

Urban and Regional Information Systems Association

Annual Conference of the Urban and Regional Information Systems Association

URISA 2007

August 20-23, 2007
Washington, DC, USA

Volume 1 of 3

Printed from e-media with permission by:

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

ISBN: 978-1-60560-364-3

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

Copyright (2007) by the Urban and Regional Information Systems Association.

All rights reserved.

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

Urban and Regional Information Systems Association
1460 Renaissance Drive Suite 305
Park Ridge, Illinois 60068
Phone: (847)824-6300
Fax: (847)824-6363

Urban and Regional Information Systems Association

Annual Conference of the Urban and
Regional Information Systems Association
2007

TABLE OF CONTENTS

VOLUME 1

Abstracts..... 1

APPLICATIONS

Parcel Data Used to Develop Tools for Neighborhood Recovery in the Gulf Region 36
Jon Sperling, Bruce Joffe, Dennis Klein

Developing a Common Language for Land Uses to Support Regional Indirect and Cumulative Effects Analysis 55
Teresa Townsend, Paul Black

Developing a GIS-based Transit Analysis System 72
Dong Young Kim

Geographic Information Systems and Pandemic Influenza Plans 94
Christopher Kinabrew

British Columbia's Natural Resource Information Centre 138
Terry Lanktree

Implementing Automated Routing of Bulk Trash Collection in Washington DC 154
David Koehler

Management Considerations for the Documentation of Mechanical Street Sweeper Routes for Routing 160
Nkechi Whiteman

Using GIS Tools to Link Land Use Decisions to Water Resource Protection 165
Pedro Flores, Erik Johnston

Mapping Community Food Access 183
Md Mahbubur Meenar

Unpacking PPGIS: Evaluating the Role of Mapping in Science and Policy 204
Wendy Walker, Shalini Vajjhala

Mapping Development Type 237
Jill Locantore

Saws, Wrenches, and Hammers: What Are the Tools Needed to Maintain High Quality GIS Data? 281
Adam Kelly, Greg Thomas

Crime Spike Detection 307
Megan Heckert

SMART Approach to Juvenile Justice: Geographically-Enabled Crime Analysis	317
<i>Megan Heckert</i>	
Effect of New City Development on Commuting Pattern and Population Concentration	332
<i>Hoon Chang</i>	
A Study on the Integrated MNL-SA Model of Land Cover/Land Use Change in Taiwan	N/A
<i>Shih-Liang Chan</i>	
Improving Land Use Management of Naga City Local Government through GIS	343
<i>Rizalino Cruz</i>	

PARTNERSHIP & COLLABORATIONS

Fifty States Initiative: Building the Business and Strategic Plan State by State	373
<i>Milo Robinson</i>	
GIT Governance: State Models and Best Practices	389
<i>Lea Shanley</i>	
Geospatial Collaboration in Partnership with National Initiatives	424
<i>Tom Tribble, Pedro Flores, Bill Lefurgy, Anne Payne, Julie Stamper</i>	
Benefits of Common Address Reference Data - Experiences and Assessments	460
<i>Morten Lind</i>	
South African View on the Value of Addresses to Economy, Society, and Governance	479
<i>Serena Coetzee, Antony Cooper</i>	
The Address - A Key to Efficient Public Sector Service Delivery: A Perspective From the UK	503
<i>Michael Nicholas</i>	
State and Local Government Collaboration: Statewide Road Centerline Base Map	513
<i>Daniel Widner</i>	
Maryland Centerline Data Synchronization Project State County's Joint Venture	520
<i>Michel Sheffer, Kaushik Dutta</i>	
The Influence of Collaboration on Social and Official Trust in Colorado Water Policy Decision Making	542
<i>Phyllis Thomas</i>	
NSDI in Australia: A Decade of Success via a Pragmatic Approach to the Delivery of Fundamental Spatial Data	558
<i>Martin Holmes</i>	
The Business Case for Real-Time Sharing of Government Data	595
<i>Greg Sanders, John Karnuth, John Jiang, Peter Haas</i>	

VOLUME 2

How to Avoid Becoming Spatial Road Kill	617
<i>Robert Bischof</i>	

TOOLS

Open Source Geospatial - An Alternative Business Model for Municipal Governments	640
<i>Geoff Zeiss, Dave McIlhagga.</i>	
The Intersect of 311, CRM and GIS	668
<i>Alan Shark, Richard Leadbeater</i>	
The Challenges and Opportunities of an Interoperable 3-D Future	684
<i>Tim Case</i>	
Integrating Three-Dimensional Information with Urban Information Infrastructure	N/A
<i>Paul Cote</i>	
GIS for Decision Support and Economic Development	702
<i>Megan Heckert, James Query</i>	
Integration of GIS and IT - Nassau County GIS Architecture Upgrade	717
<i>Joseph Jones</i>	
The Federated System	735
<i>Francois Valois</i>	
The Impact of Open Source on Development Trends in the GIS Industry	758
<i>Geoff Zeiss</i>	
Overview of Records Management Concepts and Technology	765
<i>Pete Croswell</i>	
ESIG Distinguished System Recipient: PhillyHistory.org	792
<i>Joan Decker, Megan Heckert</i>	
A Web Services Approach for Embedding Local Knowledge in Sharable Datasets	813
<i>Joseph Ferreira, Raj Singh</i>	

DISASTER & EMERGENCY RESPONSE

HAZUS-Multihazards Application	849
<i>Kevin Mickey</i>	
Disaster Preparation and Response in the Cayman Islands: A GIS Perspective	855
<i>Alan Jones, Garry Green</i>	
Rethinking the Built Environment in Natural Disaster-Prone Areas	872
<i>Andreea Ambrus</i>	
Rapid GIS Disaster Response Integrating Open Standards With Baseline Data	888
<i>Drew Hitz, Dean Hitz</i>	
The Army's Use of the Geo-Referenced PDF (GeoPDF) File Format	918
<i>Ray Caputo</i>	
E-911 – Using GIS and GPS for Public Safety Operations	936
<i>Fay Walker</i>	
Using Web Based GIS to Assist in Crime Prevention and Analysis	951
<i>Joe Kezon</i>	
Key Tools for Disaster planning, Implementation and Recovery Efforts	959
<i>Scott Sherwood</i>	

CAD and GIS – Building Enterprise Operability	988
<i>Thomas Conry, Dinese Drake</i>	
Portable Emergency GIS using Oblique Imagery GeoPDFs for Collaboration.....	1020
<i>Art Kalinski</i>	

DATA

The Critical Investment.....	1051
<i>Ronald Kistler</i>	
It's Not About the Data Anymore, Silly.....	1075
<i>Nancy von Meyer, Scott Oppmann</i>	
Geospatial Interoperability is Real: Implications for Municipal Governments.....	1077
<i>Geoff Zeiss</i>	
National Standard for Named Physical and Cultural Geographic Features	1084
<i>Dwight S Hughes</i>	
Building the Kentucky Watershed Information Portal (KWMIP)	1097
<i>Raj Singh</i>	
Migrating your FGDC Metadata to ISO/NAP – Whether, When and How?	1112
<i>Bruce Westcott</i>	
An Enterprise Transportation Network Data Model for Fairfax County, VA	1146
<i>Brendan Ford, Jim Fries</i>	
Mapping of Special Flood Hazard Areas	1159
<i>Alfredo Frauenfelder</i>	

PUBLIC PARTICIPATION GIS (PPGIS)

What is the Most Appropriate Conceptualisation of Public Participation?	1178
<i>Richard Kingston</i>	
Engaging the Public in Neighborhood Redevelopment by using Google Earth and Sketch Up.....	1191
<i>Yoon-Soo Choi, MiJi Lee</i>	
Public Participation and the Use of Neighborhood Information System	1201
<i>Sungsoo Hwang</i>	
Utilizing GIS to Foster Regional and Community Participation in the New Jersey Highlands.....	1219
<i>Roger Keren</i>	

VOLUME 3

Mapping the Barriers: A Web Venue to Identify, Map and Discuss Social and Environmental Barriers Affecting the Health of a Community.....	1220
<i>Chris Seeger</i>	

PPGIS in County Fair and Park Planning: Integrating ArcGIS, Flash, PHP, MySQL and Google Maps	1234
<i>Christopher Seeger</i>	
Identifying Trends In Land Use/Land Cover Changes In The Olomouc Region, Czech Republic	1266
<i>Tomáš Václavík</i>	
Participatory Mapping for the Grenadines: Marine Resource Space-use Information System	1277
<i>Kim Baldwin</i>	

MANAGEMENT

If I Train Them, Will They Use It?	1319
<i>Patricia Maggio-Long</i>	
An Invitation to Contribute to the Second Edition of the GIS Body of Knowledge	1329
<i>David DiBiase</i>	
Does the UCGIS Body of Knowledge Accurately Reflect the GIS Professional's Skills?	1340
<i>Al Butler</i>	
Innovative Funding Mechanisms to Sustain a GIS	1358
<i>Chris Thomas</i>	
Estimating GIS Return On Investment: The Empirical Way	1386
<i>Bruce Joffe</i>	
Organizational Change Techniques for Successful Enterprise GIS Implementation	1392
<i>Rebecca Somers</i>	
How to Achieve Agreement when Implementing Infrastructure Asset Management Solution	1401
<i>Michael Schlosser</i>	
A New Approach to Staffing Local Government GIS	1421
<i>Thomas Thomey</i>	
Deliberating About the Future – WHERE?	1438
<i>Richard E. Klosterman</i>	
Enhancing Project Management with Geospatial Information Technologies	1456
<i>Keri Shearer, David Snider</i>	
Spatial Support and Decision-making Systems in Urban Management	1480
<i>Thomas Wuerzer</i>	
Privacy and Internet Access to Public Land Records	1503
<i>Lea Shanley, Steve Ventura</i>	
Parcel Basemap Geodata: Resolving the Public Records Controversy	1545
<i>Bruce Joffe</i>	

PROFESSIONAL DEVELOPMENT

Making Effective Presentations	1571
<i>Hilary Perkins</i>	
GIS Strategic Planning: Evaluating and Selecting Approaches	1591
<i>Rebecca Somers, Bruce Westcott, Susan Johnson</i>	

URISA UPDATE

URISA's GISCorps	1599
<i>Shoreh Elhami, Juna Papajorgji, Dianne Haley, Mark Salling</i>	

K-12 EDUCATION

Building Public Awareness About Geographic Literacy	1634
<i>Tom Tate, Anne Pollard, Charlie Fitzpatrick</i>	
Mapping our School Site (MOSS)	1642
<i>Rita A. Hagevik</i>	
Local Investigations of Natural Science Project (LIONS)	1670
<i>Bob Coulter</i>	
Geospatial Semester	1675
<i>Kathryn Keranen, Daniel Lewandowski, Richard Aadahl</i>	
URISA's Awards	1687
Author Index	