50th URISA Annual Conference for GIS Professionals

(GIS-Pro 2012)

Portland, Oregon, USA
30 September - 4 October 2012

ISBN: 978-1-63266-007-7

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571

Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2012) by the Urban and Regional Information Systems Association
All rights reserved.

Printed by Curran Associates, Inc. (2014)

For permission requests, please contact the Urban and Regional Information Systems Association
at the address below.

Urban and Regional Information Systems Association
701 Lee Street, Suite 680
Des Plaines, Illinois 60016

Phone: (847) 824-6300
Fax: (847) 824-6363

info@urisa.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

The following papers/presentations presented during the conference and submitted by the presenters for inclusion in this PROCEEDINGS publication.

"Wir sind Bruder!" – How GIS and Surveying Professions can Work Together 1
Kim McDonough, GISP, Tennessee Department of Transportation, Nashville, TN
Tripp Corbin, GISP, eGIS Associates, Inc, Marietta, GA
Dean Anderson, Polk County, Dallas, OR
Dan Linscheid, Yamhill County, McMinnville, OR

10 Steps to Lead a GIS Team from Obscurity to Super-Stardom 11
Pratibha Basrao, PMP, AICP, GISP, HDR Inc, Folsom, CA

The Geospatial Technology Competency Model: Putting the Model into Practice 19
Phillip Davis, GeoTech Center, Corpus Christi, TX
Ann Johnson, GeoTech Center, Corpus Christi, TX

Continuing Education for the Geospatial Professional 31
Anthony Robinson, PhD, Pennsylvania State University, University Park, PA

Certification: Vanguard Cabinet: Professional Development & Certification 40
Ashley Littell Hitt, GISP, Connected Nation Inc, Louisville, KY

Off the Rails, Rebuilding California's Rail Network GIS 48
James Johnston, GISP, CFM, AECOM, Oakland, CA

2012 ESIG Winner: Orange County's Addressing and Land Development Information Network (ALADIN) ..... N/A
Louis Schoolkate, Orange County GIS Coordinator, Orlando, Florida

Zen and the Art of GIS Program Coordination – The Community Transit Experience 58
Jeff Anderson, Community Transit, Everett, OR

Updating Stream Classifications in the High Resolution NHD, a Pilot Project 73
Danielle Bruno-Favreau, GISP, Idaho Department of Water Resources, Boise, ID

Design and Implement a Cross-Agency Web GIS Platform with Open Source Technologies 89
Xiongjiu Liao, Ph.D, Pierce County IT/GIS, Tacoma, WA
Charles Buzzard, GISP, Pierce County IT GIS, Tacoma, WA
Renee Quenneville, Pierce County Surface Water Management, Tacoma, WA

C# and ArcGIS Server to Consume and Store Data from an AVL Tracking Web Service 100
Jason Eklund, Kittitas County, Ellensburg, WA

Geospatial Training at the Oregon Department of Forestry - Developing Skills in Tough Economic Times 113
Emmor Nile, GISP, Oregon Department of Forestry, Salem, OR

The Emergence of Terra Immersion Systems (TIS) in the Northwest 118
Roger Chappell and Ed Spilker, Washington State Dept. of Transportation, Olympia, WA

Brampton's Fire Pre-Plan Builder 145
Laura Cassian and Matthew Pietryszyn, GISP, City of Brampton, Brampton, ON, Canada

iPad Applications…Beyond Angry Birds 155
Kris Larson, GISP, CDMSmith, Helena, MT

Using Orthophotos to Find Non-premitted Structures; A Technical Success, but A Thorny Public Sell 179
Aaron Petersen, Pierce County Planning and Land Services,Tacoma, WA

GIS and Democracy: How GIS Affects the Political Landscape 206
Mark Salling, PhD, GISP, Cleveland State University, Cleveland, OH

How to Lie with Broadband Maps 226
Stephen Sharp, GISP, Vermont Center for Geographic Information, Waterbury, VT

Public Access to County GIS Basemap Data: The Supreme Decision 233
Bruce Joffe, GISP, GIS Consultants, Piedmont, CA

Developing a GIS-Based Building and Land Information System for Local Government ..... N/A
Steve Williams and Theresa Moore-Williams, GISP, Fulton County, Atlanta, GA

The Rise of Subparcels and Occpancies-Another Needed Dimension in GIS for the Next 50 Years! 258
Peirce Eichelberger, gDBMS Inc, Collegeville, PA

How to Use VRS with a GNSS (GPS) Mapping System 276
Jim Lahm, Electronic Data Solutions, Portland, OR

Standard of Care and E-Democracy Initiatives: Policy and Legislative Impacts 291
Barry Wellar, PhD, GISP, Wellar Consulting Inc., Ottawa, ON, Canada

Mobility + Crowdsourcing = Improving Quality-of-Life Service Management for Smart Phones 301
Brett Maxfield, CitySourced, Los Angeles, CA

2012 ESIG Distinguished System - Will County Master Address Point System 315
Tong Zhou, Will County GIS, Joliet, IL

Asset Management - Laying the Groundwork for Implementation - Thurston County WA 319
Owen Reynolds, AICP, Thurston County WA, Olympia, OR
Ben Hoffman, GISP, Ben Hoffman Consulting, Portland, OR

CCTV Data Flow 331
Justyna Grinholc, Fulton County, Atlanta, GA

311 GIS-Community Crowd Sourcing - **http://prezi.com/asupzy7qsdz5/311giscom/** ..... N/A
Cathy Raney, GISP, Campbell County Government, Gillette, NC
David Holdstock, GISP, Geographic Technologies Group, Inc, Goldsboro, NC

GISCI Update 351
Sheila Wilson, GISP, GIS Certification Institute, Des Plaines, IL
Kris Larson, GISP, CDMSmith, Helena, MT

Using GIS to Identify Inequities in Social Determinants of Health 363
Jason Eklund, Kittitas County, Ellensburg, WA

Fish Passage Barrier Inventory and Prioritization 380
Jon Bowers, Oregon Department of Fish and Wildlife, Salem, OR

4th Place in 2012 URISA Student Paper Competition - Impact of Distance, Traffic, and Elevation on Active Transportation to School for Children Using GIS 396
Vu Dang, Transportation and Logistics Program, North Dakota State University, Fargo, ND

Geospatial Tools to Assess and Monitor Wildland Threats 410
Charlie Schrader-Patton, US Forest Service-RSAC/WWETAC, Bend, OR

CALweedmapper - Mapping the Spread of Invasive Plant Species 421
Karsten Vennemann, Terra GIS Ltd, Seattle, WA

The Evolution of a Local Government GIS Training Plan 435
Larry Stipek, GISP, Loudoun County, Leesburg, VA
David Torraca, GISP, Loudoun County, Leesburg, VA

Close Range Photogrammetry – The Best Visualization Tool You Haven't Used Yet 462
Jay Johnson, GISP, CMS, Western Cultural Resource Management, Sparks, NV

Using GPS to improve the welfare of Asian and African zoo elephants **..... 473**
Matthew Holdgate, Portland State University, Oregon Zoo, Portland, OR

An Open Source Gaming Approach to Traffic Microsimulation 475
Mollie Webb, Golder Associates, St Louis, MO
Jochen Albrecht, PhD, Hunter College CUNY, New York, NY

Study of the Public Transit System Accessibility Based on the Average Opportunity Accessibility Measure - A Case Study of Fargo, North Dakota - **2nd Place in 2012 URISA Student Paper Competition!** 489
Nimish Dharmadhikari, Transportation and Logistics Program, North Dakota State University, Fargo, ND

ArcIMS to ArcGIS Conversion of Environmental Field Findings Data Viewer 501
Rob Grabarek, Critigen, Bellevue, WA
Joe Wong, Critigen, Bellevue, WA

The Irene Effect: Lessons Learned in Vermont 512
Stephen Sharp, GISP, Vermont Center for Geographic Information, Waterbury, VT

Civic Addressing in a Multi-Jurisdictional Environment 521
Warren Kron, Baton Rouge Planning Commission, Baton Rouge, LA

Urban and Regional Information Systems and Geographic Information Systems and Science 526
Barry Wellar, PhD, GISP – Wellar Consulting, Ottawa, ON – URISA President 1977-1978
Ken Dueker, PhD – Professor Emeritus, Portland State University – URISA President 1982-1983
Will Craig, PhD, GISP – University of Minnesota – URISA President 1986-1987
Ed Crane – Esri – URISA President 1992-1993
Nancy Tosta – Ross Associates – URISA President 1999-2000
Peirce Eichelberger- gDBMS Consulting – URISA President 2001-2002

Closing Keynote Address – GIS Technology in Transition 561
Jack Dangermond, President of Esri, Esri, Redlands, CA

Oregon' Shoreline Efforts: History, Datasets, and Standards 585
R. Dana, A. Lanier, and R. Sounhein