

**DGDC Meeting Minutes**  
**June 24, 2010**  
**9:00 a.m.**  
**Room 220, Kent Co. Admin Building**  
**555 Bay Rd. Dover, DE**

**Attendance List:**

Mike Mahaffie.....	OSPC
Doyle Tiller.....	OMB/DFM
Andrea Godfrey.....	OMB/Budget Dev.
Barbara Gladders.....	DHSS
George Yocher.....	DHSS
Sandy Schenck.....	DGS
Lillian Wang.....	DGS
Miriam Pomilio.....	DGS
Dick Sacher.....	UD/RDMS
Ben Mearns.....	UD/RDMS
Kim Cloud.....	DTI
Mary Harper.....	HCA
Carl Yetter.....	DNREC
Bryan Bloch.....	DNREC
Matt Laick.....	DeIDOT
Darrin Dell.....	DeIDOT
Bruce Allen.....	DeIDOT
Jay Gerner.....	DeIDOT
Bernie Gilbert.....	DeIDOT
Mollie Raley.....	DeIDOT
Mike Ward.....	Kent Co.
Danielle Lamborn.....	Kent Co.
Rob Pierce.....	Kent Co.
Patrick Susi.....	New Castle Co.
Jim Galvin.....	Dover/Kent MPO
Ben Johnson.....	Dover/Kent MPO
Mark Nowak.....	City of Dover
Jim Hoff.....	USAF
Art Walker.....	USDA/NRCS
Erica Rhoades.....	McCrone
Michael Hanna.....	Tidewater Utilities
Christine Smack.....	Tidewater Utilities
Brianne Jordan.....	Pepco Holdings, Inc.

**Welcome and Introductions**

Mike Mahaffie started the meeting at approximately 9:05 a.m. with a welcome and a round of introductions.

**Approval of March 25, 2010 Meeting Minutes**

**Jim Hoff made a motion to approve [the March 25, 2010 meeting minutes](#) (PDF) as presented.** Barbara Gladders seconded the motion and it passed, unanimously.

**Reports**

**DGDC Executive Council**

Mike Mahaffie gave a brief account of the April 8, 2010 DGDC Executive Council meeting. ([Draft Minutes](#) [PDF]) The draft strategic plan was the main topic of this meeting.

The Executive Council has asked for a draft of a formal state policy for entering into data-sharing agreements with outside entities.

**Conference Planning Subcommittee**

Lillian Wang is the chair the subcommittee for the 2012 conference. She reported that the attendance for the 2010 conference was 157. The conference was rescheduled for late March because of the heavy snows of February this year because of snow, but that had only minor impacts on attendance. She noted that the subcommittee is looking at late April of 2012 for the next conference.

**GIS Day Subcommittee**

Megan Nehrbas explained that the bake sale that accompanied the meeting will help support GIS Field Trip plans for Delaware school students. She said that the subcommittee plans to continue the tradition of geographic- and GIS-themed activities for students at the Dover Airbase Museum again this year. GIS day this year will be November 17.

During the meeting, Megan Nehrbas reported that Danielle Lamborn has agreed to co-chair the GIS Day Committee going forward.

### DelDOT Centerline Project

Bernie Gilbert gave an update on his project to create a process by which DelDOT and the counties can jointly maintain a statewide centerline data set that meets the needs of as many users as possible. He noted that he and Megan Nehrbas are completing a proof of concept between DelDOT and Sussex County before expanding to include Kent and New Castle Counties. He has been in close contact with all three counties, however.

**Matt Laick made a motion to establish a Transportation Data Subcommittee to continue this project and a larger collection of transportation-related data projects in the future.** Sandy Schenck seconded the motion. It passed unanimously.

Bernie Gilbert will chair the new subcommittee and members will be drawn from the three counties, DelDOT, the DataMIL Team, UD's CADSR, the MPOs and Safety and Homeland Security's E911 Team.

### Technical Infrastructure Subcommittee

Kim Cloud reported that the GeoSpatial Data Exchange project has hit some issues and that additional delays are expected. She noted that the problems arose when the Exchange, which had been in development for some time, was installed in DTI's production environment. She will continue to try to move the project along. Sandy Schenck suggested that the DGDC Executive Council might want to send a formal letter to the vendor, on behalf of the GIS community, expressing concerns.

Kim also reported that there have been two ESRI training classes under the ELA and that she is looking for input on additional classes. There was a general discussion of the possible classes and approaches to provide additional GIS training for the group.

## Old Business

### Strategic Planning Project

Mike Mahaffie gave an update on the strategic planning effort, which has resulted in a final draft of a plan, now under review by the Executive Council. He explained that the focus has become the notion of creating a small, but more formal, GIS Office to help do the work identified as needed by the DGDC and the Executive Council. There is also a first draft of a business plan to help achieve this goal.

Miriam Pomilio asked if there will be another presentation of the plan for the DGDC after the Executive Council has discussed it at their July 8 meeting. Mike agreed that that would be helpful and suggested another DGDC workshop for later in the summer.

### Election of DGDC Representatives to the Executive Council

Mike Mahaffie reported that during the open nominations period all three of the existing representatives had been re-nominated and have agreed to serve again. They are Lillian Wang (At-Large Representative), Dick Sacher (Academic Sector Representative), and Mark Nowak (Municipal Sector Representative).

**Jim Galvin made a motion to approve the slate of candidates.** Kim Cloud seconded the motion. It passed unanimously.

There was a general discussion of the need to increase participation by municipal governments in the DGDC. There are only a few municipalities doing their own GIS at this point, and outreach may be needed to those governments to get them involved in the DGDC. Other municipalities use several of the private sector companies that are part of DGDC to handle their GIS needs.

### Orthophotography Projects

Mike Mahaffie gave a brief update of the several orthophotography projects now under way. Orthophotography covering New Castle County, from a DVRPC/Federal project, is expected in early 2011. Meanwhile, a working group is trying to craft a project in 2011 to cover Kent and Sussex Counties, using federal funds that are part of the ARRA Broadband Mapping grant.

### New Business

#### Data Standards Subcommittee

Pat Susi presented two draft standards for consideration by the DGDC and the Executive Council: a metadata standard and a parcel polygon standard.

The Draft Delaware Metadata Standard (attached) requires a subset of the FGDC metadata required fields. It is designed to encourage the minimum amount of metadata needed to make GIS data useful, though the group strongly suggests creation of full FGDC metadata. The Geospatial data Exchange is being designed to require at least the Delaware Metadata Standards fields for any data sets that are published there.

**A motion was made and seconded to accept the Draft Delaware Metadata Standard and send it on to the Executive Council.** It passed unanimously.

The Draft Delaware Parcel Polygon Standard (attached) is intended to provide guidance on the basic attribute data needed for Parcel Polygon data sets from the counties that are published to the state at large. It was created with a statewide parcel data set in mind, but with the goal of not requiring the three counties to change their internal business processes. It includes parcel ID, PIN, and county and municipal identification.

**Sandy Schenck made a motion to accept the Draft Delaware Parcel Polygon Standard and send it on to the Executive Council.** It was seconded and passed unanimously.

There was a general discussion of next steps for these standards. They will be considered by the Executive Council and it was suggested that they then be submitted to DTI for consideration under DTI's standards-setting process.

As part of the standards, a start was made on a Delaware-specific place thesaurus and a GIS glossary for Delaware. These will be placed on-line in such a way to facilitate on-going, crowd-sourced editing and updates. Mike Mahaffie will work on that aspect and report back to the GIS community via listserv when they are available.

Pat Susi asked the group to contact him with any ideas for other data sets for which the subcommittee should be looking for standards.

## Learning Things

### GIS at UD

Ben Mearns gave an overview of some of the GIS work that is now under way in different parts of the University. He was working from notes (attached) submitted by some of the GIS leaders around the university community.

Some highlights included broadband mapping work, a GIS-enabled operations management plan for New Castle County, work on mapping feeder-patterns for schools in New Castle County, aggregating sales data by geography, and population projections work.

Ben was asked if there will be another UD GIS Forum, which many attendees found informative and helpful. He noted that there is a discussion under way on how best to follow up on that event.

### Open Comment Period

The **Delaware Geological Survey** is working on a web-mapping site (“DRILLER”) to disseminate geologic data.

The **Office of State Planning Coordination** is in the middle of a project to update the State Strategies for Policies and Spending maps using statistical analysis of a wide range of state, county and local data sets relating to land uses and land use planning.

**New Castle County** is entering into agreement with ESRI to provide county data to the ESRI Community Mapping Program.

The **Dover/Kent MPO** is working on a regional bike plan as well as on an update of the small-area population projections created by CADSR for the DPC several years ago.

The **DNREC Division of Water Resources** is collecting data for a study of non-point source pollution sources affecting the Chesapeake Bay Watershed.

**Delaware Coastal Programs** is studying the potential effects of sea-level rise on state and local infrastructure.

Mollie Raley pointed to a recent discussion on a blog post regarding the BP gulf oil spill that spawned a discussion of GIS and its uses and suggested that there are opportunities like this to expand public awareness of GIS.

There being no further business, the meeting adjourned at 11:30 p.m.



## **Metadata Standards**

### **Purpose**

To provide a minimum standard for the creation and dissemination of metadata by public agencies in Delaware.

### **Required Items**

#### **Identification**

- Abstract – A brief description of the data
- Purpose – A summary of why the data was collected
- Access Constraints – Restrictions and legal prerequisites for accessing the data
- Use Constraints – Restrictions and legal prerequisites for using the data, once access has been given
- Contact – Name of organization, and, optionally, a person in the organization considered to be the best contact for question concerning the data
- Contact Voice Telephone – The phone number of the organization or person in the organization who would answer questions concerning the data
- Contact Email Address – The email address of the organization or person in the organization who would answer questions concerning the data
- Title – The common name of the dataset
- Originator(s) – The name(s) of the organization(s) or individual(s) that developed the dataset
- Publication date – The date which the data was published or made available
- Time Period – Either ground condition (generally referring to aerial photography) or publication date
- Progress – The state of the data
- Update Frequency – How often the data updated
- Bounding Coordinates – The extents of the data in decimal degrees

- Theme Keyword – At least one ISO Topic Category
  - farming
  - biota
  - boundaries
  - climatologyMeteorology
    - Atmosphere
  - economy
  - elevation
  - environment
  - geoscientificInformation
  - health
  - imageryBaseMapsEarthCover
  - intelligenceMilitary
  - inlandWaters
  - location
  - oceans
  - planningCadastre
  - society
  - structure
  - transportation
  - utilitiesCommunication
- Theme Thesaurus – ISO 19115 Topic Category
- Place Keyword – At least one predefined geographic reference from Delaware thesaurus (to be posted)
- Place Thesaurus – Delaware thesaurus (To be posted)
- Security Classification – Security classification of the data

## **Spatial Reference**

- Horizontal Coordinate System – projection

## **Distribution**

- Resource Description
- Primary Contact – Name of organization, and optionally, a person in the organization considered to be the best contact for question concerning the distribution
- Contact Voice Telephone – The phone number of the organization or person in the organization who would answer questions concerning the data
- Contact Email Address – The email address of the organization or person in the organization who would answer questions concerning the data

## **Metadata**

- Metadata Date – The date the metadata was completed
- Contact – Name of organization, and optionally, a person in the organization considered to be the best contact for question concerning the metadata
- Contact Voice Telephone – The phone number of the organization or person in the organization who would answer questions concerning the metadata
- Contact Email Address - The email address of the organization or person in the organization who would answer questions concerning the metadata

## Optional (but important) Items

### Identification

- Security Classification System – the thesaurus used to define the security classification

### Data Quality

- Horizontal Accuracy
- Vertical Accuracy
- Scale
- Process step(s)

### Spatial Reference

- Vertical Coordinate System

### Entity Attribute

- Attribute Domain Values – either as part of metadata or reference to definition table

**DRAFT**



## Parcel Polygon Standards

**Purpose** – To provide a minimum requirement for the creation of a shared parcel polygon dataset with standard attributes, in accordance with accepted standards.

FIELD NAME	DATA TYPE	LENGTH	DESCRIPTION
<i>OBJECTID</i>	<i>OBJECT ID</i>		<i>MANAGED BY SOFTWARE</i>
PIN	TEXT	20	PARCEL NO. INCLUDING PUNCTUATION
PARCELID	TEXT	15	PARCEL NO. WITHOUT PUNCTUATION
COUNTY_NAME	TEXT	10	NAME OF COUNTY E.G "KENT"
COUNTY_FIPS	TEXT	5	See Table Below
MUNICIPAL_NAME	TEXT	25	INCORPORATED NAME
MUNICIPAL_FIPS	TEXT	5	See Table Below
<i>SHAPE.AREA</i>	<i>DOUBLE</i>		<i>MANAGED BY SOFTWARE</i>
<i>SHAPE.LEN</i>	<i>DOUBLE</i>		<i>MANAGED BY SOFTWARE</i>

FIPS Code	Name	FIPS Code	Name
10001	Kent County	10003	New Castle County
10005	Sussex County	01400	Arden
01530	Ardencroft	01660	Ardentown
04650	Bellefonte	05690	Bethany Beach
05820	Bethel	06730	Blades
07250	Bowers	08680	Bridgeville
10760	Camden	14660	Cheswold
15440	Clayton	18950	Dagsboro
19730	Delaware City	20380	Delmar
20900	Dewey Beach	21200	Dover
24020	Ellendale	24540	Elsmere
25840	Farmington	26620	Felton
26880	Fenwick Island	28310	Frankford
28440	Frederica	29090	Georgetown
31560	Greenwood	33120	Harrington
33250	Hartly	33900	Henlopen Acres
36760	Houston	39100	Kenton
41310	Laurel	41700	Leipsic
41830	Lewes	42870	Little Creek
44430	Magnolia	47030	Middletown
47420	Milford	47940	Millsboro
48200	Millville	48330	Milton
50670	Newark	50800	New Castle City
51190	Newport	53920	Ocean View
54050	Odessa	60290	Rehoboth Beach
64320	Seaford	64840	Selbyville
67050	Slaughter Beach	67310	Smyrna
67700	South Bethany	72510	Townsend
74330	Viola	77580	Wilmington
80830	Woodside	81350	Wyoming

## **Selected GIS activities at the IPA and WRA, University of Delaware**

### **Broadband Mapping in Delaware**

We have been involved in a comprehensive assessment of broadband capacity and provision of service within Delaware, under a federal stimulus grant. Geospatial components include geocoding of community “anchor institutions”, to determine the level of connectivity available to the public throughout the state. Other facets include census tract-level mapping of broadband availability, and modeling of priority areas for future infrastructure provision.

### **Wetland Change Mapping the in Inland Bays**

In conjunction with the College of Earth Oceans and Environment and the Center for the Inland Bays, we are using historical photography to assess the changes in the tidal marshes of the Inland Bays over time. Changes in marsh character (open water, high/low marsh components, scrub-shrub, etc.) will be captured for each of four time periods, as well as upland land use changes. Differences will be quantified over the period of interest (1937-2007). Using baseline transects, transgression of the marsh (upland boundary, shoreline, tree line, etc.) will be tracked as well. This information will be correlated with changes in the tidal regime over time, with the newest version of the SLAMM model used to extrapolate earlier conditions, based on long-term tidal records.

### **Web Mapping**

Web maps have been developed for several partners and clients, including trail maps for the federally designated White Clay Creek Wild & Scenic watershed ([whiteclay.org/wcmap](http://whiteclay.org/wcmap)), for the National Vegetation Classification System maps for the state, created by DNREC’s Natural Heritage Program ([brandywine.dgs.udel.edu/de-nvcs](http://brandywine.dgs.udel.edu/de-nvcs)), and FEMA flood mapping information for the state ([brandywine.dgs.udel.edu/flood](http://brandywine.dgs.udel.edu/flood)).

Andrew Homsey, GIS  
Services Manager  
IPA-WRA  
University of Delaware

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### **Center for Applied Demography and Survey Research (CADSR)**

Ed Ratledge, David Racca, Dan Brown, Tibor Toth, John Laznik, and others

The Center’s mission is to ensure that the best possible data and information on important public issues are developed and made available to members of the College, its clients, and most importantly, to the policy makers who affect the way we all live and work in Delaware. In regards to GIS there are a number of data resources and applications that CADSR has been developing including:

- A parcel based land records management system that integrates information on population, housing, land use, employment, projections, and a very wide range of demographic variables
- Continued development of a state wide point address file
- Route systems and standard state wide centerline files to analyze travel and to build archives for transportation system performance data.
- Regional economic models (REMI ) to examine the effects of a range of policy scenarios
- Georeferenced health statistic databases.

CADSR's GIS software includes ARCIMS and ARCGIS Server, all ARC Desktop and Workstation Products, SDE, and a wide range of web and data processing software.

**Recent projects include:**

- Development of an operations management plan for New Castle County for the Transportation Management Center
- Examination and development of feeder patterns for Delaware School Districts
- Use of GPS data as speed probes to examine travel
- Development of a parcel based population projection and allocation model for Delaware
- Cost benefit analysis for congestion management

**UD Citizen Monitoring Program, Ecology Lab at College of Earth, Ocean, and Environment's Lewes Campus.** Managed by the Sea Grant Marine Advisory service and funded by the State of Delaware

The UD Citizen Monitoring Program (<http://citizen-monitoring.udel.edu/maps.shtml>), is a volunteer-based water quality monitoring program. They have produced new dissolved oxygen maps, using volunteer mapping with ArcGIS You can view the maps here: <http://citizen-monitoring.udel.edu/maps/09DOmaps.shtml>

**Dr. Peggy Tseng, Department of Business Administration, Lerner College of Business** (ptseng@lerner.udel.edu)

Modeling consumer behavior at the zip-code level using aggregate sales data, in Delaware.

**Dr. Victor Perez, Department of Sociology and Criminal Justice, College of Arts and Sciences** (victorp@udel.edu)

Preliminary design of a study of disease outcomes within a framework of popular epidemiology and space