

# The Rhode Island Geographic Information System

# 2007 Annual Report



The Rhode Island Department of Administration Division of Planning-Statewide Planning Program RIGIS Coordinator One Capitol Hill Providence, Rhode Island 02908-5872

May 15, 2007



# The Rhode Island Geographic Information System

**PURPOSE:** This report provides a synopsis of GIS activities associated with or affecting those organizations participating in the Rhode Island Geographic Information System (RIGIS) during the calendar year 2007. It highlights milestones for the year denoting progress outlined in the "2005-2010 Strategic Management Plan for the RIGIS as adopted by the RIGIS Executive Committee in December of 2004 and reaffirmed by that body in March of 2006. The RIGIS 2007 annual report will become a part of a continuous record of GIS activity in the state for corporate retention and further review.

**INTRODUCTION:** A geographic information system (GIS) is an organizational structure, a suite of technical tools, and a geographically related database used to assimilate, analyze and depict location related or geospatial information. The Rhode Island Geographic Information System (RIGIS) is a consortium of government entities, academic institutions and private organizations that employ GIS technology and use geospatial information.

**VISION:** The Rhode Island Geographic Information System will be the acknowledged leader for the implementation and employment of GIS technology throughout the state and the accepted source for quality geospatial information in Rhode Island.

**MISSION:** To monitor, coordinate, and provide leadership for activities related to the use of geographic information system technology in Rhode Island, to support initiatives to implement or use this technology, and to manage and provide access to a common and comprehensive database of geographically referenced information that conform to RIGIS-accepted minimum standards for accuracy, completeness and metadata documentation.

**VALUES**: The RIGIS and its participants will preserve and rely upon an open and honest exchange of knowledge related to the use of geospatial information in Rhode Island.

# SUMMARY OF ACTIVITIES AND ACCOMPLISHMENTS IN 2007:

# 1. Leadership, Policy Formulation and Liaison Activities:

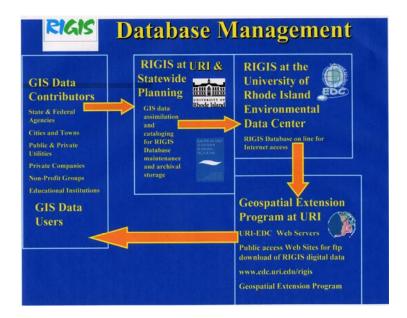
Quarterly RIGIS Executive Committee meetings were held throughout the year. Membership of the committee as appointed by the Rhode Island State Planning Council is included in Appendix A. of this annual report. Minutes of the quarterly meetings can be found in Appendix B of this annual report.

- a. The 2005-2010 Strategic Management Plan for the RIGIS was reviewed and reaffirmed on March 20, 2008. The strategic plan is available on line at <a href="https://www.edc.uri.edu/rigis">www.edc.uri.edu/rigis</a>.
- b. Rhode Islanders participated in the spring and fall Northeast Arc Users (NEARC) conferences held respectively in May in North Hampton, MA and in November in Burlington, VT. Rhode Islanders participated in discussions and made presentations at both events. Gregory Bonynge the Geospatial Extension Specialist at the University of Rhode Island continued as a member of the NEARC Board of Directors. The spring NEARC event for 2008 is scheduled for May 13 in North Hampton, MA and the annual NEARC08 conference will be hosted by Massachusetts and held in Hyannis from September 21-24, 2008.



c The RIGIS Coordinator continued representing Rhode Island as a member state in the National States Geospatial Council (NSGIC) throughout the year.





### 2. The RIGIS Database



# The Geospatial Extension Specialist at URI:

The RIGIS Database and associated RIGIS Online Data Clearinghouse are hosted by the Environmental Data Center at the University of Rhode Island. The Geospatial Extension Specialist at URI, Greg Bonynge, has been charged with maintaining the RIGIS data distribution web site since 2004. In 2007, the Geospatial Extension Specialist at URI:

- a. Released a re-designed online clearinghouse (http://www.edc.uri.edu/rigis). Data were reorganized based on ISO 19115 Topic Categories for geospatial data, on the leading edge of a trend to distribute data using common methodologies and standards. The reorganization should help GIS data users to locate data more easily as they move from various GIS clearinghouses across the nation and world. Thumbnail images that allow users to quickly preview what the geospatial data look like were introduced. Documentation that largely comply with the FGDC Content Standard for Digital Geospatial Metadata (CSDGM) are now available for nearly all data offered by the RIGIS clearinghouse. Metadata are viewable online using three different templates that each present the documentation with a unique look, depending on the users preference.
- b. Continued administration and maintenance of both RIGIS-L, a statewide email listsery, and the RIGIS RSS feed.

# 3. RIGIS Database Additions and Updates

- a. The following data were added to the RIGIS database in 2007:
  - 1. Local & NGO Conservation and Park Lands-RIDEM
  - 2. State Conservation and Park Lands-RIDEM
  - 3. Marine & Estuarine Waters: Water Quality Standards and Impairments-RIDEM
  - 4. Urban Services Boundary-Statewide Planning
  - 5. RI CRMC Coastal Water Use Type CRMC
  - 6. Wind Speed Estimates- State Energy Office
  - 7. Colleges and Universities-RIGIS
- b. The following data within the RIGIS database were updated in 2007:
  - 1. E-911 Sites- RI E911
  - 2. 1:5,000 Roads RI E911/RIDOT
  - 3. TIGER Roads RIGIS/USCensus
  - 4. RIPTA Bus Routes RIPTA
  - 5. RIPTA Bus Stops RIPTA
  - 6. RIPTA Park & Ride lots RIPTA
  - 7. RIPTA Park & Ride Bus Routes RIPTA
  - 8. US Census 2000 (SF1); Population & Housing Statewide RIGIS
  - 9. US Census 2000 (SF3); Population & Housing Statewide RIGIS
  - 10. Major Surface Water Bodies RIDEM
  - 11. Major Rivers & Streams RIDEM
  - 12. Shellfish Restrictions RIDEM
  - 13. Law Enforcement Locations RIGIS
  - 14. Libraries RIGIS

## 4. Database Enhancement Projects In Progress

- a. Development of Rhode Island's Geodata Gateway was temporarily suspended by the URI EDC in 2007 due to software limitations that could not be easily overcome. Development is slated to restart in Fall 2008, pending the release of new software.
- b. Development of the Rhode Island Digital Atlas continues by the URI EDC, with a planned release for 2008. The purpose of the Atlas is to serve as an easy-to-use website that links Rhode Islanders with live, interactive maps of Rhode Island on the Internet.
- c. URI EDC enhancements planned for the RIGIS online clearinghouse include:
  - a. Thumbnail maps updated to include Block Island.
  - Metadata corrections and updates to further comply with the FGDC CSDGM.

- c. Completion of the RIGIS logo depot. This web page will offer the RIGIS logo in several different resolutions and formats for use on the Internet and printed material.
- d. Expansion of the Help and FAQ area, including an ability to submit questions via the web site instead of email.
- d. The URI EDC is considering the re-introduction of a mandatory user login account system that will emphasize the existence of the RIGIS license agreement. The redesigned RIGIS clearinghouse did away with a mandatory review of the license agreement before permitting visitors to browse RIGIS data holdings. After this change, feedback to the URI team dropped precipitously. The login new system will likely permit users to browse RIGIS data, but mandate logging into a user account associated with a digital RIGIS license agreement acknowledgement before actually downloading any data.

# 5. RIGIS Data Distribution







### a. RIGIS Web Site at the Environmental Data Center at URI

### Summary Statistics 1/1/06 to 12/27/06

Nearly 449,000 data files were downloaded from the RIGIS online clearinghouse in 2007, for a total file size of 645 GB. 171,500 of these files consisted of vector data. 266,000 were historical non-georeferenced MrSID images. The balance consisted of georeferenced orthophotographs in both MrSID and GeoTIFF formats.

The most popular vector data were:

- 1) 1:24,000 Municipal Boundaries (591 downloads)
- 2) Soils (561 downloads)
- 3) Wetlands (531 downloads)
- 4) 1:24,000 Coastline (529 downloads)
- 5) 1:24,000 RIDOT Roads (526 downloads)

# **b. Data Distribution on Optical Media** (CDROM) 01/01/06-12/31/06)



Orthophotos = 5 GB

DEM = .5 GB

Total 5.5 Gb

8 Total Requests

All data distribution on CDROM or DVDROM media consisted of either high volume orthophoto image data in a compressed MrSid format or statewide elevation data

consisting of digital elevation models (DEMs) with accompanying TINs. Data requests for products on optical disk have been greatly reduced with the inclusion of additional imagery data available for download from the RIGIS web site.

# 6. Financial – URI Foundation RIGIS License Account

(Proceeds from Data Distribution License Fees)

Starting Account Balance: \$6311

In - URI Foundation RIGIS Account in License Fees + \$450

Out – Lizardtech License Maintenance - \$599

DVD+RW Drive (DVD Data Distribution) - \$89

RI League Conference Display Registration - \$450

URI Foundation Service Charge -\$31

Total Out - \$1169

Ending Balance: \$ 5692





# 7. Rhode Island EDUCATION, TRAINING AND OUTREACH

- a. Traditional classroom and laboratory classes in the use and application of GIS continued at Colleges and Universities in Rhode Island. This included URI, Brown, and Rhode Island College. At URI courses were offered within the Natural Resources Sciences curriculum (3 courses), and within the Landscape Architecture Program (1 course).
- b. Professional training courses in the use of GIS software were offered by the URI Geospatial Extension Program in 2007. The URI Geospatial Extension Program hosted ESRI at URI to teach an advanced training course, Building Geodatabases.
- c. The University of Rhode Island partnered with Applied Science Associates, Brown University, City of Cranston, Narragansett Bay Commission, the Town of South Kingstown and RIGIS to organize the 2007 Rhode Island GIS Conference. 179 attended this conference, the first of its kind held in the last decade in Rhode Island. The conference consisted of twelve sessions conducted by more than 25 speakers representing a variety of interests. Currently URI plans to continue to take the lead on organizing and hosting this conference on a biannual basis. The next Rhode Island GIS conference is slated for 2009.
- d. RIGIS members supported and attended specialized training sessions, workshops, and seminars offered throughout the year:
  - 1. RIGIS / URI / National Park Service cosponsored *Introduction to LIDAR Technology* March
  - 2. Northeast Arc Users Group Spring Conference Workshops Northampton, MA May
  - 3. RIGIS / URI / IAGT cosponsored *What's in a Pixel: Introduction to Remote Sensing* September
  - 4. Northeast Arc Users Group Fall Conference Workshops Burlington, VT November

### 8. FEDERAL GOVERNMENT SUPPORT OF GIS ACTIVITIES

a. The United States Geological Survey of the

Department of the Interior provides guidance through the activities of the Federal Geographic Data Committee (FGDC) in the establishment and promulgation of standards for geospatial data. USGS offered financial grant assistance through the NSDI Cooperative Agreements Program and the "Fifty States Initiative" enabling RIGIS participants to move forward with GIS activities. In Rhode Island grant awards included metadata training at the URI and the development of strategic/business plans for state government agencies. <a href="http://www.fgdc.gov">http://www.fgdc.gov</a>

c. The Natural Resource Conservation Service ONECS Natural Resource of the Department of Agriculture working with the University of Rhode Island and other federal and state agencies continued in an extensive project to map sub-aqueous soils in coastal Rhode Island. http://www.Mapcoast.org

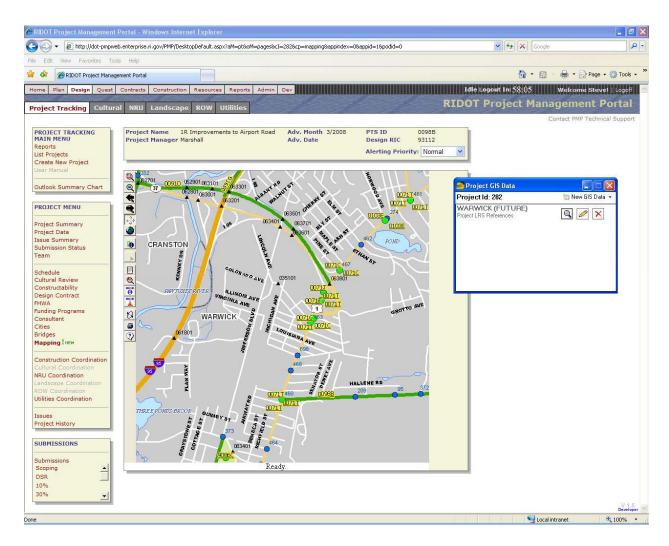
# 9. STATE GOVERNMENT GIS ACTIVITIES

a. **RIDOA/DoIT** Four state agencies actively using GIS consisting of the Departments of Administration, Environmental Management, Health and Transportation (RIDOA, RIDEM, RIDOH, and RIDOT) continued toward a common goal to establish a consolidated enterprise wide system. A federal grant was awarded last year by the U.S. Geological Survey for enhancements to state government GIS systems under the FGDC "Fifty States Initiative". The business plan was completed in September of 2007 with the assistance of Applied Geographics Inc. of Boston Mass working under contract to the RIDOA Division of Information Technology.

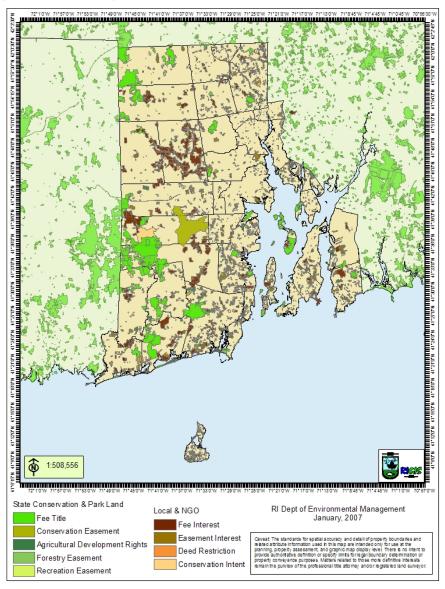
The master price agreement for state and municipal government for ESRI software products and services was updated and renewed. This MPA allows state and municipal government entities to purchase technical support services and GIS software from ESRI at standardized pricing. <a href="www.purchasing.ri.gov">www.purchasing.ri.gov</a> (MPA183)

GIS personnel assigned to DoIT under the governor's Fiscal Fitness Program in 2005 were reassigned back to their original parent agencies (RIDOT, RIDEM, and RIDOA Statewide Planning). These administrative moves were initiated primarily for budgetary considerations in July and August of 2007.

- b. **RIDOT** The Rhode Island Department of Transportation has implemented a new mapping enhancement to the Department's Project Management Portal (PMP) website. The mapping enhancement implements geographic information system (GIS) functions and data to enable PMP users to view, interactively enter, edit, and validate construction project/contract locations and will store location information together with related project records in the underlying Oracle database. The core GIS products used for this project are ArcSDE and ArcGIS Server products from ESRI. ArcGIS server allows for advanced web-based interaction with underlying GIS layers, including:
  - \* Defining project limits based on references to existing street centerlines and other features
  - \* Dynamic rendering of LRS-based events
  - \* Improved map symbology rendering and labeling
  - \* ArcGIS server has a much larger set of GIS processing capabilities than any other GIS server technology



c. **RIDEM** continued to up develop, update and enhance data supporting all natural resources of interest to the Department. An extensive effort for mapping all state, municipal and nongovernment conservation lands continues. A major focus during the year concentrated on training municipal conservation commissions and local land trusts for submission of new additions and their features for lands that they own or manage. Training was offered by the RIDEM Water Quality Division and the RIDEM GIS specialist to city and town conservation land managers in using digital maps of these data on viewing software (ESRI/ArcReader).



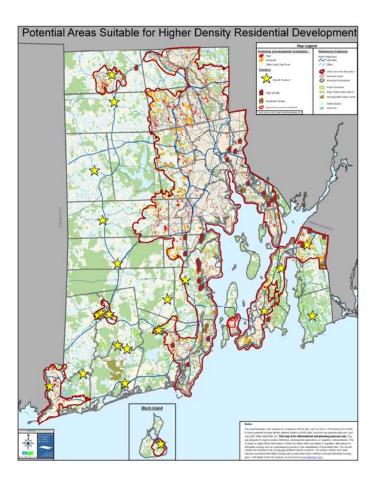
Conservation Lands in Rhode Island



# d. The **Statewide Planning Program**

within the Department of Administration

initiated a study of potential sites suitable for higher density residential development in Rhode Island using GIS tools and extensive use of information from the RIGIS database. The project titled *Mapping Potential Sites Suitable for Higher Density Residential Development* was completed to fulfill a mandate established by R.I. Gen. Law 42-128-8.1(h) also known as the Affordable Housing Act of 2004. The intent of the Act is to insure that each Rhode Island municipality has a minimum of 10% of their housing classified as "affordable". To help implement this goal, the act required the creation of a GIS map that identifies areas statewide that could have the potential to support residential development at a higher density than currently exists. The study supplements and enhances an extensive land suitability analysis entitled "*Land Use 2025*" completed in 2006 that established policy for future land use patterns most desirable for the future. The map *Potential Sites Suitable for Higher Density Residential Development* developed in this year's study reflects a summary vision of all GIS analyses and policies in the plan encouraging future growth within a specified Urban Services Boundary (USB) and in local growth centers as recognized in "Land Use 2025".

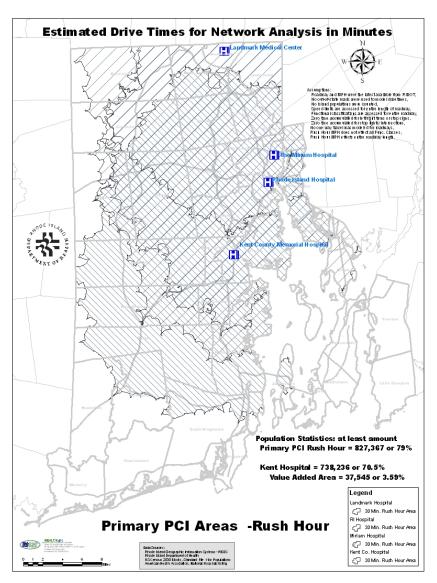




# e. RIDOH The Rhode Island Department of Health

The Center for Health Data and Analysis' Geographic Information Systems (GIS) Program has applied the ESRI ArcGIS v9.1 Enterprise and the ArcGIS v9.1 Network Analyst Extension, to assist the Office of Health Systems Development and the RI Health Services Council in the evaluation of a certificate of need application from Kent County Memorial Hospital for Primary Percutaneous Coronary Interventions –PCI on patients experiencing a heart attack.

By applying the network modeling software to the RI Roadway Network for travel speeds obtained from the RIDOA –Administration and the RIDOT -Transportation (through the RIGIS's data sharing protocols), the Center has defined geographic areas that are within specified travel times of the state's healthcare facilities. With small-area Census data, these geographic areas provided estimates of the populations that live within



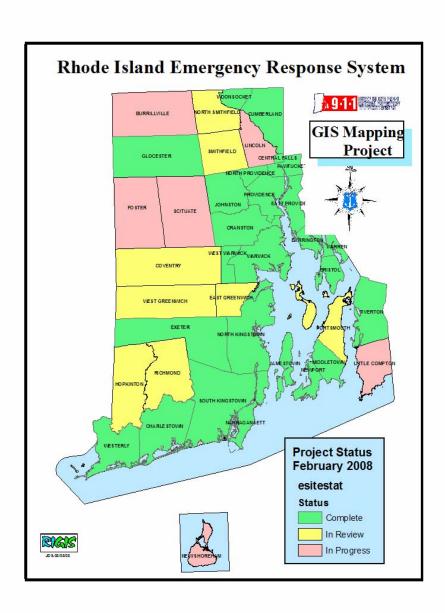
specific travel times to the facilities. The final report was presented February 2008.

This ArcGIS technology is also used to support public health emergency preparedness, emergency medical service protocols, trauma system planning, patterns of healthcare utilization and market share, and other health policy functions of the Department and other state agencies.

Application Utility (RIDOH Internal IMS)

f.

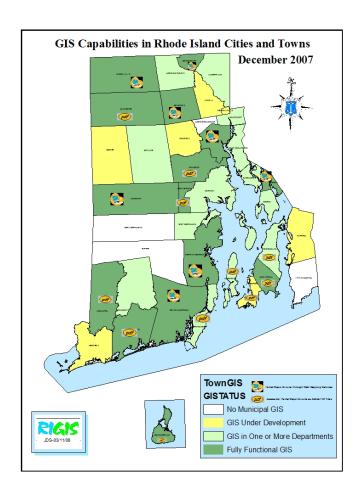
f. The RI Emergency Response – RI E911 Continued with an overall statewide effort to geolocate all buildings in the state and verify their addresses and related attribute information. At the close of the year, 25 of Rhode Island's 39 cities and towns had been entered into the RI E911 system and corresponding GIS data sets was being finalized for entry into the RIGIS database. Field work for an additional 8 towns had been either completed or is in progress. All field work for the project is scheduled to be completed by May of 2008 with full integration of the data into the RI E-911 system by July of 2008.



*RI E911 Status Map-2007* 

# 10. MUNICIPAL GOVERNMENT GIS ACTIVITIES:

Interest and growth in the use of GIS technology in cities and towns continued to rapidly increase throughout the year. Approximately 80% of Rhode Island's municipalities now have some level of GIS capability and are using the technology in one or more departments in city or town hall. Expansion of municipal GIS into Tax Assessment and Public Safety (police and fire) departments in several towns has led the way. Many Rhode Island municipal towns are creating or enhancing their GIS databases with new material. The town of Middletown is in the process of finalizing new parcel and infrastructure data sets based on high resolution imagery acquired last year. The towns of Charlestown and South Kingstown have accepted new high-resolution color orthophotography (6" pixel) and are enhancing their GIS vector data based on these sources. Several cities and towns including, Coventry, North Kingstown, Smithfield and South Kingstown have opened public Web Map Service sites to share information available from GIS data with their citizens. Many towns are providing mapping information produced through their internal GIS capabilities to the public through on-line static map displays and at computer kiosk desks within town halls. The Town of Hopkinton was awarded membership representation to the RIGIS in November (2007).



# RI Municipal GIS and Parcel Data Status – December, 2007

<b>Town Name</b>	<b>Contact Department</b>	Status
Barrington	DPW/Eng	Functional GIS /No Parcels
Bristol	Planning	GIS & Parcels Under Devel.
Burrillville	MIS/IT	Functional GIS/Parcel Data
Central Falls	DPW/Eng	GIS & Parcels Under Devel
Charlestown	Assessor	Functional GIS/Parcel Data
Coventry	Planning	Functional GIS/Parcel Data
Cranston	MIS/IT/GIS	Functional GIS/Parcel Data
Cumberland	Planner	Functional GIS/Parcel Data
East Greenwich	Planning	Functional GIS/Parcel Data
East Providence	Planning	Functional GIS/Parcel Data
Exeter	Planning Board	No GIS/No Parcel Data
Foster	Assessment	Dormant GIS/Parcel Data
Glocester	Planning	Functional GIS/Parcel Data
Hopkinton	GIS	Functional GIS/Parcel Data
Jamestown	Planning	GIS & Parcels Under Devel
Johnston	Building	No GIS/CAD Parcel Data
Lincoln	Planning	Functional GIS/Parcel Data
Little Compton	Planning Board	No GIS/No Parcel Data
Middletown	Planning	Functional GIS/Parcel Data
Narragansett	GIS	Functional GIS/Parcel Data
Newport	AdminServices	GIS & Parcels Under Devel
New Shoreham	GIS/Planning	Functional GIS/Parcel Data
North Kingstown	GIS/MIS	Functional GIS/Parcel Data
North Providence	Unknown	No GIS/No Parcel Data
North Smithfield	Planning	Functional GIS/Parcel Data
Pawtucket	Planning	GIS & Parcels Under Devel
Portsmouth	Planning	GIS & Older Parcel Data
Providence	Planning	Functional GIS/Parcel Data
Richmond	Planning	Functional GIS/Parcel Data
Scituate	Assessor	Functional GIS/Parcel Data
Smithfield	Assessor	Functional GIS/Parcel Data
South Kingstown	GIS	Functional GIS/Parcel Data
Tiverton	Planner	GIS Under Development
Warren	Planner	Functional GIS/Parcel Data
Warwick	Planning	Functional GIS/Parcel Data
Westerly	DPW/Eng	GIS Under Development
West Greenwich	Unknown	No GIS/No Parcel Data
West Warwick	GIS	Functional GIS/Parcel Data
Woonsocket	DPW/Eng	Functional GIS/Parcel Data

# 11. PRIVATE SECTOR SUPPORT







Regional and Rhode Island based private businesses assisted municipalities developing or enhancing city and town GIS capabilities throughout the year. This included the creation or maintenance of digital parcel level data sets and the development of web service applications for several cities and towns. Private sector enterprises assisted state agencies through the fulfillment of contract obligations for Rhode Island state government agencies. This included database development at RIDOH and applications for highway asset management at RIDOT.



ECOTONES.









The Rhode Island Society of Professional Land Surveyors (RISPLS) established the RISPLS GIS Committee and petitioned the RIGIS Executive Committee for membership. The organization was awarded membership by the State Planning Council in November (2007). The RISPLS GIS Committee's mission is to monitor the activities of RIGIS, RI Municipalities, and of any agency or entity engaged in the implementation and/or use of Geographic Information Systems as they pertain to the survey profession in Rhode Island; shall offer expertise in survey matters and promote the role of the surveyor in the development and maintenance of such systems; shall promote the education and corporation among RISPLS members, GIS professionals and all public and private individuals, firms, utilities and agencies having interest in the practice of land surveying as it pertains to Geographic Information Systems.

# Appendix A – The RIGIS Executive Committee – December 2007



**State Government**RI Department of Administration, Statewide Planning
Town

and Division of Planning – Executive Secretary

RI Department of Environmental Management

Vice Chairperson

RI Department of Health

Office of the State Geologist

RI Department of Transportation

**Municipal Government** 

Town of South Kingstown

Town of New Shoreham

City of Providence

City of Cranston

Town of Charlestown

Town of East Greenwich

Town of Smithfield Town of Hopkinton

State Offices, Boards, Commissions, Authorities Federal Government

Natural Resource Conservation Service Warwick Office (US Dept. of Agriculture)

RI Water Resources Board US Geol. Survey, Geospatial Programs Office

New England Liaison-Northboro, MA Regional Office

(US Dept. of the Interior)

Beta Group Inc, Lincoln, RI

RI Board of Registration for Professional Land Surveyors

RI E911 Emergency Response System

RI Public Transit Authority Private Sector Organizations & Enterprises

The Narragansett Bay Commission The Providence Plan, Providence, RI

Educational Institutions Mapping & Planning Services Inc, Jamestown

University of Rhode Island

Department of Natural Resources Sciences

Environmental Data Center Applied Science Associates, Narragansett, RI

EcoTones Inc, North Kingstown, RI

**Brown University** 

Department of Planetary Geology Fuss and O'Neil Inc, Providence, RI

RI Society of Professional Land Surveyors

Applied Geographics Inc, Boston, Ma

# Appendix B Minutes of Quarterly Meetings of the RIGIS Executive Committee For 2007

# RIGIS Executive Committee NRCS Conference Room, Warwick March 15, 2007 Meeting Minutes

Attendees: John Stachelhaus, Secretary-RIDOA, (Acting Chair); Christopher Galagan-ASA Inc.; Thomas Grala- Narraganset Bay Commission; Greg Bonynge-Cooperative Extension, URI; Carol Baker-Towns of New Shoreham and South Kingstown: Maria Giarrusso-City of Cranston; Jon Boothroyd – State Geologist/URI; Jim Turrenne-USDA/NRCS; Ann Marcotte-Fuss& O'Neil; Lynn Carlson-Brown University and Town of Coventry; Mary Hutchinson-Mapping & Planning Services; Steve McCandless-Town of Charlestown; Steve Sawyer-RIDOH; (Observers) Melanie Brenda-Joubert-Town of Hopkinton; Steven Anderson-Applied Geographics, Inc.; Jared Rhodes-Statewide Planning; Laura Cadmus- ESRI Boston; Lyn Malone- WorldViews Inc; Kathrynn Willis-Town of West Warwick; Terry Meyer; Jodi Hunt-RIDOH; Observers from USDA/FSA;

- 1. The minutes of the December 13, 2006 were accepted with corrections by vote of the committee.
- **3. Spring Northeast Arc Users Conference** –The Spring NEARC Conference will be held in North Hampton, MA on April 27 of 2007. This one day conference is well worth attending and a bargain for the registration price of only \$35.
- **4. 2007 Rhode Island GIS Conference** Greg Bonynge announced the annual Rhode Island GIS conference will be held on June 1<sup>st</sup> at the URI Narragansett Bay Campus. Preliminary program information and registration can be found at http://www.edc.uri.edu/rigis/conference. Space is limited so early registration is recommended. ASA has offered to help sponsor the event through assisting with administrative matters. RIGIS will be subsidizing the event to keep registration costs down.
- 5. Greg announced that the transition is complete for the new RIGIS web site at <a href="http://www.edc.uri.edu/rigis">http://www.edc.uri.edu/rigis</a>. Data Categories are on the international (ISO) standards. Town level data that were on the older RIGIS site are no longer included. Those still needing access to the old site can still access it at <a href="http://www.edc.uri.edu/rigis-legacy">http://www.edc.uri.edu/rigis-legacy</a>. The Geodata Gateway project is moving ahead with an expected appearance in a beta mode later this spring.

# 6. New RIGIS Database Additions

**RIDEM -** Federal, state, municipal and private non-profit conservation lands and protected open space, inland lakes, ponds, rivers and streams and salt water bodies with updated water quality attribute classifications

RIPTA – Winter and Spring Schedule Bus Routes and Bus Stops
RIDOA – Statewide Planning urban services boundaries, Census 2000 SF1
demographic data (block level) and SF3 economic, housing and education (block
group level) all registered on and compatible with RIGIS 1:5000 scale geography.

- 7. Reaffirmation of RIGIS Strategic Management Plan for 2007
  John Stachelhaus submitted the RIGIS Strategic Management and requested a reaffirmation for 2007. Carol Baker made a motion for acceptance and Maria Giarrusso seconded. The motion was passed by voice vote of the committee.
- **8. RIGIS Annual Report for 2006** John reported that the first draft had been sent to all committee members for comment. He requested input and comment and said he hoped to complete the report by the end of April.
- 9. Discussion on Statewide Municipal Parcels-Jim Lucht from the Providence Plan briefed the committee on the IMS site that the Providence Plan maintains for the RI Economic Development Corporation. The site includes town property parcel level data and was initiated in 2005. At that time, the Providence Plan approached towns for their willingness to participate through volunteering to provide parcel level data through data sharing agreements. Only 11 towns responded at that time and data from 4 additional towns were included on the web site later in that year. In the fall of 2006 the RIEDC sent letters to all cities and towns requesting parcel level GIS data and related municipal Tax Assessment data under Title 38 of the Rhode Island General Laws covering requirements to provide data as public records. Additional towns responded and the site now has 24 of the 39 towns in the state. Several of the remaining towns either do not have parcels in an electronic form at all or do not have the technical capability to provide their data in format suitable for use in a GIS.

John Stachelhaus noted that some towns had called him and were upset by the method the RIEDC had used in demanding the parcel data under Title 38. In his opinion, since future use of the parcel data including access to updates will rely on cooperation from towns, a more tactful approach would have been in order.

Jared Rhodes introduced himself as the new Chief of the Statewide Planning Program and explained that Statewide Planning is very interested in using parcel information to support land use studies in general and as benchmark data for the Landuse 2025 initiative that is currently in progress. He outlined an approach to assess the present state of parcels data available throughout the state as to its content and standardization. He suggested that the RIGIS Digital Standards be used as the basis for determining the quality and compatibility of parcel data from the different towns, and indicated that Statewide Planning would support a study to do so. He also said that a in order to determine if parcel data would be suitable for tracking land use changes, a separate study could be performed for a pilot area where municipal parcel data has been maintained for several years.

Anne Marcotte noted that Fuss and O'Neil recently conducted a survey of towns within the state with parcel data. She said she could check within her company to see if the survey results could be made available to Statewide Planning.

Maria Giarrusso offered to asisst Statewide Planning in using Cranston parcel data over a series of years for the study on parcel based land use changes over time.

Jared requested that anyone with additional input on this issue or with a desire to help contact him at Statewide Planning at 222-5772 or email jrhodes@admin.ri.gov.

10.Building a Database for Addresses – Tom Grala briefed the attendees on a project he is working with RI-E911, RIDOT and RIGIS to use an address database based on the building points (esites) currently being collected by RI E911. Tom has demonstrated that with input from sources such as site development plans and municipal building officials it is possible to add to the esites data and premise address information as new building with addresses are created by developers. Although initially this will help the Bay Commission with billing information for new sewer hookups, it can be envisioned that a multiplicity of applications would follow.

Steve Sawyer mentioned that this is an area of great interest to the Health Department that use addresses for a variety of purposes. RIDOH has been working with address based databases for a number of years, and more recently employed Applied Geographics to assist them in creating a database of medical facilities across the nation.

- 11. Land Cover/Land User Standardized Layer File John Stachelhaus presented a graphic originally created at Statewide Planning for standardized colors for Land Cover/Land Use data sets. Although he wasn't sure of the exact source, he believed it was based on the APA's LBCS color codes. He suggested that the committee study this and recommend an improvement of this coding as a standard for Planners and GIS practitioners. Mary Hutchinson offered to "take a shot" at this and make a recommendation in the future.
- **12. Standardized Symbologies for RIGIS Data.** Steve Sawyer made a motion that the RIGIS Technical Advisory Committee study all RIGIS data for the generation of symbology layer files. The motion was passed by voice vote of the committee.
- 13. It was noted that the Technical Advisory Committee had offered to assist the Town of Westerly evaluate a needs analysis that the town had obtained several years ago to explore implementation of municipal GIS for that town..

# RIGIS Executive Committee NRCS Conference Room, Warwick June 11, 2007 Meeting Minutes

**Attendees:** Paul Jordan, RIDEM (acting Chair); John Stachelhaus, (Secretary)-RIDOA,; Christopher Galagan-ASA Inc.; Greg Bonynge- Cooperative Extension, URI; Carol Baker-Towns of New Shoreham and South Kingstown: Maria Giarrusso-City of Cranston; Jon Boothroyd – State Geologist/URI; Jim Turrenne-USDA/NRCS; Mary Hutchinson-Mapping & Planning Services; Joe Klinger, Ecotones Inc.; Steve McCandless-Town of Charlestown; Paul Spina –Beta Group Inc; Janice Piexhno, Town of East Greenwich; Suzanne Kogut, Town of Smithfield; Steve Sawyer-RIDOH; (Observers) Melanie Brenda-Joubert-Town of Hopkinton; Andrew Buck-Applied Geographics, Inc.; Ed O'Brien, Professional Land Surveyor

- 2. The minutes of the March 15, 2007 were accepted with corrections by vote of the committee.
- **14.Annual Northeast Arc Users Conference** –The Annual NEARC Conference will be held in Burlington, VT from November 4-7, 2007. The conference committee has extended the time period for accepting presentations until 25 June. Conference registration is available on line at <a href="https://www.northeastarc.org">www.northeastarc.org</a>.
- **15.2007 Rhode Island GIS Conference** Greg Bonynge recapped the annual Rhode Island GIS conference will be held on June 1<sup>st</sup> at the URI Narragansett Bay. Attendence at the event total 149 out of 177 registered. ASA helped to sponsor the event through assisting with administrative matters. Everyone attending enjoyed the conference and recommended doing it in the future. Greg is assimilating the comments on the survey sheets from the conference. One of the questions of high interest is whether to hold similar events on either a one year or a two year basis.
- **16.**Paul Jordan suggested **renewing the GIS forum sessions** that were held in the past. These generally were two to three hour sessions focused on various topic areas for specific interest groups. John Stachelhaus recalled that these were popular events that were somewhat easy to organize, but he had not been able to keep them going because of time commitments. It was suggested that RIGIS members contact John about possibly reviving the forums.
- 17. Greg also announced that the transition is complete for the **new RIGIS web site** at <a href="http://www.edc.uri.edu/rigis">http://www.edc.uri.edu/rigis</a>. Data Categories are on the international (ISO) standards and town level data are no longer included. Those still needing access to the old site can still access it at <a href="http://www.edc.uri.edu/rigis-legacy">http://www.edc.uri.edu/rigis-legacy</a>. The legacy site will remain active until metadata for the new site is in place. The Geodata Gateway project is moving ahead with an expected appearance in a beta mode later this summer.

### 18. New RIGIS Database Additions

**RIDEM** - Shellfish Closure areas for June of 2007

RIPTA -Summer Schedule Bus Routes and Bus Stops

- **7. RIGIS Annual Report for 2006** John reported that the RIGIS Annual Report for 2006 is now on the RIGIS site in a .pdf format. http://www.edc.uri.edu/rigis/about/docs/2007/RIGIS\_2006\_Annual\_Report.pdf
- 8. Discussion on Statewide Municipal Parcels-John Stachelhaus noted a "white paper" titled "THE DEMAND FOR AND FEASIBILITY OF A STATEWIDE GIS-BASED PARCEL DATA SYSTEM" written by Tiffany Smythe for the Rhode Island Economic Policy Council (EPC). A copy of which was previously emailed to RIGIS members. Among the several recommendations in the document was the establishment of a technical committee to plan the development of a statewide parcel data system. John suggested the creation of another group for this purpose was not necessary and that the RIGIS Executive Committee should take the lead. Municipal government has the inherent core responsibility for the creation and continued maintenance of parcel level data and the involvement of city and town clerks, tax assessors, GIS professions and others involved with land records will be necessary. The EPC as interested party should be invited to meetings involving this topic. Ed O'Brien added that the community of professional land surveyors also has a high level of interest and involvement in this area and must also be represented, possibly through the RI Society of Professional Land Surveyors. (It was noted that the Board of Registration for Professional Land Surveyors has a seat to the RIGIS Executive Committee.) Paul Jordan noted that dealing with parcel data is an involved and long term commitment, certainly not to be taken lightly. Several other recommendations in the paper were discussed. Joe Klinger made a motion that a response from the RIGIS Executive Committee be drafted. The motion was passed, John Stachelhaus will draft that response and Carol Baker will assist in reviewing it.

# a. Discussion on the RI Board of Registration for Professional Land Surveyors request for comment on a draft informational bulletin on the use of GPS.

The RI Board of Registration for Professional Land Surveyors requested input from the Executive Committee on language in an information bulletin they were drafting on the qualification of data obtained by the use of GPS technology. A discussion on this specific topic followed initially centered upon the particular statement in the draft, "Those GPS practitioners not currently registered under these statutes (R.I.G.L 6-9.1-13 on Professional Land Surveyors) are advised that data derived from this technology must clearly be identified as approximate and that such data represents only a conceptual relationship of located **features**." With respect to the portion of the statement in bold type, Paul Jordan offered to research the topic of accuracy standards as accepted by the federal government. The discussion further evolved into the area of what are the limitations (under the R.I.G.L.) of GIS practitioners in gathering data for use in building databases and producing output products including maps. This included not only the use of GPS, but also photo interpretation of remote sensing and aerial photography (orthophotography), digitizing of hardcopy maps, and assimilation of CAD data into GIS databases. Joe Klinger noted that a basic problem exists in that the laws as written only address mapping under the

sections pertaining to Land Surveyors and GIS is not mentioned at all. The laws need to be rewritten or modified to address issues related to the current use of technology such as GIS. Ed O'Brien noted that Professional Engineers are allowed to do specific types mapping "incidental to duties required of their profession" John Stachelhaus mentioned that in past discussions at the national level the term "authoritative definition" of map features such as property boundaries and the legal determination of elevations is restricted to the duties of a licensed land surveyors. A motion and passed was made that this item should further explored and addressed by the RIGIS Technical Committee and reviewed by the full RIGIS Executive.

# RIGIS Executive Committee NRCS Conference Room, Warwick September 20, 2007 Meeting Minutes

Attendees: Joe Klinger (Chair), Ecotones Inc.; Paul Jordan, RIDEM; John Stachelhaus, (Secretary)-RIDOA,; Tom Grala, NBC; Al Diorio, RIBORPLS; Greg Bonynge, GES - Cooperative Extension, URI; Carol Baker-Towns of New Shoreham and South Kingstown: Maria Giarrusso-City of Cranston; Jim Turrenne-USDA/NRCS; Mary Hutchinson-Mapping & Planning Services; Paul Spina –Beta Group Inc; (Observers) Melanie Brenda-Joubert-Town of Hopkinton; Andrew Buck-Applied Geographics, Inc.; Ed O'Brien, Professional Land Surveyor; Jay Drew, Opaldata;

- **3.** The minutes of the June 11, 2007 were accepted with corrections by vote of the committee.
  - **19.Annual Northeast Arc Users Conference** –The Annual NEARC Conference will be held in Burlington, VT from November 4-7, 2007. Rhode Island is expected to be well represented although state agency personnel may not attend due to travel restrictions
  - **20."What's A Pixel" Seminar** Greg Bonynge recapped the seminar on remote sensing that he organized on September 10th at the URI Narragansett Bay. Attendence at the event total 55 out 67 of registered. Everyone attending enjoyed the conference and recommended similar events in the future.

Greg is planning a GPS Seminar and training session for the spring or early summer of 2008.

**21.** Paul Jordan suggested **renewing the GIS forum sessions** that were held in the past. These generally were two to three hour sessions focused on various topic areas for specific interest groups. It was suggested that RIGIS members contact either Paul or John Stachelhaus about reviving these forum sessions.

### 22. New RIGIS Database Additions

**RIDEM/RIDOA** - 80 Meter (elevation) Wind Profiles for power generation **RIDOA** — Updated Police Stations and Libraries (2007) **RIPTA** — Fall Schedule Bus Routes and Bus Stops

# 6. Discussion on the functions of geospatial data collection and mapping conducted by GIS practitioners and Professional Land Surveyors as related to Rhode Island General Law (RIGL) 5-8.1

Paul Jordan, the chair of the RIGIS technical committee is dealing with this issue. He referred to concerns on the subject here in Rhode Island and noted that this is a national issue involving the relationships between the two groups in many other states. The present RIGL is similar to others in many states, and almost identical to those of some New England states (NH, ME, VT). It was based on a "model law" promulgated by the National Council of Examiners for Engineers and Surveyors (NCEES), an organization that advises states on licensing professionals in those two disciplines. As noted in past RIGIS Executive Committee meetings several members of the GIS community feel that the law needs clarification. Paul noted that the RIGIS technical committee will be working with surveyors from both the Board of Registration and the RI Society of PLS to try to obtain a better definition as to what is and is not surveying. This will also include a better interpretation of the responsibilities and limitations or GIS practitioners. At the direction of the Executive Committee (June of 2007) John Stachelhaus drafted a letter to the Board of Registration to the same effect and indicated that the RIGIS would also be seeking legal clarification on the existing RIGL entry as well. (The Board more recently (11/23/07) responded to this letter and agrees with the idea to continue dialogue to improve the relationship between the two groups.)

A more general discussion followed addressing interests of both parties.

Professional land surveyors are concerned in that maps being produced by many GIS practitioners are being accepted by an unknowing user community for purposes other than what they are suited for. Without proper documentation, caveat and credit statements included for maps and features on them, maps are being interpreted as and used for purposes exceeding the intent and accuracy of data from which they are derived. This in particular is of concern when dealing with maps containing property parcel and wetland that are traditionally defined by surveyors in there work. (Al Diorio and Ed O'Brien)

GIS practioners are interested in a more definitive explanation of what the surveying community sees as activities and functions that are responsibilities of professional surveyors. These include mapping not involving the definition of property boundaries and the location of "fixed works" as opposed to more general mapping. If the accuracy or precision of measurement for entry into a database is a determining factor, at what point is the line crossed from GIS mapping to a land survey product. The location of "natural and manmade features" as stated in the RIGL covers areas that traditionally not been the exclusive domain of surveyors.

This includes geophysical, soils, bathymetric mapping and natural feature delineation such as eel grass beds and to some extent general wetlands delineation by photogrammetric means. (Baker, Buck, Grala, Jordan, Klinger)

Continued discussion between the survey community as represented by the Board of Registration and the RISPLS (Society) and the GIS community were encouraged. A standardization of map caveat statements, metadata documentation as well investigations into developing and publishing criteria defining accuracy levels of GIS data and map products should be considered. Efforts to educate all parties including real and potential end users of GIS products as to the intended purpose and limitations of data, maps and analysis studies should be continued.

7. Parcel Data Standards: In light of increased general interest in municipal property parcel data John Stachelhaus encouraged members to review the RIGIS parcel data standards originally accepted in 2003 to see if modifications or updates are in order. The standards can be found at: (http://www.edc.uri.edu/rigis/about/docs/default.htm). by Tiffany Smythe for the Rhode Island Economic Policy Council (EPC). A letter of response was drafted by John and Carol Baker to a "white paper" titled "THE DEMAND FOR AND FEASIBILITY OF A STATEWIDE GIS-BASED PARCEL DATA SYSTEM" written by Tiffany Smythe in the spring of 2007 RIGIS for the RI Economic Policy Council. The letter of response advocated that the EPC and other interested parties consider using the RIGIS Executive Committee in a leadership and advisory role for studying a potential statewide parcel data set. It was also strongly recommended that municipal GIS professionals be directly involved and remain in the forefront for efforts involving the use municipal parcel level data. It was noted that MassGIS recently put parcel data for many communities in the Commonwealth on their website (www.ma.gov/mgis) for download. http://www.mass.gov/mgis/parcels.htm The site includes data from Mass. cities and towns that meet the MassGIS parcel standards as well as some that don't. Although there is no intention by MassGIS to standardize that data in the Commonwealth, an interest to do so in Rhode Island is being considered by the Statewide Planning Program. Statewide Planning will be funding a study to be completed by the Providence Plan next year to investigate the possibility of using municipal parcel data in a GIS database for use in tracking land use change over time.

### 8. Land Use Classification Standards

Jay Drew led a discussion on the possibility that Rhode Island adopt a standard developed by the American Planning Association for categorizing land use. Interested parties would include not only the RIGIS, but the RI Association of Assessing Officers (RIAAO). The standard can be found at <a href="http://www.planning.org/lbcs/">http://www.planning.org/lbcs/</a>. A motion was passed to continue this discussion at the next RIGIS meeting.

# RIGIS Executive Committee NRCS Conference Room, Warwick December 12, 2007 Meeting Minutes

Attendees: Paul Jordan (Vice Chair), RIDEM; John Stachelhaus, (Secretary)-RIDOA,; Steven Sawyer, RIDOH; Charles LaBash, EDC/URI; Lynn Carlson, Brown University and Town of Coventry; Tom Grala, NBC; Carol Baker-Towns of New Shoreham and South Kingstown: Jim Turrenne-USDA/NRCS; Steve McCandless, Town of Charlestown; Chris Galagan, Applied Sciences Asso.; Jon Boothroyd, State Geologist and URI Geosciences; ; Melanie Brenda-Joubert-Town of Hopkinton; Janice Piexhno, Town of East Greenwich; Michael Doyle, Fuss and O'Neil Inc.; Andrew Buck-Applied Geographics, Inc.; Ed O'Brien, RI Society of Professional Land Surveyors; (Observers) Christina Delage-Baza, RIDOA, Statewide Planning; Kathrynn Willis, Town of West Warwick

- **4.** The minutes of the September 20, 2007 were accepted with corrections by vote of the committee.
  - 23.RIGIS Executive Committee Meeting Schedule for 2008 John Stachelhaus suggested that a similar schedule to the schedule for 2007 be adopted for 2008. Meetings would be held on the third Thursday of the months of March (20<sup>th</sup>), June (19<sup>th</sup>) and September (18<sup>th</sup>) and the second Thursday in December (11<sup>th</sup>). He suggested that members look at their calendars and make suggestions to him to modify these dates if major conflicts exist.
  - 24.New and Updated Data Notices John Stachelhaus and Chuck Labash listed several new data additions to the database accessible through <a href="https://www.edc.uri.edu/rigis">www.edc.uri.edu/rigis</a>. These include 2003/2004 LandCover/Land Use, Statewide Impervious Surface, Urban Services Boundaries, updated libraries, police, and hospitals from Statewide Planning, Potential Wind Energy polygons from the State Energy Office, High Resolution Orthophotography on the Narragansett Bay Shoreline from URI, and updated 5Kstreams from RIDEM.
  - **25.NAIP Imagery for 2008** Jim Turenne announced that USDA was planning on obtaining 1 meter pixel, color, leaf-on orthophotography of southeast New England including Rhode Island in the summer of 2008 as part of the NAIP initiative. Initially USDA was looking for partnerships to secure funding support for this project, but they are now apparently committing on going forward with the project on their own. Jon Boothroyd ask whether funding input from others might allow for an option for higher resolution. It was also questioned whether additional funding would also make consideration for leaf-off photography more possible.

# **5.** Continued Discussion on the Relationship between GIS Practitioners and Professional Land Surveyors

Paul Jordan noted two recent meetings between members of the GIS community from the RIGIS Executive Committee and the GIS Subcommittee of the RI Society of Professional Land Surveyors (RISPLS). Productive discussions are resulting in a better understanding of mutual concerns from both parties. An agreement was reached that a continued dialogue will benefit all concerned in the future. Paul announced a seminar would be held in January where presentations on subjects of interest to both parties would be given. It is expected that these types of gatherings will occur throughout the coming year.

John Stachelhaus reported that the Board of Registration for Professional Land Surveyors responded to an earlier letter from the RIGIS Executive Committee regarding concerns centered on the use of GPS technology by other than licensed surveyors. The Board agreed that continued dialogue and cooperation should be initiated to resolve issues in the future. John apologized for not distributing copies of the letter to RIGIS members. John also noted that he approached the legal staff at the Department of Administration concerning an interpretation of RIGL-5-8.1. It was suggested that existing discussion taking place between the bodies should continued to resolve differences. If issues still remain, the RIDOA legal staff will be amenable to moderate differences if needed.

Ed O'Brien discussed existing Rhode Island law (RIGL 5-8.1) and a "model law" promulgated by the National Council of Examiners for Engineers and Surveyors (NCEES), an organization that advises states on licensing professionals in those two disciplines. Ed suggested that the NCEES model law and related model rules would be a good start to use in further clarifying points of interest to both parties. Ed also emphasized that the relationships between maps created by GIS practitioners and surveys conducted by land surveyors needed to be explained to users, particularly to municipal officials in city and town halls.

### 6. Land Use Classification Standards

At the September 12, 2007 meeting Jay Drew a representative from the RI Association of Accessing Officers (RIAAO) led a discussion on the possibility that Rhode Island adopt a standard developed by the American Planning Association for categorizing land use. Since Jay was not able to attend this meeting, Janice Piexhno explained that the RIAAO was still very interested in adopting that standard. Further discussion was deferred to the next meeting.

# 7. GIS Professional Certification Program

John Stachelhaus gave a brief explanation of the GIS Professional Certification Program offered by the GIS Certification Institute and showed a PowerPoint presentation that was originally offered at the National States Geographic Information Council fall conference. GISP certification is backed by URISA, NSGIC, the University Consortium for GIS (UCGIS) and the American Association of Geographers. He noted that there are several Rhode Islander holding the GISP certification including members of the RIGIS Executive Committee. Others in the state are in the process of applying for the same. He also pointed out that four states have endorsed the certification and posed the question as to whether the Executive Committee might submit a similar statement

of endorsement in the future. Michael Doyle pointed out that in some areas of the country, contracts (RFPs etc) are specifying GISP certification is now required.

# 8. Participant Activity Reviews

- a. **Town of East Greenwich** Janice Piexhno announced that the Town is using Fuss and O'Neil to conduct a needs analysis for GIS. Several departments within town hall are already using GIS software and as a tool for functions within town hall.
- b. USDA/NRCS Jim Turenne explained that a summer of 2008 NAIP flight to obtain 4 Band, 1meter pixel imagery for the state is being funded by USDA/NRCS and USDA/FSA. Jim is working on updating the soil survey data including some modifications of soil type descriptions. (No changes to soils spatial features)
- c. **URI Geosciences** Jon Boothroyd outlined progress on determining and mapping shoreline change being conducted for Narragansett Bay and Rhode Island's south coast for the CRMC. Erosion rates were determined for time periods for 1939, 1985 and 2003. Support for the MapCoast project is also being provided including studies of benthic geology, and marine habitat. Field work utilizes drop and vibra cores, side scan sonar and the use of drop video cameras.
- d. **Town of Charlestown** Steve McCandless noted that along with his duties as the town's GIS analyst, he is now taking on managing the Charlestown waste water management department. In doing so he is introducing the use of GIS technology to that utility.
- e. **Applied Geographics Inc.** Andrew Buck explained that Applied Geographics is working with several towns in Rhode Island on parcel data updates and web mapping services development including Coventry, North Kingstown and Smithfield. The company also recently completed a study for an enterprise GIS plan for Rhode Island's state agencies.
- f. Narragansett Bay Commission Tom Grala continues to be involved with managing the NBC's wastewater infrastructure system using GIS and CAD tools. A project to map easements is in progress.
- g. **Applied Sciences Associates** Chris Gallagan announced that ASA has developed a Time Slider extension for ESRI ArcGIS software and is making it available for free download to the public from their web site <a href="www.asascience.com">www.asascience.com</a>. ASA is in the process of moving from their former location in Narragansett to South County Commons on Route 1 in South Kingstown.
- h. **RIDEM** Paul Jordan explained that RIDEM, USEPA and USDA/NRCS are currently involved in a project to update the HUC12 watershed boundary data set. When completed this will correct several mapped boundary delineations that were not well depicted in the existing watershed boundary data sets.
- i. **Brown University & Town of Coventry** Lynn Carlson offered interns to help place Brown interns to assist GIS efforts where

- needed. Coventry is using their municipal GIS for update the town's comprehensive plan.
- j. Fuss and O'Neill Mike Doyle announced that Fuss & O'Neill is moving from their present location in the Foundry Complex to new offices at the former American Locomotive Works in Providence. He noted the companies support of GIS in RI cities and towns and the previously mentioned needs analysis being conducted for EastGreenwich.
- k. University of Rhode Island Chuck LaBash referred to the discussion on updates to the RIGIS database that were mentioned earlier in the meeting. The Environmental Data Center is exploring ArcGIS server applications including the use of ArcExplorer for viewing and distributing data. The old RIGIS web site is scheduled to be taking off line in early January 2008. (due to needs to do some tweaking on the new web site, this shutdown time has been delayed)
- 1. **RIDOA Statewide Planning Program** John Stachehaus announced that the statewide land us/land cover and impervious data sets will be available in January. The study for and enterprise GIS for state government mentioned earlier by Applied Geographics was completed. However, the implementation of suggested actions is being delayed due to budget/personnel limitations within the agencies. John announced he will be retiring from State service in June of 2008

Christina Delage-Baza who is the GIS analyst with Statewide Planning explained that she has been involved in an extensive study to identify potential areas for residential development within the state. The study is based on the Land Use 2025 policy adopted as a state guide plan element last year.

- m. **Society of Professional Land Surveyors** Ed O'Brien outlined Some of the projects he is currently involved in research on old property surveys including deeds and boundary surveys. This type of work often uncovers discrepancies of interest to town officials relying on property ownership and its boundary delineation. It may also point out features included and needing clarification in GIS parcel databases.
- n. **Town of West Warwick** Kathrynn Willis announced that West Warwick is running ArcGIS server technology in the town GIS, but is fighting problems with the SQL Server component. The town will be issuing an RFP for an automated asset management system.
- o. **Town of Hopkinton** Melanie Brenda-Joubert explained that Hopkinton is working on an automated pavement management system and a stormwater management to support public works functions and GASB-34 requirements.
- p. **RI Department of Health** Steve Sawyer is leveraging ArcServer technology for the incorporation of many large databases at RIDOH. This serves the needs of critical daily operations as well as for the many related emergency management functions of that agency.