

**Delaware Spatial Data I-Team
House Hearing Room
Legislative Hall
Dover
9:00 a.m.
November 21, 2001
Minutes**

I-Team Members Present:

Connie Holland, Office of State Planning Coordination
Thomas Jarrett, State CIO
Dick Sacher, UD/RDMS
Sandy Schenck, DGS
Michael Ward, Kent County Planning
Tim Westbrook, New Castle County
Steven Foley, Sussex County
Dennis Murphy, DNREC
Vince Rucinski, DelDOT

Others Present:

Mike Mahaffie, Office of State Planning Coordination
Dorothy Morris, Office of State Planning Coordination
Dave Racca, UD CADSR
John Laznik, UD CADSR
Trim Lucas, DNREC
Mark Headd, DTI

Welcome and Introductions

Connie Holland began the meeting by asking everyone to introduce themselves.

Approval of August 23, 2002 minutes

A motion was made by Tom Jarrett, seconded by Mike Ward, and unanimously approved by all members present to accept the minutes of the August 23, 2002 meeting.

Project Updates

OrthoImagery Project

Mike stated that the last report he had on the project was for October. The imagery has been acquired and scanned and aerotriangulation is complete. About 5% of the compilation is complete. Mike stated that he expected to begin seeing the orthos in about a month. The pilot project will be the Route 1 area between Lewes and Rehoboth. He added that a group planned to visit the vendor and discuss the project on November 22.

Connie discussed how important these orthos would be to municipalities and counties as they update their plans.

Sussex Cadastral work

Steven Foley, of Sussex County, said that the final product was received on November 21 and that County staff are working to bring it completely up to date. They hope to have available to the public in 2 to 3 months.

DataMIL/UCGIS

Dick Sacher stated that he will give a presentation on DataMIL in February at a meeting in Washington sponsored by the University Consortium on GIS (UCGIS). He expects to speak on the project to Congressional leaders.

USGS MPO Office

Sandy Schenk stated that the USGS will fund a full time person to work in Delaware. The DGS will provide office space and Sandy note that he will meet further with USGS to coordinate the establishment of the office. USGS has posted the position internally.

Sandy also noted that he has met with USGS on the design of the new topo maps and that he is working with them to set the process to gain the USGS seal of approval on the DataMIL version of the new maps.

GIS Conference

Mike reported that a date has been set for the 2003 Delaware GIS Conference. The Conference will be held on April 29, 2003, at the University of Delaware's Clayton Hall. The Conference Working Group is working on finding speakers for the conference.

Cadastral/Centerline Integration

Mike Mahaffie discussed cadastral data and the idea of combining cadastral and centerline files so that the two data sets match more closely and can be updated easily (presentation slides attached). Mike discussed who is currently responsible for maintaining each data set and what might happen with integration.

Dave Racca discussed the applications that this information can be used for, including the DelDOT household survey, response times, and travel studies.

Vince Rucinski noted that this approach would help reduce duplication. He stated that DelDOT is looking for an approach to have just one data set.

Tom Jarrett stated that he sits on the 911 committee and they are getting ready to move to wireless. He stated that the map structure needs to be up-to-date and it must be the same for all areas.

Tim Westbrook stated that New Castle County is getting ready to spend \$75,000 to take the Geo files and the CAD files and move them all into one data set.

Mike Mahaffie stated that the functional leadership for this will be in the counties. Tim agreed but stated that it would be a lot of work to get there.

Sandy asked about the attribution data on the road network and would this data be available to everyone. Vince stated that he would be careful with what was published.

Sandy questioned the standards for the dataset. It was discussed that the information is out there but it needs to be brought together. Sandy stated that he thought the different agencies should get together to discuss.

Mark Head stated that he does not hear anyone disagreeing with the concept and stated that if everyone agrees, it is time to figure out what the issues are.

Tom Jarrett stated that the 911 Advisory Board currently oversees the E-911 process but that the data is owned by Verizon. He further stated that a mapping structure was needed so the counties are all dealing with the same issues and they can communicate.

It was further discussed that a working group should meet and that the standards should be set across the State. Sandy asked if it needed to be formal. It was decided that Mike would begin to construct a document with standards and then meet with the Counties and DelDOT as a Working group.

A motion was made by Tim Westbrook, seconded by Mike Ward and unanimously approved by all members present that this effort continue to move forward with Mike Mahaffie beginning to outline standards.

Mike Mahaffie asked if Phil Cabaud, the Governor's Homeland Security Advisor, should join the Working Group. It was discussed that a representative from DEMA should also be involved. Tom stated that someone should talk to Phil before making him a member.

Tom Jarrett asked what the authority of the committee is. Mike Mahaffie stated that Executive Order 18, which established the I-Team, directs the I-Team to maintain Delaware Spatial data Framework. There is no legislative mandate.

Tom stated that it should be possible to push the standards with the Governor's office approval. He felt that if a small group would get together they could get it done.

Sandy noted that the Executive Order states that this group maintains standards and that this group decides how it should be done.

Tom suggested information be put together to educate the legislators on this committee and its goals.

Elevation Data Update

Tim Lucas, of DNREC's Coastal Programs, gave an outline of progress in his efforts to craft a Request For Proposals (RFP) for a statewide LIDAR Project. Mike Mahaffie noted that much of the money is coming from Coastal Programs and FEMA. FEMA may fund all of Sussex and there might be help from NRCS for Kent and Sussex but money is still needed.

Dennis Murphy asked what the accuracy of the elevation will be. Sandy noted that the possible accuracy, and the requirements of FEMA's flood mapping work, both point to a data product with approximately 2-foot contour lines.

Mike stated that it needed to be determined when the project should be finalized and when it should be flown.

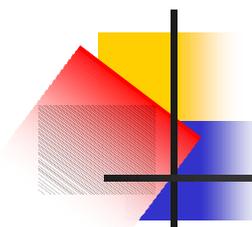
Annual Report

Mike Mahaffie went over the information that he plans to include in an annual report to the Governor on Delaware's Framework (presentation slides attached). He asked that the committee members send him e-mails with any additional comments. Connie asked that Mike e-mail Tom or Mark since they had to leave early.

There being no further business, the meeting adjourned.

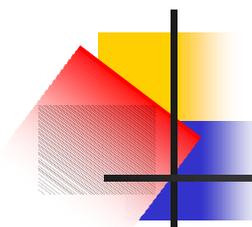
Cadastral/Transportation Partnership

Some Rough Ideas



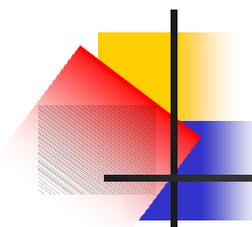
Presently

- Cadastral (parcel) data maintained by each county
 - Cadastral, by default(?), shows rights-of-way (ROW)
- Centerline data maintained by DeIDOT
 - Not necessarily from Center of ROW
 - Doesn't always match cadastral
 - Not all streets/Transportation items mapped
 - As compared to Topo Maps



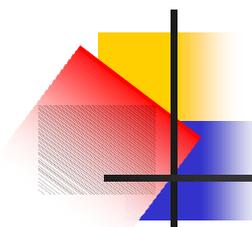
Presently

- Counties “approve,” name, and map streets as part of subdivision/cadastral process
- Counties report streets to DeIDOT, periodically(?)
- DeIDOT maintains records mostly of state-maintained streets
- DeIDOT periodically conflates a statewide data set



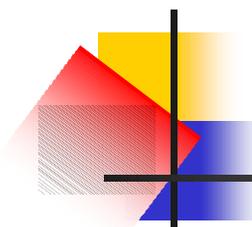
So, why not

- Let Transportation Dataset be a distributed statewide dataset
- Maintained at the local (county) level
- With additional attribute data (as appropriate) from DeIDOT
- With state (DeIDOT/DataMIL?) role in aggregating and serving statewide dataset



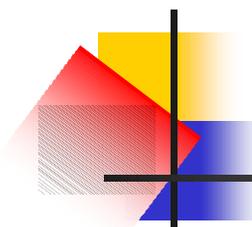
ROW vs. Pavement

- Much of County data use relies on center of ROW
 - Zoning, etc.
- DeIDOT uses centerline of road (center of pavement)
- They don't always match



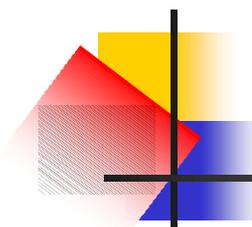
ROW vs. Pavement

- Both Centerline and Center of ROW are useful
- Maintain data set of both, with appropriate code on line-segment, i.e.:
 - Is Center of ROW
 - Is Road Centerline
 - Is Both



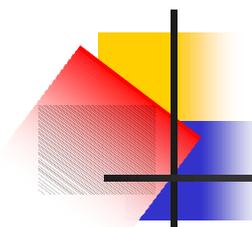
County Would Maintain

- Line work, based on Cadastral
 - At least Center of ROW lines
- Basic attribute data
 - Name
 - Functional Codes
 - Others?
- Addresses?
 - Address range approach should be replaced by point-to-address tables



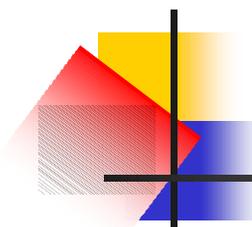
DeIDOT Would Maintain

- Added attribute tables, i.e.
 - Mile-point ranges
 - Pavement type
 - Speed limit
 - State/US Route numbers
 - Maintenance ID?
- Derived data sets such as
 - Main Roads
 - Emergency Routes?



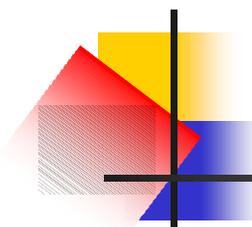
Who Takes Care Of:

- Road centerlines that are not Center of ROW?
 - DeIDOT provides, based on regular Aerial photos and/or as-built data?
 - The County maintains?
 - Should they be conflated?



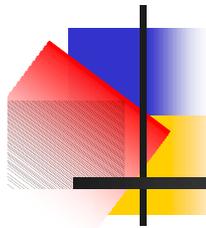
Who Takes Care Of:

- All that stuff that USGS puts on Topos that we haven't traditionally mapped?
 - Pipelines
 - Transmission Lines/Towers?
 - Trails/paths
 - Private Roads

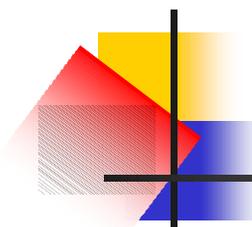


And What About

- Symbology for different roads types?
 - Dual Highways?
- Railroads?
- Statewide standards?

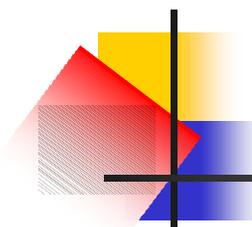


2002 Framework Report



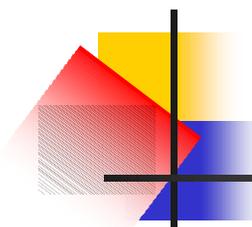
Overview

- Framework complete since 2000 at, at least, 1:24,000
- In 2002,
 - Major enhancements in Cadastral data
 - DataMIL implementation has led to needed discussions/changes
- In 2003,
 - Enabling truly distributed data-sharing



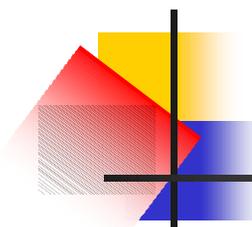
OrthoImagery

- Dated 1997
- 1-meter pixels, at 1:12,000
- Distribution
 - Spatial Analysis Lab (simplified)
 - DataMIL
 - Environmental Navigator
 - SmartMap Sites
 - On-Demand
- Metadata Published



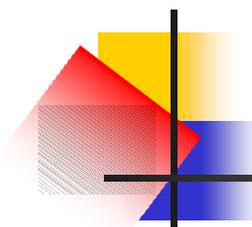
OrthoImagery (New)

- Responsibility:
 - I-Team (OSPC Staff Lead)
- Funding
 - DeIDOT
 - DNREC
 - New Castle County
 - OSPC



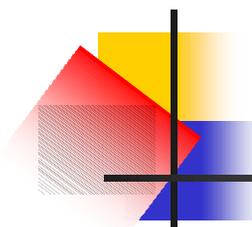
OrthoImagery (New)

- Available starting on or about 1/1/03
- 1-foot pixels, at 1:2,400
- Distribution?
 - DataMIL
 - Environmental Navigator
 - SmartMap Sites
 - On-demand
 - Other??
- Metadata to be Published



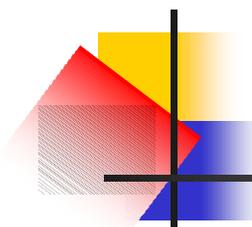
OrthoImagery, Future

- Next Round?
 - 2005?
 - Funding?
- Move to Digital Camera?
- Track Satellite Technology



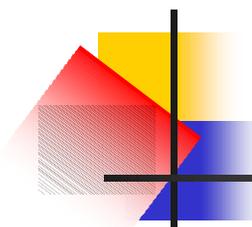
Geodetic Control

- National Geodetic Survey HARN Network
- Maintained by the National Geodetic Survey
- Local Contact: Delaware Geological Survey?
- Metadata Published



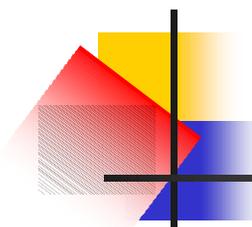
Geodetic Control, Future

- Keep in Framework?
- Tie-in with “less accurate” monumentation?
- Tie-in with survey community?



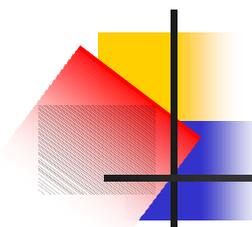
Cadastral/Parcels

- Maintained by Counties
- Varied Scales (?)
 - Most now match to 1:12,000 OrthoImagery
 - "At least 1:12,000"?
- Metadata Not Published



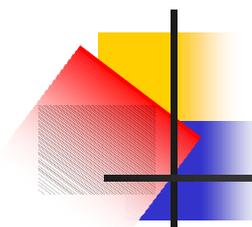
Cadastral/Parcels

- Distribution Varied
 - New Castle Co.: ArcIMS, not a Map Service (yet?)
 - Kent Co.: Smartmap, not a Map Service (yet?)
 - Sussex Co.: Smartmap(?), not a Map Service (yet?)
- No Download sites (yet?)
- Available on demand?



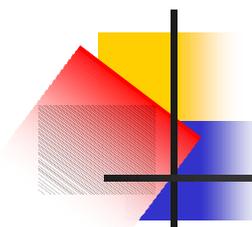
Cadastre/Parcels, Future

- Need to add to DataMIL
- Or other map service/Open GIS environment
- Need download sites
- Statewide Standards?
- Added attribute data?



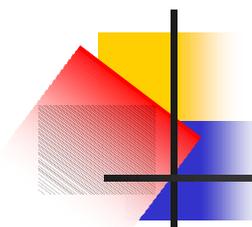
Land Use/Land Cover

- Dated 1997 (Derived from OrthoImagery)
- 1:12,000
- Distribution
 - DataMIL
 - SmartMap Sites
 - Download from OSPC Web Site
- Metadata Published



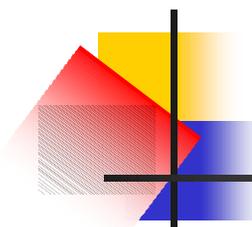
Land Use/Land Cover (New)

- To be derived from 2002 OrthoImagery
- Responsibility:
 - I-Team (OSPC Staff Lead)
- Funding
 - DeIDOT
 - DNREC
 - New Castle County
 - OSPC



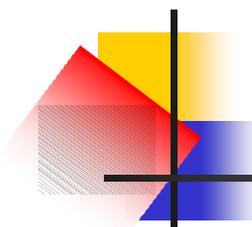
Land Use/Land Cover (New)

- Available by 6/30/03
- 1:2,400
- Distribution
 - DataMIL
 - SmartMap Sites (?)
 - Download from OSPC Web Site
- Metadata to be Published



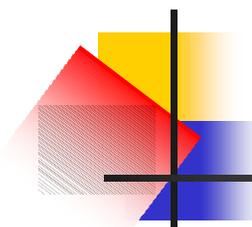
Land Use/Land Cover, Future

- Closer tie to cadastre/parcel data?
- To allow more “real-time” updates?



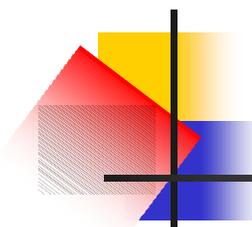
Geographic Names

- Geographic Names Information System (GNIS)
- Maintained by USGS
- Distribution
 - DataMIL
 - USGS
- Metadata Published



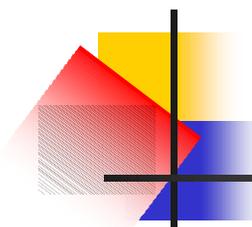
Geographic Names, Future

- Move from “label-point” GNIS approach to attribute for specific features
- Many issues with USGS legacy approach
- Many names missing
 - New sub-divisions?
- What is the real future for GNIS?



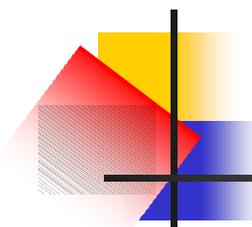
State/County Boundaries

- USGS Delaware State and County Boundary Lines
- From Digital Line Graph (DLG)
- 1:24,000
- Stitched together from 57 quad sheets (Thanks Shannon!)
- Distribution
 - DataMIL
- Metadata Published



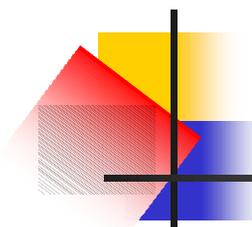
State/County Boundaries, Future

- Boundary vs. Shoreline
- County Boundaries
 - Relate to Cadastre?
- Boundary Monuments
 - Incorporate
 - Lock to



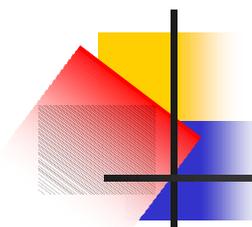
Municipal Boundaries

- Published by OSPC
- Generally 1:12,000, often larger scale
- Distribution
 - DataMIL
 - Download from OSPC Web Site
- Metadata Published



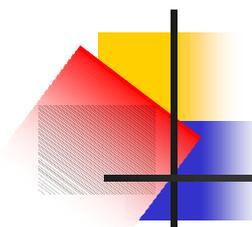
Municipal Boundaries, Future

- Continued Coordination with County Cadastre
- Updates via Municipal County Comprehensive Planning Process
- Establish stand-alone Municipal Boundaries Map Service?



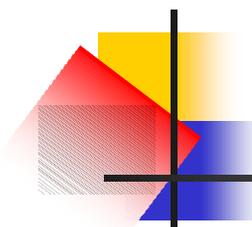
Other Boundaries

- Census Geography
 - On DataMIL, Census Mapper
 - To be realigned?
- Senate and Representative Districts
 - Published by Elections Commissioner
 - Based on Census
 - Will need update?



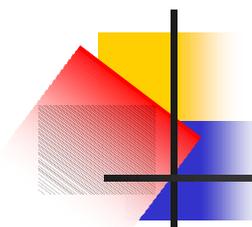
Elevation

- USGS 10-foot (meter?) Contour Lines
- From Digital Line Graph (DLG)
- 1:24,000
- Stitched together from 57 quad sheets (Thanks Shannon!)
- Distribution
 - DataMIL
- Metadata Published



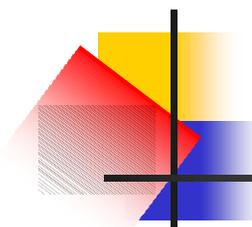
Elevation, Future

- LIDAR to develop “tighter” contours
 - Multi-agency project
 - As funding available
 - Led by Delaware Coastal Programs
- Digital Elevation Models?



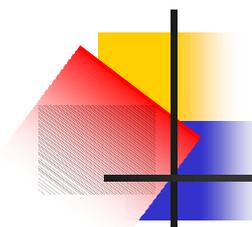
Water

- From Digital Line Graph (DLG)
- 1:24,000
- Stitched together from 57 quad sheets
(Thanks Shannon!)
- Distribution
 - DataMIL
- Metadata Published



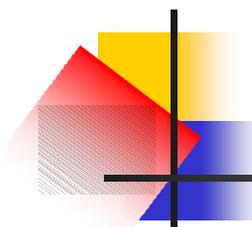
Water, Future

- Transfer to National Hydrography Dataset (NHD)
- Complete NHD for Delaware
 - Parts complete
 - Parts under way
 - Funding for the rest?



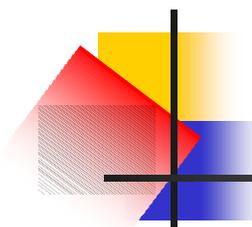
Watersheds

- DNREC Watersheds (1998)
- 1:12,000
- Distribution
 - DataMIL
 - Environmental Navigator
 - On-demand
- Metadata Published



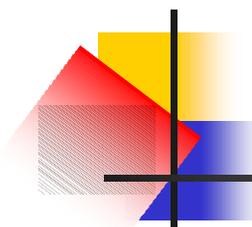
Watersheds, Future

- Coordinate with USDA/NRCS and USGS efforts
- Match to MD and PA at state lines?



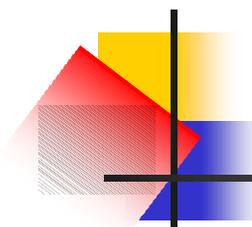
Roads

- DeIDOT Centerline Files
- 1:12,000
- Distribution
 - DataMIL
 - DeIDOT
- Metadata Published



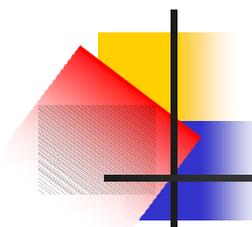
Roads, Future

- Transfer to County Cadastre/DeIDOT partnership?
- Center of ROW issues v.s. Center of Roadway issues
- Features from USGS Topo maps?



Railroads

- DeIDOT Centerline Files
- 1:12,000
- Distribution
 - DataMIL
 - DeIDOT
- Metadata Published



Railroads, Future

- Transfer to County Cadastre/DeIDOT partnership?
- Maintenance?