About CalGIS — Every year, URISA’s California Chapters come together to present the CalGIS Conference, now in its 19th year. This year’s conference is also sponsored by the California Geographic Information Association.

Southern California Chapter of URISA — www.socalurisa.org
Central California Chapter of URISA — www.centralcalurisa.org
Northern California Chapter of URISA — www.norcalurisa.org
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Welcome to CalGIS 2013 in Long Beach!

This year’s theme, “Pathways to California’s Future” signifies the diverse directions and constant progression of our GIS profession. Never before has there been such a large variety of people using GIS including health professionals, police officers, teachers, real estate agents, engineers, biologists; and the list doesn’t stop there. We should be proud to be involved in such an exciting and innovative industry!

Events like CalGIS bring to light the amazing projects that are going on in schools, companies, and organizations all around us. CalGIS always inspires me to think bigger and better. It is also our responsibility to continue to inspire others, not just at conferences, but in our everyday lives; to share our knowledge and experiences with the next generation of GIS professionals in California and further to the world!

It has been an honor and a privilege to help coordinate this year’s CalGIS 2013 conference. Our program was carefully created to offer the best projects and showcase the best professionals the California GIS has to offer. A special thank you goes out to all who participated on the conference committee; you are an amazing group of people.

To all the attendees- please take time to meet and really get to know the great people all around you. CalGIS is the place to create lifelong partnerships and friendships alike. Enjoy the conference!

Sincerely,

Melisa Caric-Lee, GISP, 2013 Conference Chair

CalGIS 2013 Conference Committee

Melissa Caric Lee, GISP, Compass Rose GIS, Oceanside, CA - Conference Chair
Russell Mercer, Get Spatial, San Diego, CA - Conference Co-Chair & SoCal Chapter President
Adrienne Perry, San Diego County, San Diego, CA
Amber Beckler, IMS Health, Redwood City, CA - NorCal Chapter President
Amy Storey, NVS, San Diego, CA
Annalisa Saqui, Contractor for Orange County Sanitation District, Fountain Valley, CA
Blanca Quintero, Sweetwater Authority, Chula Vista, CA
Wing Cheung, GISP, Palomar College, San Marcos, CA
Dan Henderson, GISP, Accela Inc., San Ramon, CA - 2012 Conference Chair
David Jacobus, RBF, Irvine, CA
Emily Sin, UC Davis, Davis, CA - Sponsorship Chair
Jeannine Carlin, TC Technology, Carlsbad, CA
Jeff Orton, Paramount Citrus, Delano, CA - Program Co-Chair & Central Cal Chapter President
Karen Chadwick, GIS Consultant, San Diego, CA
Kris Lynn-Patterson, UC Kearney Ag Center, Parlier, CA - Education Chair
Dan Henderson, GISP, Accela Inc., San Ramon, CA - 2012 Conference Chair
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CalGIS Registration

Westin Long Beach – Centennial Ballroom Foyer
Monday, April 15: 7:30 AM–5:00 PM
Tuesday, April 16: 7:30 AM–5:00 PM
Wednesday, April 17: 8:00 AM–3:00 PM

Schedule at a Glance

Monday, April 15
Preconference Courses, Meetings & Port Tour
Networking Event

Tuesday, April 16
Opening Session, Keynote Speaker (Este M. Geraghty, MD, MS, MPH, FACP, GISP) & CalGIS Townhall – 8:30–10:00 AM
Exhibit Hall Hours – 10:00 AM–6:00 PM
Breakout Sessions – 10:30 AM–3:00 PM
Luncheon & Exhibits – 12:00–1:30 PM
Gold Sponsor (Esri) Session – 1:30–3:30 PM
Ignite Session – 3:30–5:00 PM
Conference Networking Reception in Exhibit Hall – 5:00–6:00 PM
Geocaching Networking Event

Wednesday, April 17
Networking Activity – Morning Bike Tour
Conference Breakfast, CGIA Awards and Keynote Speaker (Maggi Glasscoe) – 8:30–10:00 AM
Exhibit Hall Hours – 10:00 AM–1:30 PM
Poster Session & Beverage Break – 10:00–10:30 AM
Breakout Sessions – 10:30 AM–3:00 PM
Closing Plenary Session (Gretchen Peterson, GISP) – 3:15–4:00 PM
Preconference Workshops, Meetings & Tours
CalGIS 2013 is offering numerous events on Monday, April 15.

URISA Certified Workshop:
8:00 AM – 3:30 PM: GIS Program Management
(additional registration fee required)
Instructor: Cy Smith, GISP -- Oregon State GIO, URISA Past President
Room: Melbourne

(Not that the Introductory Digital Image Enhancement workshop was cancelled on March 27.)

Additional Vendor-Affiliated Event:
8:30 AM – 12:00 NOON: Electronic Data Solutions and Trimble “CalGIS Workshop Highlighting Trimble Positions/New Trimble Hardware & Best Practices for Collecting Field Data”
Room: Palos Verdes #430 (fourth floor)

Meeting:
10:30 AM – 12:00 NOON: CGIA Open Board Meeting
Room: Barcelona

Esri Half-Day Workshop:
12:30 – 3:30 PM: GIS on the Go - Configuring ArcGIS for the Office & the Field
Room: Tokyo/Vancouver

Offsite Tour:
4:00 – 5:30 PM: Port of Long Beach Boat Tour
Limited to the first 100 people. Meet promptly at 3:45 PM near the CalGIS conference registration desk in the Centennial Foyer for the walk to the Port facility.

Networking Event:
6:00 – 7:30 PM: Start connecting with your fellow attendees during this informal no-host annual get-together at Gladstone’s (330 S Pine Ave, located within walking distance of the hotel.) Gladstone’s has offered CalGIS the patio and a 15% discount on food for conference attendees and guests. See you there!

TUESDAY, APRIL 16, 2013

Conference Opening Session & Keynote Address
8:30 – 10:00 AM
Room: Salon A
Melisa Caric Lee, 2013 CalGIS Conference Chair, will welcome attendees and talk about some of the highlights of the conference. Cy Smith, GIO for the State of Oregon and Past President of URISA will share the vision and future of URISA International and the organization’s relationship with the local Chapters.

CalGIS Townhall 2013 – Russell Mercer, SoCal URISA President and Conference Co-Chair will facilitate an open discussion about issues impacting our profession. The topics will be used further as discussion points at Tuesday’s lunch, and summarized in our closing session. Don’t miss this golden opportunity to discuss hot topics with the current and future leaders of GIS in California.

Keynote Address: From Hippocrates to Geomedicine: GIS in the Age of Big Data
CalGIS is honored to welcome Estella “Este” M. Geraghty, MD, MS, MPH, FACP, GISP, Assistant Professor of Clinical Internal Medicine, University of California Davis as the opening keynote speaker for CalGIS 2013. The power of place in determining health status has been recognized since 460 BCE. Dr. Geraghty will review the development of health mapping, discuss her current projects, and predict a future for GIS in medical practice in the age of big data.

Dr. Geraghty is a clinician researcher in the Division of General Medicine at UC Davis. Her research focuses on using GIS to influence health policy and advance community development programs. She has co-authored research in pesticide exposure modeling, statewide mental health service access and use tracking systems; asset and disparity mapping of youth outcomes, and index development for youth well-being and vulnerability. Dr. Geraghty is also the recipient of the Larry L. Sautter Golden Award for Innovation in Information Technology as a part of a team developing an electronic medical record data discovery solution. In addition to her degrees in Medical Informatics and Public Health, Dr. Geraghty is also a certified Public Health professional (CPH) and a Geographic Information Systems Professional (GISP).

10:00 – 10:30 AM
Grand Opening of Exhibits
CalGIS exhibitors will be available from 10:00 AM – 6:00 PM today to discuss technology solutions with you. We thank them for their support of CalGIS!

Breakout Sessions 10:30 AM – 12:00 NOON
Breakout sessions are typically two or more presentations scheduled within concurrent educational sessions. Conference attendees may choose which session to attend based on their own personal interests. There is no need to pre-register for individual breakout sessions.

Geospatial Curriculum Development
Room: Barcelona
What does it take to grow and garner competent GIS professionals, and integrate spatial thinking in research methods? These presentations focus on model course outlines used to reevaluate geospatial and interdisciplinary curriculums.
Moderator: Mark Kumler, PhD
- GTCM: From Concept to Implementation
  Richard Smith, Texas A&M University, Corpus Christi, TX
- Spatial Science for Interdisciplinary Curriculums
  Sheila Steinberg, Chapman University, Orange, CA
- Leveraging the Geospatial Technology Competency Model (GTCM) for Curriculum Development and Career Planning
  Rachel Kornak, GISP, Penn State University and Emerging GIS Leaders, Yucaipa, CA

GIS at California’s Ports
Room: Tokyo/Vancouver
Speakers in this session will highlight enterprise GIS, web applications, and various other geospatial systems and methods developed and implemented by some of California’s local Ports.
Moderator: Tina Parmelee, GISP
- Port of Stockton: Improving Security and Operations with GIS and Mass Notification
  Daniel Elroi, NorthSouth GIS LLC, Los Angeles, CA
- Underground Videos Go Live on the Web
  Rick Hendrickson, GISP, and Dave Hill, RBF Consulting, San Diego, CA
- GIS in Action at the Port of Long Beach
  Miguel Hernandez, Port of Long Beach, Long Beach, CA

Additional Vendor-Affiliated Event:
4:00 – 5:30 PM: Port of Long Beach Boat Tour
Limited to the first 100 people. Meet promptly at 3:45 PM near the CalGIS conference registration desk in the Centennial Foyer for the walk to the Port facility.

Offsite Tour:
4:00 – 5:30 PM: Port of Long Beach Boat Tour
Limited to the first 100 people. Meet promptly at 3:45 PM near the CalGIS conference registration desk in the Centennial Foyer for the walk to the Port facility.
Government Geospatial Data Efforts
Room: Melbourne
Local government and nonprofit organizations face many challenges when it comes to developing, accessing and managing spatial applications and data. Take a look at what some of these issues are, and what professionals are doing to make improvements.
Moderator: Lisa Lubeley, GISP
- Enhancing GIS Accessibility for Local Governments in Southern California
  Javier Aguilar, GISP, Southern California Association of Governments, Los Angeles, CA
- Geodetic Control: A Positional Foundation for GIS in California – Potentially At Risk
  Bruce Joffe, GISP, GIS Consultants, Piedmont, CA
  Art Andrew, Representative for CSRC
  Ryan Hunsicker, GISP, San Bernardino County
  * Note that this part of the session will be one hour in duration.

GIS Tool Development in the ArcGIS Environment
Room: Casablanca
Geospatial technologies are ever changing and continually advancing. This session focuses on a few examples that augment successful systems.
Moderator: Russell Mercer
- Managing Field Investigation Techniques and Streamlining Workflows:
  Application Development
  Fernando Esquer, Citigen, Santa Ana, CA
- The Building of a Document Management Add-in Extension for ArcMap
  Tim Gunn, GISP, Microdesk, Concord, NH
- Migrating Tools from VBA to Python: Lessons Learned
  Jamie Kass, San Francisco Estuary Institute, Richmond, CA

Roundtable Lunch – Hot Topic Discussion
12:00 NOON–1:30 PM
Room: Salon A
Network with your GIS peers over lunch, discussing the hot topics from this morning’s Town Hall Meeting followed by quality time with our CalGIS exhibitors.

Breakout Sessions 1:30–3:00 PM
Career Development, Mentoring and Certification
Room: Barcelona
This panel will discuss approaches to preparing for your career and getting your foot in the door for your first (or next) GIS position.
Moderator: Jeff Orton
Panelists:
Sheila Steinberg, Chapman University, Orange, CA
Richard Smith, Texas A&M University, Corpus Christi, TX
Additional panelists will also participate

Coastal Resource Management
Room: Melbourne
Interactive web-based applications and tools are highlighted in this session along with their importance in the mapping, management, and profiling of California’s coastal aquatic resources.
Moderator: Kirsten Zecher, GISP
- GIS Tools for Management of California’s Aquatic Resources
  Kristen Cayce, San Francisco Estuary Institute, Richmond, CA
- Mapping the Historical Wetlands of the Southern California Coast
  Michal Salomon, San Francisco Estuary Institute, Richmond, CA
- Developing A Dynamic Web-based Landscape Profile Tool
  Patty Frontiera, San Francisco Estuary Institute, Richmond, CA

GOLD SPONSOR SESSION – 1:30–3:30 PM
Maps, Apps, and Tools for Modern GIS
Room: Tokyo/Vancouver
Moderator: Mike Martinez
The mapping needs and expectations of constituents, management and colleagues are growing; making it an exciting time to be a GIS Professional. Leveraging and expanding your GIS investment to meet these needs throughout your organization and to the Public has become conceivable through the use of ready to use maps, apps, and tools. Join us as we take a look at some of the new resources and core capabilities of ArcGIS to help meet growing demands.

CalGIS IGNITE!
3:30–5:00 PM
Room: Salon A
You’ve probably heard about Ignite presentations (or Lightning Talks). Ignite presentations are typically limited to 5 to 7 minutes (20 slides auto-advanced at 15–20 seconds each). This event is certain to become a regular feature at the CalGIS conference. Short but sweet, and usually quite entertaining…a perfect opportunity to learn about a wide variety of topics, quickly and informally!
Session Moderator – Russell Mercer & David Jacobus
- Student Presentation – Winner of Student Competition
  Lesley Handa – Mesa College

Participating Presentations:
- NASA Radar Remote Sensing for Levee Health Assessment – Austin Madison, NASA DEVELOP, Pasadena, CA
- Public Access to County Basemap Data: After the Supreme Decision – Bruce Joffe, GISP, GIS Consultants, Piedmont, CA
- High Accuracy GPS Data Collection for GIS – Kevin Brown and Isaiah Mack, California Surveying and Drafting Supply, Sacramento, CA
- New River Improvement Project: Challenges of Data Management – April Villagomez-Roe, Environmental Resources Management, Irvine, CA
- Integration of Spatial Data and Documents as an Information Framework
  Keith Russell and Radek Nemeczek, USA Imaging, Poway, CA
- SitStat GIS Emergency Incident Tracking – Craig Gooch, PSOMAS, Riverside, CA & Scott Doan, Alameda County Fire Department, San Leandro, CA
- Emergency Customer Notification using GIS Targeting – Craig Gooch, PSOMAS, Riverside, CA
- Public Policy Issues Affecting GIS Professionals – Bruce Joffe, GISP, GIS Consultants, Piedmont, CA
- The Inside Story of the Creation of High Accuracy, High Resolution Ortho-Photography: Current Developments and Surprising Facts about Ortho-Imagery – Paul Clark and Wayne Tate, Eagle Aerial Imaging, Irvine, CA
- Looking Out to the Ocean: Linking Coastal and Ocean People and Data – Laura Engeman, California Ocean Protection Council, Oakland, CA & Tim Doherty, NOAA Coastal Services Center, San Francisco, CA

Exhibit Hall Networking Reception
5:00–6:00 PM
An ideal time to get your technology questions answered in an informal atmosphere. Participate in product demos, gather technical tips, and make purchasing decisions. Light refreshments will be served.
**Geocaching Event**

**6:30–9:00 PM**

An optional geocaching networking activity will round out the evening. We will meet in the lobby at 6:30 PM to break into teams and distribute GPS units, sponsored by California Survey and Drafting Supply. The race begins at 7:00 and each Team will have 2 hours to find 5 locations using the x,y coordinates (and some clues). At each location, every Team will pick up a playing card. At the final destination the team with the highest poker hand wins some great prizes! This is a fun event and great networking opportunity, hope to see you there! Be sure to sign up by 5:00 on Tuesday at the California Survey and Drafting Supply booth!

**WEDNESDAY, APRIL 17, 2013**

**CalGIS Morning Bike Tour**

**7:00–8:00 AM**

Only 15 spaces available: Reserve a FREE bike and helmet rental at the RBF Consulting Booth #400 on Tuesday, April 16th. Participants must also sign a safety release form before the ride. Be sure to wear comfortable shoes and clothing and arrive on time and be ready to ride!

**Awards Breakfast & Keynote Address**

**8:30–10:00 AM**

**Room: Salon A**

Start your day with a CalGIS breakfast followed by the CGIA Awards presentation. Each year, the California Geographic Information Association (CGIA) recognizes outstanding achievements in various aspects of GIS within California through its awards program. Find out the distinguished individuals and organizations that are being recognized with CGIA Awards in the following categories:

- Chairman’s Award: Granted to honor a person who has made outstanding contributions in the promotion, innovation, and/or use of GIS technology.
- Exemplary Systems Award: Granted for outstanding application of GIS technology representing innovative, elegant, or creative techniques.
- Advancement of Collaboration Award: Granted for outstanding inter-organization collaborative efforts in GIS.
- Outstanding Internet Presentation Award: Granted to the outstanding integration of GIS and web technologies demonstrating excellence in aesthetic presentation, functionality, ease of use, and overall user experience.
- Excellence in Education Award: Granted to the educational institution that displays extraordinary approach, contribution, development or commitment to GIS education in California.

Congratulations in advance to all who will be recognized!

**Keynote Address: E-DECIDER: Experiences Developing Disaster Decision Support and Response Tools Using Remote Sensing and Geophysical Modeling Data**

**Moderator: Kirt Emery**

Maggi Glasscoe is a Geophysicist in the Solid Earth Group at the Jet Propulsion Laboratory, California Institute of Technology. She has experience working with a number of modeling codes, including viscoelastic finite element models (the JPL developed Geophysical Finite Element Simulation Tool, GeoFEST, in particular). Her research interests include disaster response, modeling deformation of the Earth’s crust to study postseismic response to large earthquakes, numerical models of the rheological behavior of the lower crust, and simulations of interacting fault systems. She received her B.A. in Print Journalism and B.S. in Geological Sciences from the University of Southern California in 1997 and her Masters of Science in Geology from the University of California, Davis in 2004. She is a researcher on the QuakeSim project and the Principal Investigator of E-DECIDER (Earthquake Data Enhanced Cyber-Infrastructure for Disaster Evaluation and Response).

**Networking Break and Poster Session in the Exhibit Hall**

**10:00–10:30 AM**

Join your fellow attendees in the Exhibit Hall to discuss poster session entries and visit with conference sponsors. The exhibits will be open until 1:30 PM today. Entrants, please be present during the poster session to discuss your map with attendees.

Winning maps will be announced at the closing keynote.

**People’s Choice Award** - stop by to cast a vote for your favorite map.

- GIS University Teaching: From Graduate to Undergraduate Programs in Ensenada
  - Georges Seingeier, Universidad Autonoma de Baja California, Ensenada, MX
- Layers of Time: GIS & Southern California’s Cultural Heritage
  - Albert Garcia, South Central Information Center, Fullerton, CA
- The Living Desert - Botanical Garden Management
  - Mark Jumps, LLHNAV, LLC, San Diego, CA
- Post Construction Management Requirements for the City of Monterey
  - Lauren Sommers, CSU Monterey Bay, Marina, CA
- Latino/A Spatial Food Security: A Santa Ana, CA Case Study
  - Angel Flores and Sheila Steinberg, Chapman University, Orange, CA
- Southern California Water Resources: Applications of synthetic aperture radar for water quality management in the Southern California Bight
  - Ryan Boarman, Spring Valley, CA
- New River Improvement Project: Challenges of Data Management
  - April Villagomez-Roe, Environmental Resources Management, Irvine, CA
- SitStat GIS Emergency Incident Tracking
  - Craig Gooch, PSOMAS, Riverside, CA
- The End of the Vine? Potential Impacts of Climate Change on California Viticulture
  - Christina Wile, Humboldt University, Arcata, CA
- The California Environmental Data Exchange Network (CEDEN): A Statewide Water Quality Monitoring and Visualization System for California
  - Steven J. Steinberg, Ph.D., GISP, Southern California Coastal Water Research Project, Costa Mesa, CA

**Public Data Access**

**Room: Barcelona**

Discussion of the implication of this case on the GIS community in California and nationwide.

**Moderator: David Peck**

- Public Access to County Basemap Data: After the Supreme Decision
  - Bruce Joffe, GISP, GIS Consultant, Piedmont, CA

**Coastal and Marine GIS**

**Room: Tokyo/Vancouver**

Understanding the biological condition of California Ecosystems, monitoring for bacteria in Southern California ocean beaches, and sampling of coastal waters and benthic communities are discussed in this session. Steps, processes, and tools used are highlighted, including open source software and interactive mapping applications.

**Moderator: Kirt Emery**

- An Open Source System to Compute and Geospatially Visualize Benthic Indices
  - Steven J. Steinberg, Ph.D., GIS P, Southern California Coastal Water Research Project, Costa Mesa, CA
• Developing a Remote, Multi-Camera Image Acquisition System for Beach Monitoring
  Steven J. Steinberg, Ph.D., GISP, and Abel Santana, Southern California Coastal Water Research Project, Costa Mesa, CA

• Developing a Water Quality Index for Southern California Reef Habitats
  Rebecca Schaffner, GISP, and Larry Cooper, Southern California Coastal Water Research Project, Costa Mesa, CA

Local Government GIS Success Stories
Room: Melbourne
Learn about achievements and challenges in integrating GIS into organizational operations and workflows, and the tools and systems developed to share critical information enterprise-wide.
Moderator: Jeff Orton
• Long Beach GIS: 30 Years of Progress
  Tina Parmelee, GISP, City of Long Beach, Long Beach, CA

• Breaking Down Barriers for GIS Use - New and Innovative Tools for Enterprise-Wide
  David Holdstock, GISP, Geographic Technologies Group, Goldsboro, NC

GIS On the Web and In the Cloud
Room: Casablanca
Attend this session to explore web-based mapping do’s and don’ts, distribution and sharing of spatial data in a cloud computing infrastructure, and map-based communication using Amazon Cloud (EC2) and the latest GIST technology.
Moderator: RuthAnne Harbison, GISP
• Effective Communication through Web Maps
  Pratibha Basrao, GISP, HDR Inc, El Dorado Hills, CA

• Leveraging ESRI’s Feature Services on Amazon EC2 and iPads
  Ryan Carroll, Evari GIS Consulting, San Diego, CA

• Spatial Data Sharing in the Cloud
  Cristiano Giovando, Terrapan Labs, San Diego, CA

12:00-1:30 PM
Lunch on own and dedicated exhibit time.
Be sure to save room for dessert in the exhibit area!

Breakout Sessions 1:30-3:00 PM

LIDAR: Application and Practice
Room: Barcelona
The presenters in this session will discuss improving accuracy and efficiency in monitoring, analyzing, datasets, mapping, and reporting using ModelBuilder, LiDAR data, satellite imagery, and point cloud interpretation.
Moderator: Lan Nelson
• Rapid Levee Toe Identification/Delineation from LiDAR Data
  Chieko Plotts, HDR Engineering, Folsom, CA

• Monitoring Southern California Habitat Reserves Satellite Imagery and LiDAR
  Mark McGinnis, GISP and Pete Coulter, Dudek, Encinitas, CA

• Photo and Point Cloud Interpretation as a Building Block to Geospatial Datasets
  Devin Kelley and Melissa Christie, Photo Science, Emeryville, CA

Water and Wastewater: Asset Management with GIS
Room: Tokyo/Vancouver
Limited budgets and the rising cost of resources are a constant concern for water utilities. See how integrating or leveraging GIS technology, spatial tools, and strategies have worked for several agencies.
Moderator: Christina Boggs
• Asset Management within Water Utilities
  Diana Cregar, GISP, Black & Veatch Corporation, Rancho Cordova, CA

• Using ArcGIS Server as a Stormwater and Water Conservation Tracking Tool
  Jim McPherson, GISP, and April Kaiser, GISP, RBF Consulting, Irvine, CA

• Cloud Solution - Mobile GIS on a Budget for a Sanitary Agency
  Diane Ray, GISP, RBF Consulting, Thousand Oaks, CA

Public Participation and Crowd Sourcing
Room: Melbourne
Discussion and examples of using GIS to detect trends and patterns in outreach services through comparative analysis, citizen outreach using interactive GIS centric tools, and public online mapping resources.
Moderator: Dr. Sheila Steinberg
• Crowd Sourcing and Citizen Engagement
  David Holdstock, GISP, Geographic Technologies Group, Goldsboro, NC

• Talk to Me: Using Online Maps for Citizen Engagement
  Benjamin Webb and Annie Schwab, Digital Map Products, Irvine, CA

• Applying Geospatial Technologies to Homeless Outreach in Long Beach, California
  Abel Santana, California State University, Long Beach, Cypress, CA

GIS Going Mobile
Room: Casablanca
Embracing the Smartphone and tablet devices for field data collection and computing, and leveraging cloud storage will be explored in this session.
Moderator: Steven J. Steinberg, Ph.D., GISP
• Mobile Meets the Cloud: An Exploration of the Open Data Kit
  Joseph Doherty, Microdesk, Weymouth, MA

• Smart Field Computing, taking advantage of readily available technology
  Larry Cooper, Southern California Coastal Water Research Project, Costa Mesa, CA

• I just got an iPad, can I do GIS on it?
  RuthAnne Harbison, GISP, City of Merced, Merced, CA

Closing Plenary Session - Cartographer’s Toolkit
3:15-4:00 PM
Room: Salon A
Join us for some closing remarks and welcome Gretchen Peterson to deliver our closing keynote address.
Gretchen is well-known for her cartographic expertise and will discuss Maps Behaving Badly: A gallery of bad maps and good maps for discussion; Map Tips and Tricks; and Modern Mapping Tools: A brief overview of modern tools and workflows.

Gretchen Peterson, GISP, Principal Consultant, PetersonGIS, Fort Collins, CO
Gretchen Peterson, GISP, is a world-renowned geospatial professional who runs the mapping firm PetersonGIS and authors books on cartographic design. She works on a wide range of GIS projects including (just to name a few) solar energy site suitability analysis, stream restoration prioritization, wildlife corridor design, and archaeological sensitivity models. Her extensive experience with geographic analysis and mapping forms the baseline for the knowledge she shares in her publications on maps and cartography. Peterson shares her thoughts about cartography and the geospatial field regularly on her blog, in keynotes, and via her @PetersonGIS twitter account. She is a member of the GISCI Review Committee and is the author of Cartographer’s Toolkit: Colors, Typography, Patterns and GIS Cartography: A Guide to Effective Map Design.
Conference Sponsors

The CalGIS Conference would not be possible without the support of our sponsors. Be sure to spend time learning more about their solutions in the exhibit hall.

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Booth #111/113

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**DUDEK**

Booth # 115

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Dudek provides a full-range of geospatial services for public and private clients. Our GIS specialists provide: data management and cartographic services; GPS field data collection; data analysis and modeling; risk assessment; remote-sensing; desktop, web-based and mobile application development; program and project management; emergency preparedness and Homeland Security support; utilities modeling and asset management; and as-needed and extension of staff services. Headquartered in Encinitas, Dudek’s 200 employees work in seven offices throughout California. We can be contacted at www.dudek.com or info@dudek.com.

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California Surveying & Drafting Supply, Inc. (CSDS) is an authorized distribution partner for Trimble, ESRI and HP, offering a complete range of products, service, training, rentals and support throughout California. A leader in mapping and wide-format printing and imaging solutions, CSDS also operates the state's largest GNSS Real-Time Network.

Cityworks - Azteca Systems Inc Booth# 402
Cityworks - Empowering GIS for Infrastructure, Assets, Permits, and Licensing™. Since 1986, Azteca Systems has been helping agencies effectively manage capital assets, infrastructure and property. An exclusive ESRI partner and proven industry leader, Cityworks is the only GIS-centric solution for asset maintenance management and has been successfully deployed around the world.

Cyclomedia Booth# 406
www.cyclomedia.com
CycloMedia's GIS accurate street-level imagery (cycloramas) is used in asset management and mapping, property appraisal, and infrastructure planning. Our precision panoramic photos can be delivered as cloud-based services or client hosted server software and accessed via full-featured web applications or inside leading desktop GIS software.

Digital Map Products Booth#212
www.digmap.com
Digital Map Products creates cloud-based spatial solutions that make GIS technology and data accessible to everyday government, consumer and business users. From its turn-key Software-as-a-Service mapping applications to its spatial development platform and decision-ready data, Digital Map Products simplifies location technology so it is easy to implement and use.

Eagle Aerial Imaging Booth# 203
www.eagleaerial.com
For over 25 years, Eagle Aerial has provided annually updated, high resolution, off-the-shelf ortho-imagery throughout California and in many other markets. Also available: oblique imagery, Lidar data, contours, wall murals, custom photography, desktop and web-based GIS solutions, and surface classification/change detection services for many industries.

Electronic Data Solutions Booth# 214
Electronic Data Solutions proudly offers sales, rental and support services for Trimble GIS data collection systems, Esri GIS software, Laser Technology rangefinders, Ricoh GPS Digital Cameras, Juniper Systems field computers, and a variety of water level, quality and flow instrumentation from In-Situ, INW, and Teledyne RD Instruments. Visit us at www.elecdata.com

Geographic Technologies Group, Inc. Booth# 215
Geographic Technologies Group, Inc. (GTG) is one of the country’s leading full-service local government GIS consulting companies. GTG's corporate headquarters is located in North Carolina, with regional offices in Florida, Texas, Ohio, and California. GTG has secured state, national, and international awards for software solutions and consulting services. Founded in 1997, GTG celebrates more than 15 years of growth and success. Built on its tradition of deploying the very best GIS solutions for local government, GTG now has over 700 clients nationwide. A corporate culture of quality, understanding government operations, and commitment to our clients allows GTG to continue to build an outstanding GIS portfolio.

Intergraph Booth# 200
www.intergraph.com
Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph’s industry-specific software to organize vast amounts of data to make processes and infrastructure better, safer and smarter.

Latitude Geographics Group Ltd. Booth# 105
www.geocortex.com
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, build and maintain Esri ArcGIS Server applications. They can do more; faster, at less cost and risk.

Pictometry Booth# 212
www.pictometry.com
Pictometry is the world leader in oblique aerial imagery solutions. Buildings and properties can be seen from multiple views with full measurement and overlay capabilities. Our ChangeFindr™ product provides a comparison of properties over time and identifies new construction, demolitions, and additions. Our new SketchCheck™ service geo-references your digital sketches and compares them to current imagery to identify discrepancies.

Photo Science Booth# 205
www.photoscience.com
Photo Science is a full-service Geospatial Solutions firm specializing in aerial imaging, LiDAR acquisition and processing, mobile mapping, photogrammetric mapping, GIS, system integration, remote sensing and surveying services. The company employs qualified professionals and support personnel in nine offices located in California, Colorado, Florida, Georgia, Kentucky, Maryland, Michigan, & Pennsylvania.

Psomas Booth# 103
www.psomas.com
Psomas provides full life cycle GIS consulting services based on our understanding of your business practices, needs, and opportunities. We strive to provide guidance based on best practices and alignment of solutions with your key organizational priorities. Services include GIS strategic planning, web and mobile GIS, data integration, and asset management.
Baker and RBF Consulting, a company of Michael Baker Corporation, together provide Geospatial Information Technology (GIT) solutions to Defense, Transportation, Federal, Civilian, State, Municipal and Private Clients for projects ranging from needs analysis and system implementation to data collection and web or mobile mapping applications.

SAIC is a FORTUNE 500® scientific, engineering and technology applications company that uses its deep domain knowledge to solve problems of vital importance to the nation and the world, in national security, energy & environment, health and critical infrastructure. For more information, visit saic.com. SAIC: From Science to Solutions®

USA IMAGING, Inc. is an IT services and software development company providing an advanced Enterprise Document Management Systems we call, “The Enterprise Data Window Map Edition” (EDW-Map). Out of the box EDW-Map brings together Geo-Spatial data and document management into a solid framework providing the opportunity to unify an agency’s legacy data under the same roof without disruption to those current legacy or specialized GIS systems. Designed specifically for government agencies EDW-Map offers a cost effective, sustainable, scalable and environment to index, share and retrieve all data by everyone in every department. EDW-Map does not require or need any third party applications for GIS or document management functionality. Our sustainable solution is proven to increase productivity and reduce operational expense by as much as 60% and eliminates the need for expensive third party GIS or document management licensing.

“Valtus has been offering Data as a Service and Cloud Solutions for the storage, management and distribution of geospatial data through open-source internet protocols since 1995. By utilizing innovative technologies, we provide a cost-effective, worry free solution that is intuitive and easy to use. This allows a broad range of users to derive value from the data by ensuring its consistent and reliable availability, delivering precisely what they need, when and how they need it.”

VESTRA proudly presents the GeoSystems Monitor™ providing intimate real-time knowledge of your Enterprise GIS and of all its moving parts necessary to troubleshoot. As a leader in GIS/IT, Environmental Solutions, Engineering, and Surveying, VESTRA has the depth of know-how and experience to help clients achieve success.
Creating your own map from maps published by other users is just one of many ways to take advantage of the rich collection of data and resources ArcGIS® Online makes available to you.

Welcome to the new frontier in geographic information systems.

ArcGIS Online
Maps made better.
(Some assembly required.)

Creating your own map from maps published by other users is just one of many ways to take advantage of the rich collection of data and resources ArcGIS® Online makes available to you.

Welcome to the new frontier in geographic information systems.

30-day free trial: esri.com/agol

Learn more about your local URISA chapter and upcoming activities in the Chapter & CGIA information booth.

GET INVOLVED!

Are you a GISP?

By attending this conference, you’ve earned EDU points toward your initial GISCI certification or renewal. Did you present at this conference? If so, you’ve also earned CON points!

Learn more about GIS certification at www.gisci.org
## Monday, April 15, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30–10:00 AM</td>
<td>Conference Opening Session &amp; Keynote Address - Salon A</td>
</tr>
<tr>
<td></td>
<td>Keynote - Estella “Este” M. Geraghty, MD, MS, MPH, FACP, GISP, Assistant Professor of Clinical Internal Medicine, University of California Davis</td>
</tr>
<tr>
<td>10–11 AM</td>
<td>Exhibits &amp; Poster Set-Up - Salon BCD</td>
</tr>
<tr>
<td>10:30 AM–NOON</td>
<td>CGIA Open Board Meeting</td>
</tr>
<tr>
<td></td>
<td>Room: Barcelona</td>
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<tr>
<td>12:30–3:30 PM</td>
<td>Esri half-day workshop</td>
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<tr>
<td></td>
<td>Room: Tokyo/Vancouver</td>
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<tr>
<td>8:00 AM–3:30 PM</td>
<td>GIS Program Management - A URISA Certified Workshop</td>
</tr>
<tr>
<td></td>
<td>Room: Melbourne</td>
</tr>
<tr>
<td>4:00–5:30 PM</td>
<td>Port of Long Beach Tour</td>
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<tr>
<td></td>
<td>Meet at the conference registration area promptly at 3:45 PM for the walk to the Port facility.</td>
</tr>
</tbody>
</table>

### Evening Networking Activity

- **Registration – Centennial Foyer**
- **Exhibits & Poster Set-Up – Salon BCD (must be set up by 9 AM)**

## Tuesday, April 16, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM–10:00 AM</td>
<td>Conference Opening Session &amp; Keynote Address – Salon A</td>
</tr>
<tr>
<td></td>
<td>Keynote - Maggi Glasscoe, Geophysicist in the Solid Earth Group at the Jet Propulsion Laboratory, California Institute of Technology</td>
</tr>
<tr>
<td>10 AM–6:00 PM</td>
<td>Exhibit Hours – Salon BCD</td>
</tr>
<tr>
<td>10:30–12:00 NOON</td>
<td>Geospatial Curriculum Development</td>
</tr>
<tr>
<td></td>
<td>Room: Barcelona</td>
</tr>
<tr>
<td>10:30–12:00 NOON</td>
<td>GIS at California’s Ports</td>
</tr>
<tr>
<td></td>
<td>Room: Tokyo/Vancouver</td>
</tr>
<tr>
<td>10:30–12:00 NOON</td>
<td>Government Geospatial Data Efforts</td>
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<tr>
<td></td>
<td>Room: Melbourne</td>
</tr>
<tr>
<td>10:30–12:00 NOON</td>
<td>GIS Tool Development in the ArcGIS Environment</td>
</tr>
<tr>
<td></td>
<td>Room: Casablanca</td>
</tr>
<tr>
<td>12:00–1:30 PM</td>
<td>Roundtable Lunch – Hot Topic Discussion – Salon A</td>
</tr>
<tr>
<td>1:30–3:00 PM</td>
<td>Career Development, Mentoring and Certification</td>
</tr>
<tr>
<td></td>
<td>Room: Barcelona</td>
</tr>
<tr>
<td>1:30–3:00 PM</td>
<td>Coastal Resource Management</td>
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<td></td>
<td>Room: Melbourne</td>
</tr>
<tr>
<td>3:30–5:00 PM</td>
<td>Esri GOLD SPONSOR SESSION – 2 Hour Session - 1:30–3:30 PM Maps, Apps, and Tools for Modern GIS</td>
</tr>
<tr>
<td></td>
<td>Room: Tokyo/Vancouver</td>
</tr>
<tr>
<td>5:00–6:00 PM</td>
<td>Exhibit Hall Networking Reception – Salon BCD</td>
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<tr>
<td>7:00–8:00 PM</td>
<td>Geocache Activity</td>
</tr>
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</table>

## Wednesday, April 17, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30–10:00 AM</td>
<td>Awards Breakfast &amp; Keynote Address - Salon A</td>
</tr>
<tr>
<td></td>
<td>Maggi Glasscoe, Geophysicist in the Solid Earth Group at the Jet Propulsion Laboratory, California Institute of Technology</td>
</tr>
<tr>
<td>10 AM–10:30 AM</td>
<td>Networking Break and Poster Session in the Exhibit Hall - Salon BCD</td>
</tr>
<tr>
<td>10:00–1:30 PM</td>
<td>Exhibit Hours</td>
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<tr>
<td>10:30–12:00 PM</td>
<td>Public Data Access</td>
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<tr>
<td></td>
<td>Room: Barcelona</td>
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<tr>
<td>10:30–12:00 PM</td>
<td>Coastal and Marine GIS</td>
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<tr>
<td></td>
<td>Room: Tokyo/Vancouver</td>
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<tr>
<td>10:30–12:00 PM</td>
<td>Local Government GIS Success Stories</td>
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<tr>
<td></td>
<td>Room: Melbourne</td>
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<tr>
<td>10:30–12:00 PM</td>
<td>GIS On the Web and In the Cloud</td>
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<tr>
<td></td>
<td>Room: Casablanca</td>
</tr>
<tr>
<td>12:00–1:30 PM</td>
<td>Lunch on own and dedicated exhibit time (exhibitors dismantle at 1:30 PM)</td>
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<td></td>
<td>Refreshment break in exhibition</td>
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<tr>
<td>1:30–3:00 PM</td>
<td>LIDAR: Application and Practice</td>
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<td></td>
<td>Room: Barcelona</td>
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<tr>
<td>1:30–3:00 PM</td>
<td>Water and Wastewater: Asset Management With GIS</td>
</tr>
<tr>
<td></td>
<td>Room: Tokyo/Vancouver</td>
</tr>
<tr>
<td>1:30–3:00 PM</td>
<td>Public Participation and Crowd Sourcing</td>
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<td></td>
<td>Room: Melbourne</td>
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<tr>
<td>3:15–4:00 PM</td>
<td>Closing Plenary Session - Cartographer’s Toolkit</td>
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<tr>
<td></td>
<td>Gretchen Peterson, GISP, Principal Consultant, PetersonGIS, Fort Collins, CO</td>
</tr>
<tr>
<td></td>
<td>Room: Salon A</td>
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