a real business need for some participants, however it needed to be conducted in a better, more efficient way to meet participant (and vendor) expectations. This would definitely have to be approached differently next time around.
5. **King County as Fiscal Agent:** There were no objections to King County continuing to act as the fiscal agent.
6. **King County management of the project:** King County would continue to manage the project as well as the vendor, but Mike Leathers, King County's GIS Data Administrator, had been stretched far too thinly in 2012 as he led both the technical work group as well as doing key participant pricing work; overseeing major technical

This project has been hailed by the vendors involved as currently the most complex and demanding project across the United States this year.

issues; working with George Horning (King County GIS Center Manager) on vendor management; sending out hard drives full of deliverables; and many other tasks. For 2015, greater staffing would be required – even if the project simply remained at around 50 participants... and that is where my part in this story begins.

For 2015 I was fortunate enough to be tasked with leading the effort. As the Lead PM for the project, I was given the opportunity to take a look at the lessons from previous projects and, working with Mike Leathers, George Horning and the Project Steering Group, determine what changes could be implemented and how in order to make the 2015 Western Washington Regional Aerials project the most successful iteration of the project yet. Together, we are bringing a whole host of changes to the project so we can best meet the diverse needs of participants both large and small across the region.

To be sure, the project has many challenges ahead. It has been hailed by the vendors involved as currently the most complex and demanding project across the United States this year. But we are confident that together, the team is up to that challenge.

To learn more regarding the new ideas, procedures and overall changes being brought to the 2015 project, and to hear more on how and why the project has now garnered support from nearly 100 parties throughout the region, be sure to catch Part II in the next issue of The Summit!

New Online Tool to Avoid Bridge Strikes

(Continued from page 8)

"This is a huge step in the right direction," said Sheri Call, the association's vice president of government of relations, noting drivers previously had to look up bridge data online or in a book and then consult their own maps.

In addition to the new tool, WSDOT also has clarified its commercial vehicle policies, initiated a statewide review of all signing for low-clearance structures, added the bridge clearance list to its road restrictions webpage and added a

step-by-step guide to help drivers determine what type of permit they should request. All bridges with a minimum clearance of 16-foot, 6-inches and lower also will be re-measured as part of a comprehensive statewide review scheduled for completion in late 2015.

WSDOT also will continue to expand the trip planner features, including displaying lane-by-lane height information. That work will be completed by 2017.

Senators Hatch and Warner Introduce Bipartisan Geospatial Data Act

(Continued from page 9)

ment.

Additionally, the bill will provide a clear definition for geospatial data and metadata, will require an accounting of the costs associated with the acquisition or creation of geospatial data, and will improve government transparency and availability to public information.

Following requests from Senators Hatch, Warner, Risch, and Carper, the Government Accountability Office recently published their third [report](#) on the issue, entitled “Geospatial Data—Progress Needed on Identifying Expenditures, Building and Utilizing a Data Infrastructure, and Reducing Duplicative Efforts.” The report outlined the intrinsic value of geospatial data, and recommended various measures for better coordination of geospatial activities.

3D Elevation Program Public Meetings: USGS National Geospatial Program

The 3D Elevation Program (3DEP) initiative is being developed to respond to needs for high-quality topographic data and for a wide range of other three-dimensional representations of the Nation’s natural and constructed features. The primary goal of 3DEP is to systematically collect enhanced elevation data in the form of high-quality light detection and ranging (LiDAR) data over the conterminous United States, Hawaii, and the U.S. territories, as well as interferometric synthetic aperture radar (ifsar) data over Alaska. The 3DEP initiative is based on the results of the National Enhanced Elevation Assessment (NEEA), which indicated an optimal benefit to cost ratio for Quality Level 2 (QL2) data collected over 8-years to complete national coverage. The implementation model for 3DEP is based on multi-agency partnership funding for acquisition, with the USGS acting in a lead program management role to facilitate planning and acquisition for the broader community, through the use of government contracts and partnership agreements. The annual Broad Agency Announcement (BAA) is a competitive solicitation issued to facilitate the collection of LiDAR and derived elevation data for the 3D Elevation Program (3DEP). Federal agencies, state and local governments, tribes, academic institutions and the private sector are eligible to submit proposals. The 3DEP public meetings will introduce this opportunity to the broadest stakeholder community possible and provide a forum for interested parties to discuss elevation data collection needs of mutual interest that could be addressed by a coordinated investment.

Advanced Registration is required for meeting attendance. National Webinars will be recorded and made available for viewing.

Dates: April 24, 12 PM ET and April 29, 2 PM ET

<https://www.geoplatform.gov/elevation/3DEP/PublicMeetings>





DAVID EVANS AND ASSOCIATES INC.

David Evans and Associates, Inc. (DEA) delivers sustainable solutions for energy, water, transportation, and land development projects, evaluating conventional approaches for ways to improve transportation efficiency and minimize carbon emissions; provide clean, renewable energy; reduce water consumption and enhance ecosystems; while generating social and economic value for our clients and communities.

Discover with us. Together we can build a more sustainable world.

Offices
 Arizona California Colorado Idaho Mississippi New York Oregon Washington






Courtesy of RTD Denver

To improve the **quality** of life while demonstrating stewardship of the built and **natural** environments

Cityworks®

Empowering GIS®

Asset Management

Critical Infrastructure

Condition Assessment

KPI's

Citizen Engagement

Service Request

Permit

Decision Support

Open 311
Work Order

Mobile
Inspections



Chris Brussow | Client Relations
801.502.9420

State GIS Office: New Imagery Services Available

By: Eadie Kaltenbacher and Joy Paulus

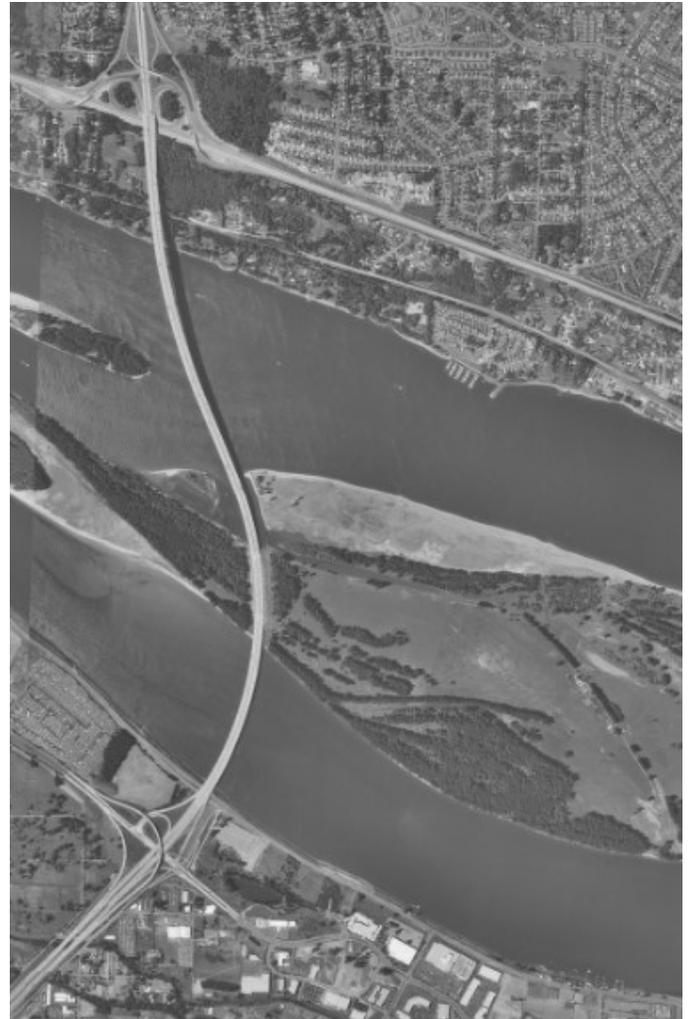
The State GIS Office is pleased to announce that more than 80 imagery services are now publicly available. They may be accessed from the geospatial portal at geography.wa.gov, or go directly to the services using the following links:

SOAP URL: geoservices.wa.gov/arcgis/services

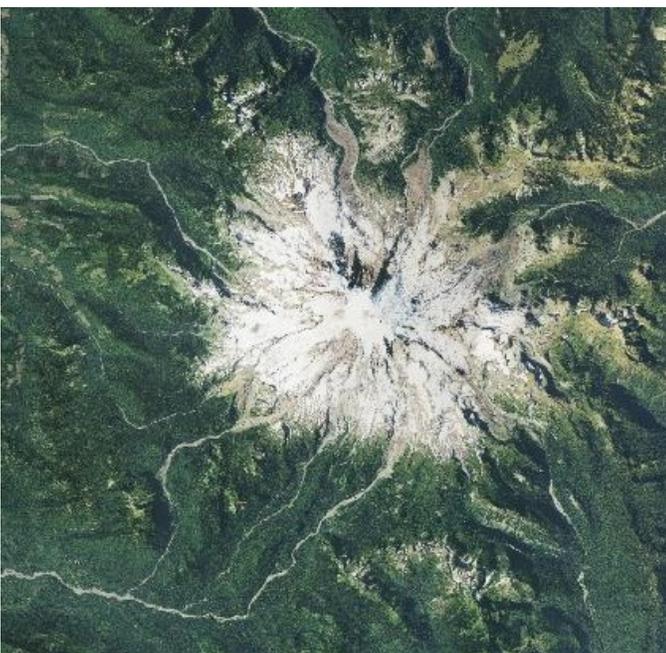
REST URL: geoservices.wa.gov/arcgis/rest/services



Washington State Capitol Building. Thurston County Image Service: Year 2006, 6" resolution.



I-205 Bridge across the Columbia River. Statewide Image Service: Year 1989, 1m resolution.



Mt. Rainier. National Agriculture Imagery Program Image Service: Year 2013, 3' resolution.



Circular irrigation patterns. Walla Walla Image Service: Year 2002, 12" resolution.

GIS in Action 2015

Spatial Connections

Oregon & Washington GIS Conference

May 4-6, Hilton Vancouver Washington Conference Center



OREGON &
SOUTHWEST
WASHINGTON

URISA

WAURISA

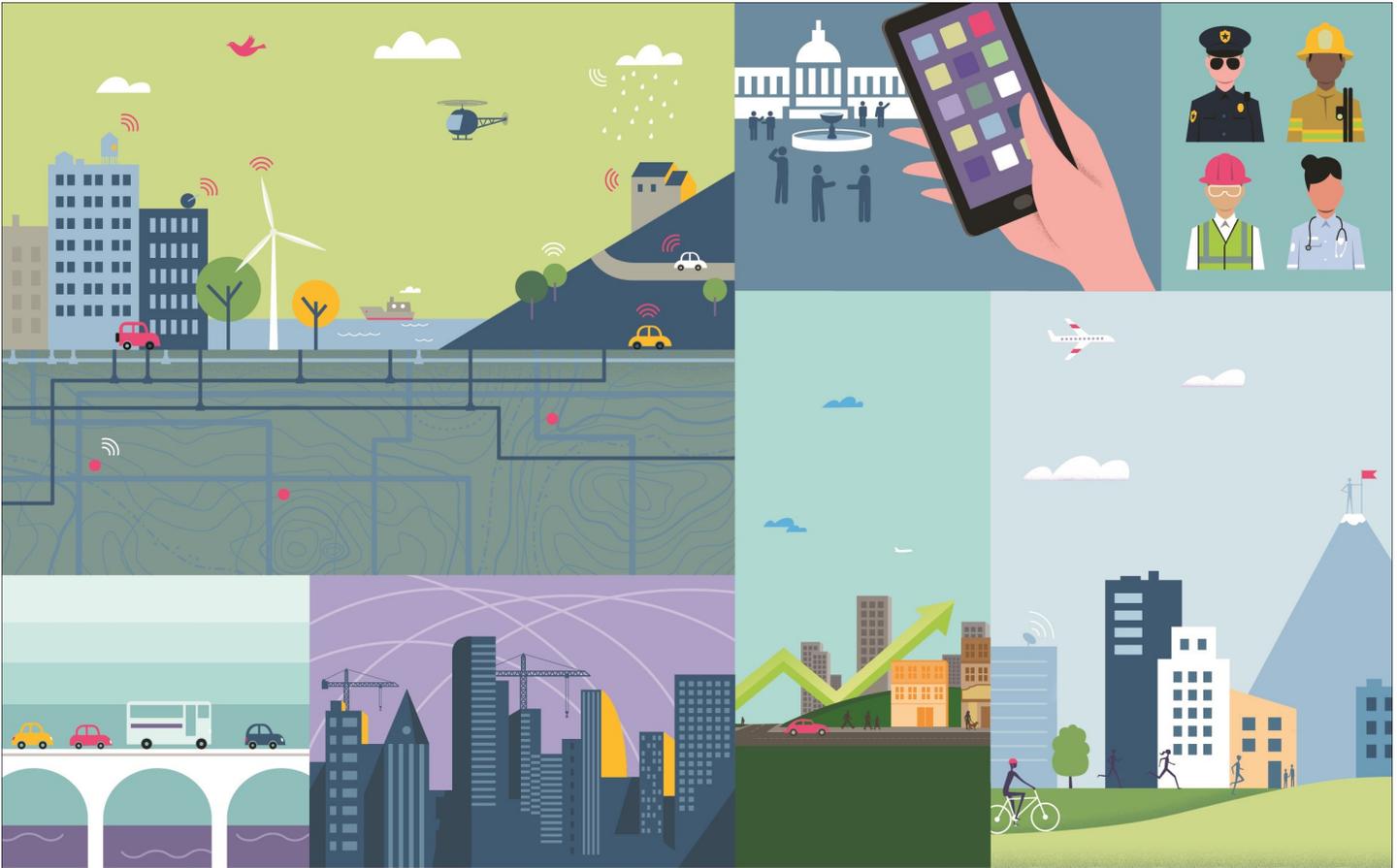
Register Now at GISinAction.org!

May 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Check out the At-A-Glance Schedule, and the Preliminary Program on the website , as well as, information on Esri's Hand's-On Learning Lab and this year's keynote- Steve Ressler, GovLoop.					1	2
3	GIS Workshops	4 in Conference Day 1	5 Action Conference Day 2	6	7	8
9						
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24/31	25	26	27	28	29	30

GIS in Action: Full List of Presentations

County Geospatial Applications and PC Maps
Master Title Plats in ArcGIS, Mapping Federal Rights
Title and Interest throughout History
Bicycle Networks- moving beyond traditional level of Service Metrics
Cloud for the everyday GIS person
Asset Inventory Using Street-level Imagery
Polk County Control Mapping in the Parcel Fabric
Using GIS and spatial statistics for analyzing health care facilities in Jeddah city, Saudi Arabia
Analyzing Public Participation Data for Transportation Planning in the Mt. Baker Snoqualmie National Forest
Integrating Field Data Collection Document management and Enterprise GIS for Natural Resources
Implementing Asset Management in the Cloud using Ground Based LiDAR
Making GIS an IT solution platform
The State of GIS in 2015 in Washington & Oregon
Digital Mobile Sketch Map: Offline Airborne Mobile Mapping Solution for Forest Health Monitoring
Clark County Sign Inventory Project
Applying GIS in Public Water System Source Protection; Oregon DEQ experiences
The Coastal Change Analysis Program: Tracking Changes in Coastal Land Cover Over Time
Exploring Prehistoric Movement and Land-Use in the Old River Bed of Western Utah
Integration of Mobile Technology to Support Remotely Sensed Vegetation Mapping Efforts
Web Mapping
What is the ArcGIS Platform & Where does Portal/portal Fit?
Vegetation Management Using Digital Surface Modeling Analysis
Imagery: A Core Component of your ArcGIS Platform
Use Story Maps to Inform and Inspire Your Audience
Mapping the Oregon King Tide Photo Project
Classifying Oregon Estuary Habitats with CMECS
Geostatistical Estimation of Current and Target Sediment Cap Conditions at the Wyckoff/Eagle Harbor East Harbor
Angling for a Successful Public - Private Partnership
Building Capacity for Climate Change Adaptation: Land Suitability and Cost-Path Analyses
Oregon tidal shoreline: update on process to create and standardize
Building a Digital Elevation model of Mt St Helens using Photogrammetry
The National Map, US Topo and USGS Historic Quadrangles in the Pacific Northwest
Pacific Northwest Environmental Response Management Application (ERMA®): Web Mapping and Visualization Application
Where will ArcGIS Pro Take You?
CityIQ - Keeping A City Government Map Application Current and Relevant
Maintaining Mission Critical Data in an NG9-1-1 Environment
How to Manage GIS Projects, Contractors and Everything Else
Trimble Positions – ArcGIS Compatibility with Trimble and Esri Field Data Collection Software for
Don't Copy Data! Instead, Share it at Web-Scale
Adapting to the Evolving GIS World
The State of the States: How Oregon and Washington use GIS



Every Community Can Be a Smart Community

At Esri®, we do more than talk about smart communities. We help create them.

For decades, we have partnered with thousands of governments of all sizes, all around the world. Through these partnerships we built ArcGIS® for State Government and ArcGIS for Local Government—a series of application templates for issues related to economy, health, infrastructure, and public safety. You can download these apps and start creating your smart community today.

Smart communities start here.

Learn more at
esri.com/smartcommunities



Understanding our world.

Copyright © 2015 Esri. All rights reserved.

Pierce County Launches Open Data Portal

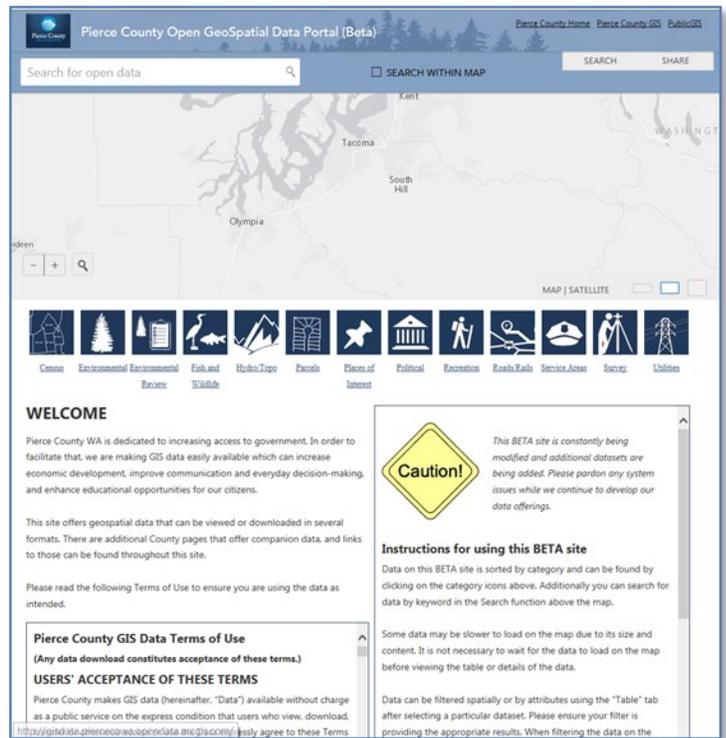
By: Brandy Riche

For well over a decade, Pierce County had chosen to offer GIS data through custom data requests with the premise that it guaranteed that customers received the right data for their particular project, county departments were aware of how their data was being used by the public, and everyone was happy. Sometimes however, requests took longer than the customer wanted, and often the requests for data were large and took valuable resources to fulfill.

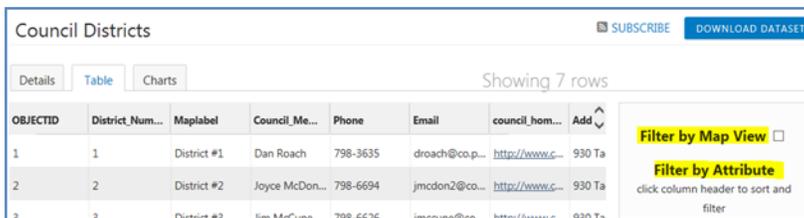
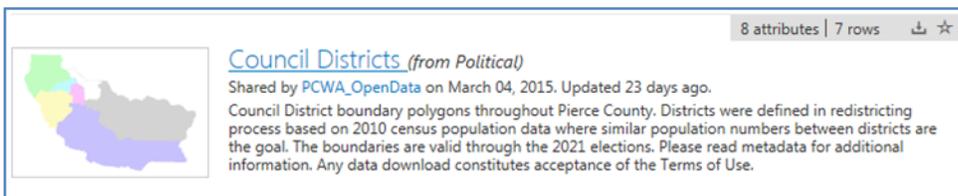
To mitigate these issues, on GIS Day 2014 Pierce County launched the [Open GeoSpatial Data Portal](#). This site offers free production geospatial data to businesses, students, and the general public. It provides on-demand data to facilitate and improve communication and everyday decision-making.

Data on the site is sorted by general categories such as Fish & Wildlife, Parcels, Political, etc., and is fully searchable by topic. In the data lists, additional information is displayed for each layer including the number of records, number of attributes, last updated date, and a short description.

When a layer is selected by clicking on the name, a link to detailed metadata is provided in the "Description". Additionally, attribute information, tabs for the table and charts, and download buttons are provided. When the "Table" tab is selected, filters by "Map View" or "Attribute" are provided to focus the data selection and streamline the download.



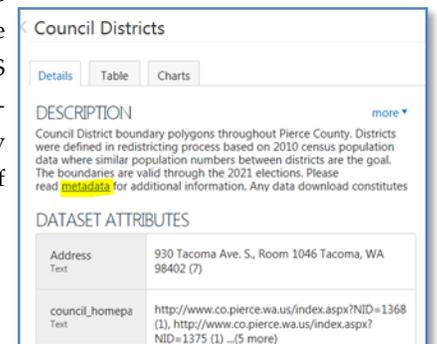
State of Washington which has linked to the Pierce County data from [their](#) site. Before using the Pierce County site and data, the "GIS Data Terms of Use" document on the home page should be reviewed to ensure you are using the data appropriately and as intended. Basic instructions for the site are also available there for your convenience.



Available download formats include KML, API's, .csv tables, or a shapefile packaged in a zipfile. A progress bar is provided and in the newest version, multiple downloads are allowed and can be monitored in an Activities window.

The foundation for the site is Esri's [Open Data](#) portal, used by numerous organizations around the world, including the

The site is still considered "beta" as Pierce County is gathering feedback and actively developing the site. There has been a great response to the site and the data offerings there. Businesses, students, and other government agencies are finding it to be a great asset to them. By participating in the Open Data Portal concept we have made Pierce County GIS data discoverable and usable by the masses for all of their GIS endeavors.



Where is GIS in K-12 Education?

(Continued from page 3)

Online Organizations to any US K-12 school for instruction for free". According to Charlie, "Esri has a core ethic supporting education. We want people to make good decisions, which depends on a holistic understanding of a situation, and careful analysis of good data, which all has a spatial component. People need to learn how to use good tools and methods, collaborating with people to acquire the right resources and gain key perspectives, and to make good decisions. These problem-solving capacities need to be built, they don't just happen. Fortunately, they can be built even from a young age, with the right kinds of experiences".

We asked Charlie what was the expectation/vision for GIS for K-12 when the Esri educational license agreement was implemented? He responded that Esri "wanted teachers and students to be able to work with GIS to learn why and how to think geographically to solve problems. We wanted to make it easy for schools to get access. As school resources dried up and communities and families faced challenges, it became more important than ever to ensure everyone could get access to this". We also asked Charlie to reflect on if the vision/

"Good tools are available to all schools; right now...but we have not yet succeeded in getting all schools to use these tools. Not come close yet".

goals for this implementation been achieved? If so, how? And if not, why not? Charlie offered that "Esri has succeeded in making good tools available to all schools; right now, any US K12 school can acquire a very powerful ArcGIS Online subscription, for free. But we have not yet succeeded in getting all schools to use these tools. Not come close yet. Education is a mountain range, with lots of individual peaks, and variation, and it's hard to move the whole thing. But over the years, especially now with ArcGIS Online, a lot of schools have started, and demonstrated the power of kids engaging GIS in their activities".

We asked Dennis at OSPI what efforts have been made to promote the use of GIS via the Esri Statewide License to the state's educators. Dennis responded that OSPI "promotes its use through both our website (<http://www.k12.wa.us/EdTech/EdSoftware/GIS.aspx>) and a Moodle course (<http://edtech.ospi.k12.wa.us/course/view.php?id=12>). In addition, the partnership is promoted at conferences and regional trainings, and OSPI has partnered with Green River Community College to provide training to K-12 educators. Finally, OSPI maintains a distribution list for educators interested in GIS, which currently has 651 subscribers".

How has GIS been used successfully within the classroom?

Both Dennis and Charlie offered examples of how GIS has been successfully used in K-12 classrooms.

Dennis shared that, in his opinion, one of the best examples is the Waterville Elementary School "Adopt-a-Farmer Project" (<http://naturemappingfoundation.org/natmap/projects/waterville/index.html>). The Adopt-a-Farmer Project began in 1999 by Diane Petersen's 4th grade and Cathy Nelson's 2nd grade classes. It has continued each year with 4th graders adopting local farmers who report short-horned lizard sightings to their students." Charlie observed that "Washington was an early leader in interest in GIS in schools, but other states have raced ahead. (Check out <http://Esriurl.com/usk12gis>. Graphic shown below.) There is a single school district in Virginia that has 90 ArcGIS Online Orgs running,

(Continued on page 19)

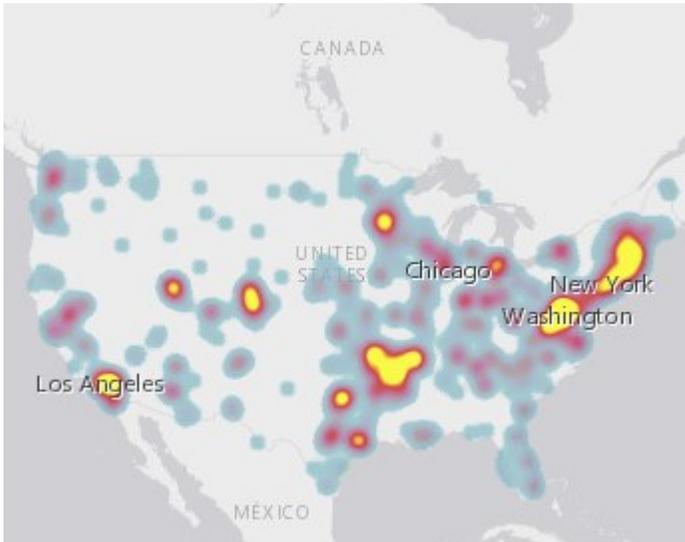


Tracking short-horned lizards in the field: from the Waterville Adopt-a-Farmer 2005 project, by the Waterville Elementary 4th Grade class.

Where is GIS in K-12 Education?

(Continued from page 18)

one in every high school, middle school, and elementary school. How did that happen? Two people got together and said 'We're going to work on this.' It doesn't take an act of Congress, just people with vision and mission, who say 'Our kids -- all of them -- need this, and we can help folks understand why and how to use it.'



Schools with GIS from Esri and ConnectED. Map from <http://Esriurl.com/usk12gis>

How can the GIS community/GIS professionals help facilitate GIS in the K-12 classroom?

Dennis and Charlie both see the GIS community as a valuable resource for helping support and promote GIS in K-12 classrooms. Dennis observes that GIS professionals "may be able to assist with training and awareness of educators...who are trying to integrate GIS in their classrooms, and there may be opportunities to serve as a mentor or provide technical support for classroom projects".

Charlie suggests that "most people have a school or a teacher they know, or at the very least have one in their neighborhood. Going to the school or teacher and saying 'I'd like to help the school be able to take advantage of some really cool and powerful technology', may be stepping outside one's comfort zone, but it's what the school needs. If that's too hard, send an email to the school librarian or media person -- they tend to know everyone, and have nearby resources with which to check things -- and point to <http://connected.Esri.com>. One address is all it takes to start. But it can be a whole lot more effective if there's someone in person

walking through saying 'This is what people do with it right here, in our community, and here's what our kids could do'".

Are you interested in promoting GIS in the schools in your community?

From our research on GIS in the K-12 classroom it appears that GIS professionals have the potential to make a positive impact by offering some of their time and skills to help their local educators bring GIS to their students (and hey, volunteering is a good way to earn points for GISP certification and recertification too!).

If you would like to help promote GIS in K-12 education, visit Esri's Geomenter program and consider registering as a Geomenter (<http://edcommunity.Esri.com/educational-roles>). Also please consider joining the WAURISA Community Engagement Committee (http://www.waurisa.org/Community_Engagement/Community_Engagement.php)

where we are always exploring ways to engage the community and promote GIS. If you are interested in being added to the monthly call reminder email, please email me at:

anna.yost@critigen.com.

elecdata
Electronic Data Solutions®

Let Us Help You Streamline Your
Field to Office Workflows

- ArcGIS Online Specialty
- Software Development
- Equipment Rentals
- Repair Services
- Training & Tech Support

Trimble®
Laser Technology
Juniper Systems®
Water Resources
Instrumentation

Trademarks provided under license from Esri.

WA Ph: 360-539-1707
www.elecdata.com

esri ArcGIS Online
Specialty

President's Column

(Continued from page 1)

ference if you haven't done so yet: <http://www.gisinaction.org>

This is my final president's column for The Summit. As I move into the role of past-president, I want to specifically convey gratitude to the many volunteers who dedicate their time to WAURISA's mission. With its annual GIS conference, numerous quality workshops throughout the year and committee productions and initiatives, there is always something exciting going on at WAURISA. All of this work is entirely volunteer-managed. WAURISA was founded and has been kept alive by the hard work of people who have dedicated their time to our mission. Volunteer-based organizations can be so tenuous because volunteers can walk at any time. We're fortunate that so many WAURISA volunteers stay involved for many years and they willingly work with new volunteers to transfer knowledge. It's been beautiful to watch this process over the years I've been a volunteer and board member with WAURISA, and I look forward to passing along the knowledge I've gained to newcomers who jump into the fold this year.

Volunteering for WAURISA offers the rich opportunity to network with others interested in geospatial technology. I've

seen firsthand the many wonderful relationships that can come from this collaboration and fellowship. It helps to strengthen the Washington geospatial community as well as one's own professional network. Want to know more? Of course you do! There are a couple of upcoming opportunities to learn more about volunteering with WAURISA. The first is our membership meeting at the GIS in Action conference. The meeting is Wednesday, May 6, 2015 12:15-1:15 p.m. at the Hilton Convention Center conference location. The second is our monthly WAURISA board meetings. These conference-call based meetings are open for everyone, and other than to announce your presence at the beginning of the call, you can listen without comment or join the conversation on as many topics as you wish. We welcome everyone and value diverse opinions on the issues we're working on. The meetings are held the second Tuesday of each month from Noon-1:00 p.m. The toll free number is: 1.800.944.8766 access code 20311.

I truly enjoyed my time as President of WAURISA. I look forward to continuing to serve this organization as past-president, but more importantly, as a volunteer. Please consider joining me – volunteer with WAURISA!

Kind regards,

Heather Glock

2015 UNDERGRADUATE GEOSPATIAL TECHNOLOGY SKILLS COMPETITION

The GeoTech Center and URISA are pleased to announce the 2015 Undergraduate Geospatial Technology Skills Competition! The intent of the competition is to showcase the geospatial technology skills of U.S. undergraduate students. Competing students will create a project that utilizes geospatial technology to address a real-world problem. The student will then present the project and the resulting deliverables as a video that not only highlights their use of geospatial technology, but also demonstrates their communication and presentation skills.

<https://sites.google.com/site/geospatialcompetition/>

GISCI Announces Changes to the GISP Certification Process

Press release from <http://www.urisa.org/news/2015/02/17/press-release/gisci-announces-changes-to-the-gisp-certification-process/>

Changes to GISCI's GISP Certification are on the way!

The GISCI Board is pleased to announce the long-anticipated changes to the GISP certification process that were decided during the first meeting of 2015. These changes affect both current and future GISP certification holders and were made in order to increase the value, recognition and long term viability of the GISP certification and the GISCI organization.

Changes for Future GISP Applicants

Effective July 1, 2015, all professionals applying for their initial GISP certification will be required to take and pass the GISCI Geospatial Core Technical Knowledge Exam, now being developed, in addition to meeting the current standards for certification via a portfolio based review based on ethics agreement, education, experience, and professional contributions.

After July 1, 2015, anyone can start the application process at any time, either via the exam or portfolio review. In response to requests from GISPs and the geospatial community, GISCI will offer the GISCI Geospatial Core Technical Knowledge Exam to individuals independent of the application for the portfolio review process. This means that GISP applicants after July 1, 2015 can start the certification process by completing an application and taking the examination any time prior to attaining the professional experience required for the professional portfolio. All applicants will be required to fulfill all certification process requirements within 6 years from the date of their initial application to be awarded a GISP certification. A key benefit of this change in policy is that students and others new to geospatial professions will have the opportunity to begin the certification process and take the exam whenever they believe they are prepared, rather than having to wait until they have completed all of the requirements of the peer reviewed portfolio.

After July 1, 2015 the certification process will include a \$ 100 application fee, a \$ 250 exam fee, and a \$ 100 portfolio review fee. Upon completion of the certification process, an individual will be certified for a 3 year period. Annual renewal fees of \$ 95 are due on the anniversary of initial certification and will be required to be paid in full prior to recertification. Recertification of the GISP will be required at the end of the 3 year period with a procedure similar to the current review process where submission of information on completed continuing

education and service to the profession is required. Until July 1, 2015, GISCI will continue to accept GISP applications under its current process and fee structure.

Changes for Current GISP Professionals

All current professionals holding GISP certification with a recertification date after July 1, 2015 will recertify for a 3 year period, and will pay an annual renewal fee of \$95 for each of

(Continued on page 22)

Public Maps in Washington



Boater's Guide, seen at the Port Orchard Marina. Displays locations of marinas, fuel docks, and other boating facilities in the Salish Sea. Photo by Paul Andrews.

GISCI Announces Changes to the GISP Certification Process

(Continued from page 21)

the three years of the new recertification period. The portfolio points for continuing education and service to the profession required for the 3-year recertification will be reduced proportionately from the current 5 year requirements. All professionals certified or recertified before July 1, 2015 will

remain certified under the current 5 year recertification policy and fees until the next certification expiration date and then will begin the new 3-year renewal and recertification process. This will provide GISPs with certification expiration dates prior to July 1, 2015 the opportunity to recertify under the current policies for an additional 5 years. A table summarizing changes is shown below:

GISP Status	Fee(s)	Renewal Period
Current GISP with expiration <u>prior</u> to July 1, 2015 and completes recertification before July 1, 2015	\$115	5 Years
Current GISP with expiration date <u>prior</u> to July 1, 2015 recertifies after grace period*	\$450	3 Years
Current GISP with expiration date <u>after</u> July 1, 2015	\$95/yr	3 Years
New GISP application <u>prior</u> to July 1, 2015	\$250	5 Years
New GISP application <u>after</u> July 1, 2015 (application fee + portfolio review + exam fee)	\$450	3 Years

*GISCI currently offers a 1 year grace period for recertification after expiration. Any GISP that fails to reinstate their credential within the grace period will be required to reapply for certification under the standards in place at the time of recertification.

About GISCI: The GIS Certification Institute (GISCI) is a tax-exempt, not-for-profit organization, established in 2004, to manage and operate the premier professional certification program for the GIS profession and to promote ethical conduct among GISPs. GISCI offers participants from the first years on the job until retirement, a positive method of developing value for professionals and employers in the GIS profession. GISCI has certified almost 7,000 GISPs, worldwide. Its member organizations include the Association of American Geographers (AAG), Geospatial Information & Technology Association (GITA), National States Geographic Information Council (NSGIC), the University Consortium for Geographic Information Science (UCGIS), Urban and Regional Information Systems Association (URISA), and the Geographic Land and Information Society (GLIS).

Literary Corner

“I remember thinking how comfortable it was, this division of labour which made it unnecessary for me to study fogs, winds, tides, and navigation, in order to visit my friend who lived across an arm of the sea. It was good that men should be specialists, I mused.”

-from *The Sea Wolf*, by Jack London

UPCOMING DEADLINES

Submit articles to *The Summit* for publication by:

	Summer Issue	Autumn Issue
First Draft (optional)	7/17/2015	10/16/2015
Final Draft	7/24/2015	10/23/2015

The Summit is the newsletter of WAURISA. To encourage the discussion of issues and ideas of importance to the Washington GIS community, we welcome letters to the editor or opinion essays. Letters should be a maximum of 100 words and essays should be limited to 500 words.

Chief Editor: Eadie Kaltenbacher

Editorial Board: Eadie Kaltenbacher, Greg Babinski, Effie Moody

Interview Editor: Michelle Lortz

Copy Editing: Karl Johansen, Greg Babinski

For subscriptions, content, comments, or suggestions, email:

Summit@WAURISA.org



thanks the following sponsors
for their generous support:



Since 1986, Cityworks® has been providing innovative GIS-centric management software to public agencies that own and care for infrastructure and property. Built exclusively on Esri's ArcGIS technology, Cityworks is a powerful, scalable, and affordable platform for asset management, permitting, licensing and more. Time-tested and proven technology, Cityworks is Empowering GIS® at more than 500 user sites around the world.



Esri's geographic information system (GIS) software gives you the power to think and plan geographically. GIS is used in more than 350,000 organizations worldwide. It helps cities, governments, universities, and Fortune 500 companies save money, lives, and our environment. Whether transporting ethanol or studying landslides, these organizations use GIS to collect, manage, and analyze geographic information, which helps them see relationships, patterns, and trends. They can then solve problems and make better decisions because they are looking at their data in a way that is quickly understood and easily shared.



DAVID EVANS
AND ASSOCIATES INC.

David Evans and Associates, Inc. (DEA) is a multidisciplinary consulting firm doing business in the energy, land development, transportation and water markets. Centered on the core purpose of improving the quality of life while demonstrating stewardship of the built and natural environment, our professional staff work together to understand client needs, provide creative thinking and technical excellence, and deliver extraordinary service that exceeds expectations. As an infrastructure planning and design firm, DEA was founded and is headquartered in Portland, Oregon, with offices across the Western United States.



Electronic Data Solutions proudly offers sales and support services for Trimble GPS mapping systems, Esri GIS software, Laser Technology rangefinders, Juniper Systems field computers, In-Situ water level and water quality instrumentation and Teledyne RD Instruments acoustic doppler current profilers. We provide industry specific software and expert guidance while assisting you to find exactly what you need to efficiently capture field data.



Founded over 30 years ago, Geoline Inc has long been the leading industry of advanced positioning solutions in the Pacific Northwest. We provide instruments, tools, supplies, software, and solutions for all your Geospatial needs. With showrooms in the surrounding areas of both Seattle and Portland, remote employees in Eastern Washington and Boise Idaho, as well as a Partner dealer in Medford Oregon, our well trained staff is prepared to assist you in any Sales, Service, Rental, Training, or Support needs. Geoline Inc is the only authorized Trimble Reseller of all Trimble Geospatial products in the territory of Washington, Oregon, and Idaho. Our objective



King County GIS CENTER

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. Whether you need consulting, programming, data, mapping, or GIS training - - Let KCGIS help you put GIS to work!



Pioneers of industry leading Spatial Data Access Solutions, Valtus provides users with an easy and reliable storage, management and distribution solution, with software agnostic access being gained through multiple protocols such as OGC WMS, WMTS, ArcXML and ArcGIS imagery services, thereby allowing them to derive greater value from their data.



Accela's GIS-infused software makes government processes easier, faster and more accessible for local, state and federal workers. Accela Automation® automates tasks associated with permitting, licensing, code enforcement, community development, asset management, emergency response, and more. Tight ArcGIS integration lets workers share data and maps in the office or field.



Access Geographic serves local industry and government agencies across the state of Washington by using innovative geospatial technologies without losing sight that care and detailed craftsmanship still drives quality results. The AGL team loves working with geography, and is continually inspired to make it an accessible and useful resource through discipline, creativity and respect for our clients. From aerial mapping to terrestrial LiDAR, Access Geographic works hard to find the appropriate solution for your geospatial goals.



CycloMedia's products offer a complete end-to-end solution for collecting, processing, and hosting street-level panoramas allowing professionals to leverage the intelligence of updated geo-referenced imagery. We provide ready-made solutions throughout North America and Europe. Our technology is widely used in government, GIS, public safety, and security markets, as well as in construction, infrastructure management and insurance. Our technology revolutionizes the way asset and property assessment is managed and reported. It reduces field visits and provides accurate feature measurements with easy spot-checking. It simplifies maintenance and enables automated inventory and control processes.



Latitude Geographics helps organizations succeed with web-based geography by enabling them to make better decisions about the world around them. Geocortex software by Latitude Geographics transforms how organizations design, develop and maintain Esri ArcGIS Server and ArcGIS Online web mapping applications. They do more; faster, at less cost and risk, and with better results. ArcGIS by Esri is the world's leading GIS platform and Latitude has been an Esri Platinum Partner since 2010.



Hexagon Geospatial helps you make sense of the dynamically changing world. Hexagon Geospatial provides the software products and platforms to a large variety of customers through direct sales, channel partners, and Hexagon businesses, including the underlying geospatial technology to drive Intergraph Security, Government & Infrastructure (SG&I) industry solutions. Hexagon Geospatial is a division of Intergraph Corporation.



KROLL MAP COMPANY, INC.
Krollmap.com

Kroll Map Company - serving the northwest with over 100 years of maps and mapping services. We serve a broad range of organizations with services ranging from Custom Cartography to CAD/GIS Integration to digitizing and geo-referencing. Current clientele includes utilities, telecommunications, recycling-waste industries, and general business/real estate. Kroll offers general mapping services and products through our affiliate - Metsker Maps of Seattle in the Pike Place Market and now also at Sea-Tac International Airport.



With more than 11,000 clients, Tyler Technologies is a leading provider of software and services for the public sector. Designed with an insider's understanding of the public sector market acquired from more than 30 years of industry experience, Tyler Solutions reach all areas of the public sector. Comprehensive and easy-to-use applications streamline processes and improve the flow of information throughout an organization, empowering local and county governments, schools and other entities to better serve citizens.

W URBAN STUDIES
UNIVERSITY of WASHINGTON | TACOMA



salish coast
sciences

Salish Coast Sciences is a small highly skilled GIS consulting firm located in Bellingham, Washington. We can help evaluate and fine tune your spatial data tools. With a combined 60 years of experience working with environmental and local government agencies, you get all the benefit of qualified and knowledgeable professionals. We specialize in consulting and mentoring on GIS design and implementation, spatial analysis, web mapping and cartography.



3Di is a leading provider of aerial mapping, LiDAR, and GIS related services with a particular emphasis on supporting clients in the Pacific Northwest. Recent projects have focused on site development, floodplain mapping, transportation engineering, landfills, environmental analysis, facilities engineering, airport master plans, and municipal mapping.

GIS User Groups in Washington

ACSM – Washington State Section

www.wss-acsm.org

Cascadia Users of Geospatial Open Source

groups.google.com/group/cugos

Contact [Karsten Venneman](#)

Central Puget Sound GIS User Group

Join Listserve [here](#)

Central Washington GIS User Group

Meets the 2nd Wednesday of each month.

Contact [Amanda Taub](#)

Cowlitz-Wahkiakum GIS User Group

Meets the last Wednesday of each month at 3:00 pm at the Cowlitz-Wahkiakum Council of Governments meeting room, 207 North 4th Ave, Kelso WA.

Contact [TJ Keiran](#)

King County GIS User Group

www.kingcounty.gov/operations/GIS/UserGroups.aspx

Meets 1st Wednesday every other month at 11:00am at the KCGIS Center, 201 S. Jackson Street, Seattle WA, Conf Room 7044/7045.

Northwest Washington GIS User Group

www.wvu.edu/huxley/spatial/nwwgis/nwwgis_mtg.htm

Southeast Washington/Northwest Oregon GIS User Group

<http://gisgroup.wordpress.com>

Washington Geographic Information Council (WAGIC)

geography.wa.gov/wagic

Join Listserve [here](#)

Washington Hazus Users Group

<http://www.usehazus.com/wahug>

Contact [Kelly Stone](#)

To have your GIS-related group or event listed in future issues of *The Summit*, notify the editor at: Summit@waurisa.org

To be added to *The Summit* mailing list, contact:

Marketing@WAURISA.org

Back issues of *The Summit* are available at:

<http://waurisa.org/thesummit/>

Interested in volunteering your time to help WAURISA? Contact any Board member listed on the right.

WAURISA Contacts

Board of Directors 2013-2014

Heather Glock	President
Ian Von Essen	Vice President
Sarah Myers	Secretary
Don Burdick	Treasurer
Ann Stark	Past President

Board Members At-Large

[Cort Daniel](#)
[Joshua Greenberg](#)
[David Howes](#)
[Renee Opatz](#)
[Josh Sisco](#)
[Dana Trethewy](#)

WAURISA Committee Leads

Joshua Greenberg	Chapter Advisory Board
Anna Yost	Community Engagement
Sarah Myers	Conference Lead
Don Burdick	Finance
Josh Sisco	Marketing
Heather Glock	Membership
Ian Von Essen	Nominating
Joshua Greenberg	Professional Development
Cort Daniel	Technology

The Summit

Eadie Kaltenbacher	Editor-in-Chief
Greg Babinski	Editorial Board
Effie Moody	Editorial Board
Karl Johansen	Copy Editor
Michelle Lortz	Interview Editor



WAURISA
1402 Auburn Way North
PBN 158
Auburn WA 98002