



# THE IMAGING & GEOSPATIAL INFORMATION SOCIETY

## ~The Rocky Mountain Compiler~

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*Newsletter of the Rocky Mountain Region of ASPRS, serving Montana, Wyoming, Colorado, and New Mexico*

### President's Message

Dear ASPRS RMR members,

This has been a very exciting and rewarding year for the Rocky Mountain Region (RMR), and I consider it to be a great privilege to be a small part of it. Reflecting back upon these events, I can see that the RMR Board of Directors, (BOD) coupled with our local and national members are hardworking and possess a deep passion for ASPRS at the regional and national levels. During the year, RMR won numerous awards, including Region of the Month and best newsletter. Furthermore, RMR, specifically Jeff Young (National Director), streamlined efforts to get the Student Chapter at the University of New Mexico officially recognized by ASPRS National.

In September of this year, RMR was front and center at the GeCO in the Rockies Conference in Grand Junction, Colorado. GeCO in the Rockies was a great success due to the efforts of the RMR BOD. I would like to thank Mark Bowersox and Tillman Saylor for serving as the Chairs for the ASPRS track at GeCO in the Rockies.

During the month of November, the RMR coordinated with ASPRS National to set up the Young Professionals Council (YPC) social gathering at the Pecora Conference in Denver, Colorado. DigitalGlobe provided a generous

donation for the YPC event. This donation was spearheaded by RMR Treasurer, Mike Vessel. I am confident this YPC meeting was a great success.

In addition, I am also excited about our 2014-2015 Student Scholarship Program. Last year the program was a great success. That is, we had many well qualified applicants, which made the ranking efforts difficult, but well worth the time and effort. More information about the scholarships is available on the RMR website and in this newsletter.

In closing, this was a very fulfilling year for me as the ASPRS RMR president. We had many great accomplishments. I am confident that 2015 will be as robust as 2014. Thank you to everyone in the Rocky Mountain Region.

Dr. Michael Tuffly, CMS  
ASPRS Rocky Mountain Region President  
[mtuffly@eriaconsultants.com](mailto:mtuffly@eriaconsultants.com)

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## National Director's Report

### What's in a (Place) Name?

Toponymy is the study of place names. Toponymy clearly embraces history, cartography, language, anthropology, religion, tribal tradition and to a certain extent mysticism. To fully understand a place does require us to possess context of the place names used over the centuries, or for that matter, millennium. Use of conflicting place names can lead to mistrust. This certainly has been the case in Jerusalem's contested Old City holy site (See the New York Times, November 23, 2014, International Section, Page 8, *Mistrust Threatens Delicate Balance at a Sacred Site in Jerusalem*). The Times reported that the Palestine Liberation Organization declared the name "Temple Mount" was "null and void" and that the sacred site should now be called the "Noble Sanctuary." Only time will tell how this semantic declaration will persist and to what extent it will be adopted by some and rejected by others.

Interestingly, the International Cartographic Association (ICA) and the International Geographical Union (IGU) formed a joint working group on Toponymy in September 2011 (see <http://icaci.org/working-groups/>) to foster geographic/cartographic research in the field of place names, especially regarding:

- functions of place names on maps
- rendering of place names on maps
- names placement on maps
- elaborating principles for creating new place names
- place names as expression of time – or space-related identity
- place name/feature relations
- motives for place naming
- place names and administration
- place names and transportation
- place names in the cyber world
- social dimensions of place names
- elaborating principles for solving place-name conflicts

I recently heard Dr. Paulo Menezes, the ICA/IGU Joint Working Group co-chair from Rio de Janeiro, speak at the AutoCarto Meeting in Pittsburgh. I was very much impressed with his research efforts in the Rio de Janeiro region documenting place name changes from Pre-Columbian America to contemporary use of Portuguese. As a result of a newly kindled interest, I submitted an abstract addressing place name changes in the USA for the ICC in Rio de Janeiro in August 2015 titled *Exploration of Indigenous, Native and Tribal Place*

*Name Preservation in the United States* (see <http://www.icc2015.org>). In this paper I intend to present examples of indigenous, native and tribal place name preservation practices in the United States. Those will be compared and contrasted. At least five regions of the United States will be examined, including northeastern Pennsylvania, southern Indiana, south-central US, northern New Mexico, and Hawaii. In the cases of northeastern Pennsylvania and southern Indiana, tribal communities were displaced as the American settlers expanded west. South central US became a reservation-based settlement region by Federal Government policy and treaties with multiple Native American tribes. The northern New Mexico Pueblos are quite different, in that the tribal communities have been in place for hundreds of years; the most notable being the Taos Pueblo, where Tiwa has been spoken on a daily basis for 1,000 years; Tiwa continues to have a persistent influence on place name usage, despite the presence of the colonial Spanish and the English-speaking American settlers who followed. Hawaii may have historically benefited by its isolation early on in Native Hawaiian history, but rapid development over the last several decades has strained preservation initiatives. In response, the Office of Hawaiian Affairs has developed an authoritative Kipuka database which contains approximately 10,000 historic sites. In all cases for the five regions listed above, a discussion of methods and practices employed for sacred site protection will be presented. Preliminary findings suggest there has been loss or degradation of sacred sites and place name changes over time. In addition, land transfers have contributed to site disruption and damage. I intend to present findings on these special concerns related to ongoing efforts to preserve and protect indigenous, native and tribal sacred sites across the US.

To gain a deeper understanding of Toponymy, and as a member of CaGIS (see <http://www.cartogis.org/>), I have requested to be a Corresponding Member of *The Joint ICA Working Group and IGU Commission on Toponymy*. I believe this is very much a working group that might interest the GIS Division of ASPRS, as well as the Tribal GIS communities in our region. Please contact me if you have interest in Toponymy or the abstracted research above.

Jeffrey M. Young, [jyoung@lizardtech.com](mailto:jyoung@lizardtech.com)

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~ Visit our website at [www.asprs-rmr.org](http://www.asprs-rmr.org) ~

## 2014-15 ASPRS-RMR Scholarship

In its continuing efforts to support and build awareness for the Remote Sensing and GIS / Geospatial sciences, the Rocky Mountain Region of ASPRS is proud to announce its academic scholarships for 2014-2015. The ASPRS-RMR offers scholarships to deserving undergraduate and graduate students every year. There will be at least one scholarship awarded (assuming sufficient applications are received) in the range of at least \$500 to \$1,000 each, depending on level of study (Bachelor's, Master's or Ph.D.). The scholarships are intended for students throughout the Rocky Mountain Region (Montana, Wyoming, Colorado and New Mexico) who demonstrate excellence while pursuing careers in the fields of Photogrammetry, Remote Sensing, and Geographic Information Systems (GIS) or related disciplines. Both undergraduate and graduate students of any third-level educational institution within the four-state region who are pursuing careers in these disciplines are encouraged to apply. Get information and the application from <http://rmr.asprs.org/rmnewsletters/>.

Student membership in ASPRS is not required to apply, but if selected, membership is required at time of scholarship award. Awards will be presented at the ASPRS-RMR Annual Dinner Meeting in January or February 2015. The Rocky Mountain Region has consistently offered thousands of dollars in annual scholarships every year. Preference will be given to those studies that apply sound scientific principles to practical applications in the geospatial sciences (photogrammetry, remote sensing, Geographic Information Systems, etc.). Awards at both the undergraduate and the graduate levels are based on academic merit; that is, the application form does not request any personal financial data. For more information, please contact Harold Cline, ASPRS-RMR Vice-President, at (720) 879-2891 or at [Harold.Cline@tomra.com](mailto:Harold.Cline@tomra.com).

**Applications should be submitted by the December 5, 2014 deadline.**

## Student Rebate Offer

ASPRS Rocky Mountain Region will reimburse \$25 of the \$50 cost of student membership in ASPRS, so your net cost is only \$25 for all the benefits of membership in the Society!

Download the Student Membership Rebate Form at <http://rmr.asprs.org/student-rebate-offer/>

**Here's the best part: This offer from the Region is good for every year you are a full-time student!**

## GeCo in the Rockies Report

**"GIS: Bridging the Divide," September 22-26, Grand Junction, Colorado.** This year's conference was a joint venture between the GIS in the Rockies Conference (usually held in the Denver area) and the Geospatial Conference of the West (GeCo West). Turnout was good, with over 400 in attendance from various western states, mostly from Colorado. The Grand Junction Convention Center was a more than adequate venue and it was obvious that the conference planning committee had done a great job, since there were no issues and everything went smoothly.

Keynote Speaker Chris Sheldrick, CEO of *what3words*, spoke about the power of words as a better way to identify location anywhere on the planet: <http://www.gecointherockies.org/keynote/>

The Poster Session included 12 entries in Student and Professional categories. Conference Presentation Tracks included:

- ASPRS: The Imaging and Geospatial Information Society (GIS, remote sensing, aerial and satellite data processing, 3D modeling, GPS, unmanned aerial systems mapping)
- Conservation GIS (environmental, natural resources)
- GIS Education
- GIS on the Web
- Government GIS
- In the Weeds: Tech Tips and Tough Concepts Explained
- Mobile GIS
- Public Safety GIS
- On the Cutting Edge: Innovations in GIS
- Process Improvement
- Public Safety GIS
- URISA: Urban and Regional Information Systems Association (public and private organizations)
- Vendor Showcase

On Wednesday I attended the ASPRS track, which included presentations on remotely sensed data (aerial and satellite imagery, LiDAR, RADAR, drone video, etc.) and geospatial analysis for water supply, transportation, landslides, and wildfire modeling.

The Wednesday Lunch presentation and Geography Quiz was moderated by Joseph Kerski, Ph.D., Esri Education Industry Curriculum Development Manager. Joseph always delivers an interesting and entertaining presentation and his enthusiasm for geospatial technologies is infectious.

On Thursday I attended the Conservation GIS track, with talks on wild bees habitat mapping, water quality assessments, wildlife habitat, progress with the National Map, data standardization for the Continental Divide Trail, and archaeological site assessment. After that session ended, I moved to the “On the Cutting Edge” track and heard talks on the “consumerization of geospatial,” the Wyoming Geospatial Hub, and geologic process identification through landform analysis.

The Thursday Lunch session, moderated by Joseph Kerski, included a panel of experts, each of whom gave a short talk on current and future trends, then answered questions from the audience.

The Panelists:

- Gar Clarke, New Mexico Broadband Manager and Geospatial Program Manager
- Dr. Rafael Moreno-Sanchez, Professor, University of Colorado – Denver
  - See [www.GISforAll.org](http://www.GISforAll.org) with ~ 80 labs around the world participating
- Doug Danielson, Director of Cloud Team at Google
- Ian Isaacs, Esri Sales Manager, Western US (originally from Ontario, Canada)
- Patrick Cunningham, President, Blue Marble Geographics (Global Mapper software)
- Peter Batty, Co-founder and CTO, Ubisense Geospatial Division [peter.batty@ubisense.net](mailto:peter.batty@ubisense.net) → [geothought.blogspot.com](http://geothought.blogspot.com)
  - Growth of Open Source solutions (e.g., recent FOSS4G Conference had 870 attendees from 38 countries)
  - Crowdsourcing
    - Active: Open Innovation <http://www.crowdsourcing.org/community/open-innovation/1>
    - Passive:
      - waze [www.waze.com](http://www.waze.com) (traffic and navigation),
      - Google
      - Telenav <http://www.telenav.com/>
  - Unmanned Aerial Systems for 3D Mapping and Modeling:
    - Agisoft Photoscan <http://www.agisoft.com/>
    - Quadcopter GIS <https://2014.foss4g.org/session/quadcopter-gis-less-700-hardware-software-map-local-community/>
    - Drone Mapbox GL <https://www.mapbox.com/design/>
    - Skybox Imaging <http://www.skyboximaging.com/>

## Rocky Mountain Compiler

- Future of the Cloud?
  - More than likely here to stay in some form
  - The big three: Amazon / Google / Microsoft
- How to stay current:
  - Conferences (like this one): attend and participate
  - Online videos (e.g., FOSS4G)
  - Get involved locally, volunteer
  - Networking, synergy
  - Learn about different tools (especially Open Source)

For more details, visit the conference website at [www.GeCointheRockies.org](http://www.GeCointheRockies.org)

Sheila Pelczarski

ASPRS-RMR Communications Coordinator

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## Welcome New Members!

Dr. Cerian Gibbes  
Salvador Sena

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## Call for Nominations for Rocky Mountain Region Board Elections

ASPRS-RMR is currently accepting nominations for the upcoming Regional Board Member Elections. The following positions will be open for the 2015 term: **President** (one year); **Vice President** (one year); **Secretary** (one year); **Treasurer** (one year); **Regional Director** – (GIS in the Rockies) (2 years); **Regional Director** – (General) (2 years).

Being a Board Member is an excellent way to contribute to the expansion of the geospatial community throughout the Rockies. Board membership allows individuals to lead the convergence of ideas and technologies, connect with our peers, communicate with our membership, and contribute to these collaborations.

If you are interested in running for a position, would like to nominate one of your peers, or if you have questions about being a Board Member, [please contact any of the Regional Officers](#). You must be a current ASPRS member to run for office.

We will publish the nominations and announce the election in the Winter issue of the Rocky Mountain Region Compiler newsletter.

**Isn't it time YOU got involved???**

## PE&RS Call for Papers

In January 2015, ASPRS will issue a Call for Papers announcing a special issue of the Photogrammetric Engineering and Remote Sensing (PE&RS) journal that will focus on the application of advances in **Big Data analytic techniques to geospatial applications** in the commercial, government and academic remote sensing communities. The Rocky Mountain Region is an epicenter for technologic advances in hardware, storage, data management, networking and computing models such as virtualization and cloud computing for geospatial applications, as well as being the birthplace of creative uses of Big Data innovations, such as MapReduce, Hadoop, Big Table and NoSQL in geospatial processing. Please respond to the Call for Papers and help us demonstrate to the world that the Rocky Mountain Region is home to geospatial excellence. For questions, contact Harold Cline at [harold.cline@tomra.com](mailto:harold.cline@tomra.com).

## University of Colorado Denver New Graduate Program

Fall 2015

Deadline for applications: March 1, 2015

**Masters degree in Applied Geography and Geospatial Science and Technology** at the University of Colorado Denver, beginning **Fall 2015**. The two-year graduate program integrates critical geographic inquiry with training in cutting-edge geospatial science and technologies to explore pressing social and environmental issues. Signature research concentrations include: environment and health; climate change; cities and nature; urban food systems; resource conservation and management; globalization and sustainable development; landscape change; and spatial environmental history.

The program emphasizes professional development through interactive service learning. Students apply their geospatial research skills in the context of faculty-led projects conducted with community partner organizations, preparing them for successful and rewarding careers in public sector agencies, NGOs, and private firms. State-of-the-art teaching and research facilities include a new geospatial science research lab, a new geo-visualization/community engagement lab, and a dedicated 13-acre urban farm field research station. The program is offered by the Department of Geography and Environmental Sciences in the

College of Liberal Arts and Sciences at CU-Denver. We are located in the heart of downtown Denver, offering easy access to the wider Rocky Mountain region.

For more information visit us online:

<http://www.ucdenver.edu/academics/colleges/CLAS/Departments/ges/Programs/MasterofArts/Pages/default.aspx>

or contact Rafael Moreno

303-352-3762

[Rafael.Moreno@ucdenver.edu](mailto:Rafael.Moreno@ucdenver.edu)

## 25 Years of TIGER

While some of us were down at GIS Day events in Denver on November 19<sup>th</sup> (we had our cake and ate it too!), the Census Bureau issued a press release on the 25th anniversary of TIGER data. Very timely, as some of us old-school GIS-ers reminisced about the days before topology and seamless datasets. If you have not already seen it:

<http://www.census.gov/newsroom/press-releases/2014/cb14-208.html>

You can also see a darn good history of TIGER in the form of an Esri story map here:

<http://census.maps.arcgis.com/apps/MapJournal/?appid=2b9a7b6923a940db84172d6de138eb7e>

On a related subject, you may have noticed that Census has upgraded its TIGERweb viewer to HTML 5, eliminating the need for Silverlight. Among other things, TIGERweb is an excellent tool to review the current content of TIGER for your jurisdiction. This is particularly true for boundary review. Overlay our current place boundary web service on top of your local place layer to check for missing annexations or inconsistencies in TIGER. Then look for our BAS (Boundary Annexation Survey) invitation later this year for an opportunity to make corrections. Check our BAS FAQ (Frequently Asked Questions) here: [http://www.census.gov/geo/partnerships/bas/bas\\_faq.html](http://www.census.gov/geo/partnerships/bas/bas_faq.html)

Find links to all things TIGERweb here:

[http://tigerweb.geo.census.gov/tigerwebmain/TIGERweb\\_main.html](http://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html)

Jim Castagneri

Geographer, US Census Bureau

[james.d.Castagneri@census.gov](mailto:james.d.Castagneri@census.gov)