



Facilitating the sharing and coordinated use of spatially referenced data in Delaware

**Meeting Minutes
DGDC Meeting
9:00 a.m., September 19, 2007
State Conference Room, Paradee Center
Transportation Circle,
Dover, DE**

Attendance List:

Mike Mahaffie	OMB
Renee Dixon	OMB
Laura Simmons.....	OMB
Sandy Schenck.....	DGS
Brad Strittmatter.....	DGS
Lillian Wang.....	DGS
Miriam Pomilio	DGS
Dick Sacher	UD/RDMS
John Laznik.....	UD/CADSR
Mike Krumrine.....	DNREC
Deborah Sullivan	DNREC
Michael Townshend.....	DNREC
Shannon Splittorff	DNREC
Carl Yetter.....	DNREC/DCP
Kim Cloud	DTI
Jeff Savin	DTI
Matt Laick	DeIDOT
Mollie Raley	DeIDOT
Darin Dell	DeIDOT
Peggy Bacon	DeIDOT
Bruce Allen	DeIDOT
Jay Gerner	DeIDOT
Don Berry.....	DOE
Tom Steele	DSHS
Rick Sherwood.....	DEMA
Valerie Miller	DSHA
Mary Harper.....	State/HCA
George Yocher	DPH
Andrea Maucher	PSC
Kevin Neilson.....	PSC
Patrick Susi.....	New Castle Co.
Tom Peralta	New Castle Co.
Mike Ward.....	Kent Co.
Megan Dean	Sussex Co.
Dan Blevins.....	WILMAPCO
Josh Waltz	Dover/Kent MPO
Roger Barlow	USGS
Alexander Montano.....	Dover AFB
Bill Burgess.....	NSGIC
Bruce Allison.....	Wesley College
Brianne Press	GeoDecisions
Laura Konwinski	URS Wilmington
Jocelyn Lutte.....	Artesian Water
Shannon Rose	McCrone
Andrea Wedo.....	JCM Env.
Bill Steigenwald	News Journal
Phil Pierdomenico.....	Rowan University

Welcome and Introductions

Mike Mahaffie began the meeting at approximately 9:10 a.m. with a round of introductions.

Mike noted that several DGDC members had received a letter from a company called Unison asking for cell tower data. He advised that anyone receiving one should contact him; a request has been forwarded to the appropriate data steward for that data.

DGDC Reorganization

Mike Mahaffie, Office of Management and Budget, gave an overview (attached) of Delaware Geographic Data Committee. Historically the DGDC was tied into the Office of State Planning Coordination and was a group open to everyone. Until recent legislation was passed, the DGDC did not have a lot of authority but was able to accomplish many things.

He noted that the group had determined several years ago that it needed to reorganize and become more formal. Legislation was developed and was fine-tuned with input from several state agencies, including the Department of Safety and Homeland Security and the Department of Technology and Information.

A reorganized DGDC has been established under Chapter 91 of 29 Del. Code. The DGDC remains an open committee, anyone can be a member. An Executive Council of the DGDC has been established to oversee the coordination of the use and sharing of geospatial data and information in Delaware.

The Executive Council will have thirteen members:

1. The Director of the Office of Management and Budget
2. The Secretary of the Department of Technology and Information
3. The Secretary of the Department of Safety and Homeland Security
4. The Secretary of the Department of Transportation
5. The Secretary of the Department of Natural Resources and Environmental Control
6. The County Executive of New Castle County
7. The County Administrator of Kent County
8. The County Administrator of Sussex County
9. The Director of the Delaware Geological Survey
10. A Federal Geospatial Liaison to be named by the Federal Geographic Data Committee
11. A representative of the Academic Community
12. A representative of the Delaware Municipal Government
13. A representative of the whole DGDC (At Large)

The last three representatives are to be chosen annually from among the membership of the Delaware Geographic Data Committee by the members of that Committee.

A staff member from the Office of Management and Budget is assigned the role of State Geospatial Data Coordinator and serves as the non-voting Chair of the Executive Council.

David Racca, University of Delaware, announced that a caucus of GIS professionals at the University of Delaware had held discussions on the legislation and nominated him for the post of Academic Community representative.

A motion was made by Michael Townshend, seconded by Phil Pierdomenico, to approve the nomination of David Racca to serve on the Executive Council as Academic Representative. **The motion was passed unanimously.**

David Racca noted that is serving in the position as a representative of all of the academic community and would welcome input from any academic members.

Mike Mahaffie opened the floor for nominations for the Delaware Municipal Government Representative.

Miriam Pomilio nominated Mark Nowak (of Dover) and Rick Steffers (of Wilmington).

George Yocher asked how the municipal representative differs from a county representative. Mike Mahaffie noted that some of the larger municipalities stand alone in terms of governance and use of GIS.

Dick Sacher asked whether the group as a whole should vote for representatives from specific interest groups. Mike Mahaffie explained that that is how the legislation was written.

Carl Yetter suggested a representative from the League of Local Governments.

Mike Mahaffie noted that Jim Weldin does attend the DGDC meetings as a contractor for the League of Local Governments. It was generally agreed that he should also be nominated, assuming he is willing to serve in that capacity. It was also agreed that, since none of the three nominees were present, they should be asked their willingness to serve before any votes are taken.

A motion was made by Kim Cloud, seconded by Miriam Pomilio, to vote hold a vote at the next DGDC meeting to choose from among three nominees for the Municipal representative: Jim Weldin, Rick Steffers, and Mark Nowak. **The motion passed unanimously.**

Mike Mahaffie opened the floor for the At-Large DGDC Representative.

There were four persons nominated who agreed to be considered for the position. They were Pat Susi (New Castle Co.), Dan Blevins (WILMAPCO), Lillian Wang (DGS), and Brianne Press (GeoDecisions).

Kim Cloud asked if an agency was already on the Executive Council should that keep an employee of that agency from being on the committee as the At Large Representative. Mike Mahaffie answered that he was not for sure but would not think so as the At Large Person represents the DGDC Committee as a whole.

Pat Susi noted what he called a “trickle down effect,” where the members of the council may send proxy representatives to the meeting. He wondered whether, in his case, that might result in his being assigned to represent New Castle Co. and the committee at-large. Mike Mahaffie advised the group to take that into consideration, but noted that he plans to encourage executive-level participation in the Executive Council as much as possible.

A motion was made by Pat Susi, seconded by Carl Yetter, to vote at the next DGDC meeting to choose an At-Large Representative from among four nominees: Pat Susi (New Castle Co.), Dan Blevins (WILMAPCO), Lillian Wang (DGS), and Brianne Press (GeoDecisions). **The motion passed unanimously.**

Mike Mahaffie stated that a working group needs to be established to draft DGDC Bylaws. After some discussion, it was generally agreed that Mike Mahaffie will lead the effort, supported by Matt Laick, Carl Yetter, and Michael Townshend. This group will prepare a draft of by-laws for both the Executive Council and the larger DGDC for consideration at the next DGDC meeting.

Mike Mahaffie stated that he would like the DGDC to recommend to the Executive Council an expression of support from Delaware for the Imagery for the Nation program now under consideration (See <http://www.nsgic.org/hottopics/imageryforthenation.cfm>). Under Imagery for the Nation, the federal government would take a lead on, and provide funding for, regular national orthophotography updates.

Bill Burgess added some details, explaining that the program has three parts:

- An annual, 1-meter, leaf-on data set for all of the lower 48 states.
- A 1-foot, leaf-off data set collected for part of the state every three years and funded by the federal government with a series of buy-up options to allow states to increase coverage and add value-added products, and
- A 6-inch data-collection program in selected urban areas with a mandatory 50% cost-share by states.

Bill Burgess stated that the federal government has completed a Cost Benefit Analysis of the Imagery for the Nation Initiative and released it for review at http://www.ndop.gov/pdf/Imagery_for_the_Nation_IFTN_CBA_072007.pdf.

NSGIC and several other groups are now working with staff on Capitol Hill to try to get Imagery for the Nation both authorized and funded. Bill Burgess stressed that the program is not yet “real” and that no funds have been dedicated yet.

Dick Sacher asked if anyone has looked at all the possible options and costs and compared that to what we have done on our own. He asked what the savings might be to the state.

Bill Burgess explained that analysis has shown that, on the national level, basic program costs dropped approximately 35%. He added that a national program would also save states a great deal of time and stress. And, he noted, quality control would be administered by the federal government.

Mike Mahaffie explained that in planning for the state’s current orthophotography program, Delaware had reached-out to Maryland, Pennsylvania and New Jersey about the possibility of combining orthophotography projects to save money. He said that that was not possible because of differences among the states in their approaches to contracting and funding. Having the program coordinated at the federal level would alleviate that problem.

Michael Townshend expressed support for the idea, but asked how the base product would compare to the product Delaware has contracted for this year through Sanborn. Mike Mahaffie answered he was not certain, but that it was more or less on par.

A question was asked if flight time could be chosen and what the horizontal accuracy will be.

Bill Burgess explained that the annual 1-meter product will always be leaf-on, to support agricultural uses and that the higher-resolution product will always be leaf-off. He added

that horizontal accuracy will be from 4 to 5 feet on 1-foot product with an option to buy-up to higher accuracy levels.

Roger Barlow asked about the relationship between Imagery for the Nation and the National Geospatial Intelligence Agency's requirement to for biannual data for specified urban areas. Bill Burgess responded that that issue is still under discussion by technical working groups.

There was additional discussion of the project details, centered on the timing and data types.

Bill Burgess reiterated that only the current version of Imagery for the Nation guarantees only partial coverage of the state every three years and that full coverage, and added products, will require state participation, but that there will still be cost-savings for the state.

A motion was made by Carl Yetter, seconded by Michael Townshend, to recommend to the Executive Council of the Delaware Geospatial Data Committee that a letter of support from Delaware for the Imagery for the Nation program be written. **The motion passed unanimously** and will be forwarded to the Executive Council.

Mike Mahaffie noted that the Imagery for the Nation handout that was available at this meeting is from earlier this year and some of the project details have changed. When a new handout is drafted, Mile will make that available to the group via e-mail.

Data Project Updates

TeleAtlas/Roads Project

Matt Laick gave an update on the status of the TeleAtlas/Roads Project. The data was received and has been distributed in some places. If anyone has any detailed questions, they should contact Matt.

Roger Barlow stated that there is interest in coordinating with the USGS on getting Delaware's data into the National map. Matt will work with Roger on getting the information to the USGS.

Matt stated that Kim Cloud will give an update on the distribution process for the TeleAtlas/Roads Project in her DTI eGIS report.

Sussex Elevation Data

Sandy Schenck gave an update on the status of the Sussex Elevation data project by the USGS, NOAA and NASA. The data was delivered this summer and there are some issues with the data, such as hydro enforcement issues which caused contours to show up in water bodies.

USGS did some work to correct these problems and the eastern part looks good; however, issues have been found for the western area. Sandy advised that he has another meeting this afternoon to discuss approaches to correct problems. He said that it is possible that it may make more sense to make corrections to the contours and use that data to adjust the DEM, rather than to fix the DEM and generate new contours. Problems stem from a lack of break lines for this DEM.

The third deliverable from the project is absolute raw LIDAR data collected using the EAARL LIDAR system. Sand noted that EAARL data requires the use of a special processing software called ALPS. He said that ALPS is free to download and use but no one in Delaware has ever downloaded it or used it. Sandy suggested the possibility of having a training workshop if there was enough interest.

Sandy will collect the raw LIDAR data today and deliver it to Dave Carter's group at DNREC. DGS will maintain a copy of the raw data; if anyone is interested contact Sandy.

Michael Townshend asked Sandy how confident he was in having the Kent contour data, from Sanborn, line-up with the new USGS contours for Sussex. Sandy responded that is another topic of his meeting this afternoon. Sandy stated that one option is to take the remaining money from the project and contract Sanborn to fix problems in the Sussex data.

Sandy said that he is not sure how the Sussex contours will look compared to New Castle and Kent because there are no break lines. Sandy continued that this has been a learning experience and details like break lines were not spelled out in the agreement with the contractor, USGS, as it was assumed they knew what they were doing.

Mike Mahaffie noted that the problems Sandy has found in the USGS LiDAR project data are specified in the RFP response that was used to choose Sanborn for the Kent and New Castle County project.

Sandy Schenck added that, despite the problems in the data, the information is still stimulating and he does not want to "let it go." There are all kinds of scenarios to explain the data change. Sandy advised group to be aware that using LIDAR as a technology tool was not going to produce a "cartographically" perfect product.

Carl Yetter echoed Sandy's thought that this has been a learning experience and that using the new data will require some adjustments, but he added that the detail is amazing on the basic EAARL multi return LIDAR system.

Sandy noted, as an example, that it is possible for the coastal program to use the raw data and process it to map all the phragmites in Sussex Coastal marshes.

Ortho/Elevation Data Project

Mike Mahaffie gave an update (attached) on the status of the Ortho/Elevation Data Project. The data has been collected and is now being processed using two pilot areas, one near Odessa and one near Seaford. The data is different from 2002. This data is digital rather than film-based and delivered in four (4) bands rather than three. That allows for some different viewing and analysis options.

Mike said that not a lot of problems have been found in the pilot areas.

Sanborn is using an automatic process to map impervious surfaces. Comparing imperviousness between the 2002 data and the new data will guide the analysts performing the Land Use/Land Cover update.

Mike also noted that discussions have been held with Sanborn regarding revising the Anderson scheme used in the state Land Use/Land Cover data.

Mike expects usable ortho data to be available starting with Sussex in late October, Kent in November and New Castle in late November. Land Use data should be available starting with Sussex in December or January. And contours should be available in January or February of 2008. The schedule is subject to change.

Molly Raley asked if a higher-resolution was being looked at as part of the revision of the Anderson scheme. Mike responded that the same minimum mapping unit will be used. The changes will be more in interpretation. For example, he said, it was determined that if an area under "transition" showed clear signs of what it is being transformed into, it will be classified as its new use, rather than just "transition."

An Examination of Address Data Sources for Delaware

David Racca, of the University of Delaware, gave an overview (attached) of his review of available address data sources.

He worked on the project with Don Berry, of the Department of Education. Don noted that the Department of Education receives approximately 400 calls weekly from parents inquiring what school their children will attend. The Department has been working with the University to develop a website to assist in answering these questions. The key to the website is that it can actually find the addresses being typed in.

David showed the relative accuracy and value of several different data sources now in use in Delaware and suggested that the DGDC and Executive Council consider adding Address Points to the Framework.

He noted that address data sources can be used for other things other than education, such as public safety, facility planning, health, jurisdictions, etc. He said that the data should be completely in public domain with no restrictions in use. He suggested that all related products be free, documented, and readily available. He said that it is

appropriate to have a community oversight approach with a focus on the quality of the data.

Matt Laick stated he would be glad to help with and committee working on this issue.

Sandy Schenck asked if having addresses be a part of the Framework would require having a data steward. David answered that the counties and municipalities would be the data stewards. He noted that the Department of Education would be the steward for education data.

Mike Mahaffie stated now is a good time to start looking at Framework and think about how it should be expanded. Mike expressed support for the idea of focusing on address points.

There was a general discussion about “place” data. Sandy suggested that the Geographic Names Information System (GNIS) be looked at as part of this idea. Roger Barlow noted that, by law, the USGS is the data steward for GNIS data and can include buildings. Sandy Schenck is the State Names Authority for Delaware and is responsible for working with USGS on GNIS for Delaware.

There was a general discussion of possible approaches to providing a more up to date Place-name data set for the Delaware Framework. There were several suggestions on how to handle the issue of data stewardship.

A motion was made by Phil Pierdomenico, seconded by Matt Laick, to recommend to the Executive Council of the Delaware Geospatial Data Committee that an Address Data Source Working Group be established. **The motion passed unanimously and will be forwarded to the Executive Council.**

Pat Susi recommended that all three counties be represented on working group. Other recommendations for membership were Matt Laick, David Racca, and Terry Whitham.

A motion was made by Laura Simmons, and seconded by Phil Pierdomenico, to vote at the next DGDC meeting to choose a chair for the Address Data Source Working Group from among three nominees: Matt Laick (DelDOT), David Racca (UD), and Terry Whitham ((DSHS). **The motion passed unanimously.**

DTI eGIS Update

Kim Cloud gave an update (attached) of the DTI Enterprise GIS initiative. The intent of this project is to position DTI to support the needs of the DGDC and the executive council. Goals of this project are:

- Statewide software standard established
- Statewide licensing
- Centralized database for public use
- Mechanism for secure interchange
- Standard, reusable architecture for applications

- Web Services

An agreement was signed with ESRI on July 1, 2007, providing an enterprise license for all state agencies most ESRI software. The agreement does not include K-12 or higher education.

Kim explained that DTI staff have defined a cost structure with separate pricing for new purchases and for annual maintenance. There will be volume discounts. Kim asked that any agencies that have already paid maintenance for the current fiscal year, or who have new invoices from ESRI, to contact her.

Kim gave an update on the distribution process for the TeleAtlas/Roads Project. A secure website has been established. A secure website is required to limit access to data due to the terms of the agreement with TeleAtlas. State employees are to work with their ISO to request access and non state employees will work with Kim to request access.

Pat Susi questioned if the site would host links. Kim answered that all details have not be defined yet.

Carl Yetter inquired how this site works with the Clearinghouse site or DataMIL. Mike Mahaffie responded that DataMIL is limited to providing a central site for Framework data and added that the DTI site will be integrated with the Clearinghouse and DataMIL.

There was a discussion of the TeleAtlas license agreement and restrictions on the data. Matt Laick will work with members who have concerns and will make sure that the latest version of the License is posted, along with a brief overview of the agreement.

Mike Mahaffie expressed his gratitude to Kim and DTI for all their hard work.

Mike Mahaffie asked if there were any addition announcements.

Michael Townshend mentioned that DNREC has published metadata on, and is making available for download, several environmental data sets, including data on water recharge areas.

Michael also noted that he has looked into the DTI enterprise license and estimated that it will save DNREC \$12,000 in licensing fees.

Roger Barlow mentioned an effort to provide tools to states that they can use to delineate an official "shoreline," including high water, low water, and other factors. Mike Mahaffie asked Roger to send him an email with details for future consideration.

Pat Susi began a discussion centering on the recent sale of a lighthouse in the Delaware Bay and uncertainty about cadastral data for "out in the Bay." That led to a

discussion of updating county boundary data and re-energizing the County Cadastral Working Group. That will be a subject for future meetings.

A motion was made by Miriam Pomilio, seconded by Deborah Sullivan, to adjourn the meeting. **The motion passed unanimously** and the meeting was adjourned at approximately 11:40 a.m.



DGDC Reorganization

- DGDC originally formed in 1998
 - Established in Code
- Tied to Land Use Planning
- Open to all
- Lacking explicit authority
- And yet much has been accomplished





Time to get more formal...

- Everyone is getting more serious about the use of geospatial data
 - Key to agency business
 - Standardization and sharable data are more important
- A national focus
 - FGDC and NSGIC's 50 States Initiative





Senate Bill 89

- Developed in 2005/2006 by DGDC members
- Refined in 2006/2007 by agency leaders
- Passed, signed and added to 29 Del. Code, Chapter 91, summer 2007





The New DGDC

- The DGDC remains as an open committee of those using GIS and spatial data in Delaware
- An Executive Council of the DGDC is created
- DGDC works through issues and makes recommendations for policy to the Executive Council





DGDC Executive Council

- 10 members specified in legislation
- 3 selected by DGDC
 - Academic
 - Municipal
 - At-Large
- Geospatial Data Coordinator
 - Assigned to a staff member at OMB
 - Non-voting Chair of DGDC and Executive Council





DGDC Executive Council

Director, OMB
Secretary, DTI
Secretary, DSHS
Secretary, DeIDOT
Secretary, DNREC
Director, DGS
New Castle Co. Exec.

Kent Co. Admin.
Sussex Co. Admin.
Academic Rep.
Municipal Rep.
At-Large Rep.
FGDC Rep.





Executive Council Duties

- Represent Delaware on geospatial issues
- Ensure availability of basic data
- Seek funding for data acquisition
- Set standards
 - Data
 - Metadata
- Oversee DataMIL, Clearinghouse and Data Projects





Here's the Key

“The Executive Council of the Delaware Geographic Data Committee shall rely on the expertise and consensus of the full membership of the Delaware Geographic Data Committee, whenever possible, in carrying out these duties.”

29 Del. Code, § 9143 (e)





Actions Needed

- Select DGDC representatives to the Executive Council
- Establish a Bylaws Working Group





Exec. Council Representatives

- “...chosen ... from among the membership of the [DGDC] by the membership of that Committee”
 - One representing the Academic Community
 - One representing Delaware Municipal Governments
 - One representing the Committee as a whole





A Bylaws Working Group

- Executive Council is to adopt Bylaws within six months
- Fairly basic
- Must include items specified in legislation
- Working group to create draft for consideration by DGDC and Exec. Council

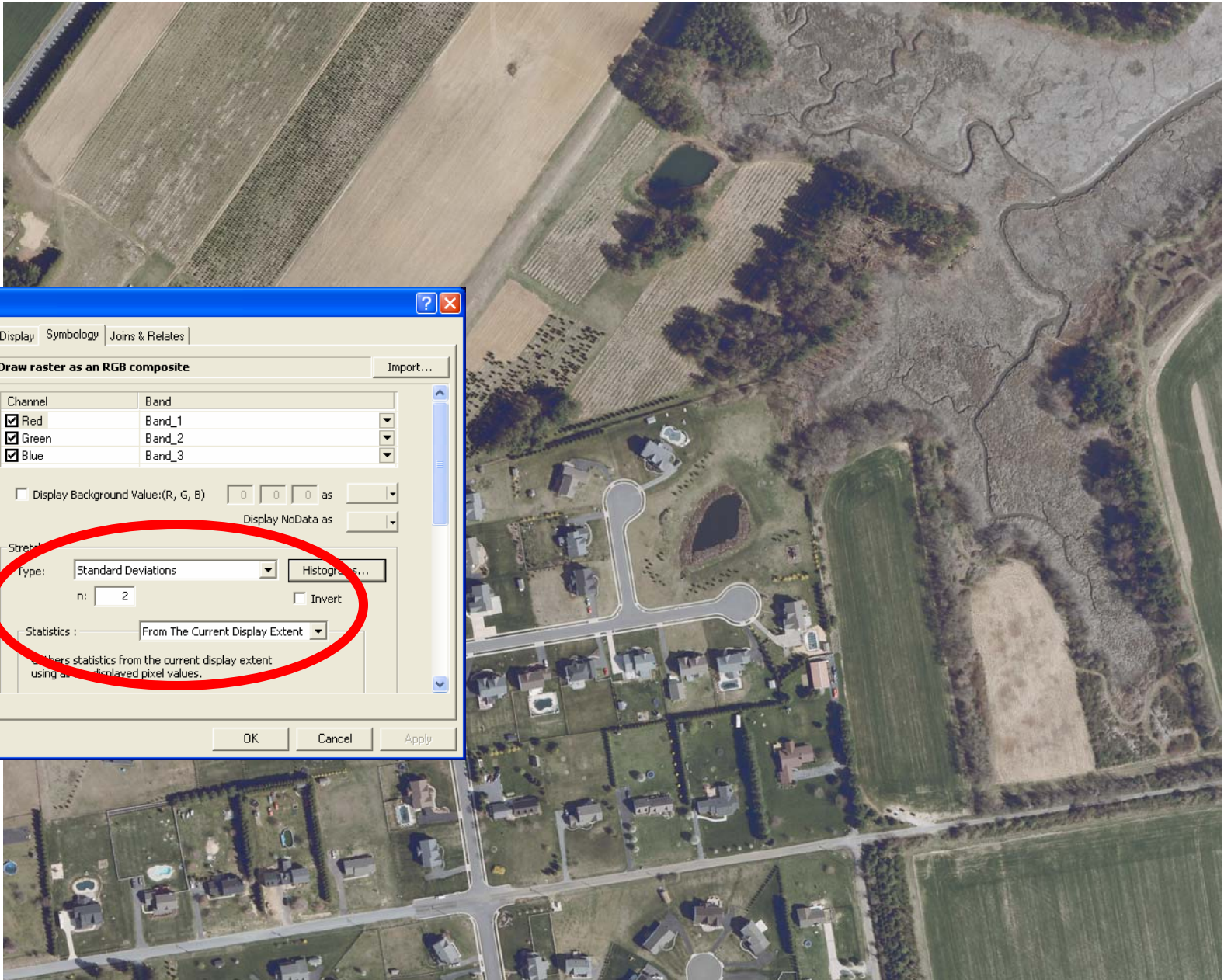




Ortho/Elevation/Land Use

- Data has been collected
- Data is being processed
- Pilot areas under review
 - New Castle Co., near Odessa
 - Sussex Co., near Seaford
- Subject matter experts, as needed





Layer Properties

General | Source | Extent | Display | Symbology | Joins & Relates

Show:
Stretched
RGB Composite

Draw raster as an RGB composite Import...

Channel	Band
<input checked="" type="checkbox"/> Red	Band_1
<input checked="" type="checkbox"/> Green	Band_2
<input checked="" type="checkbox"/> Blue	Band_3

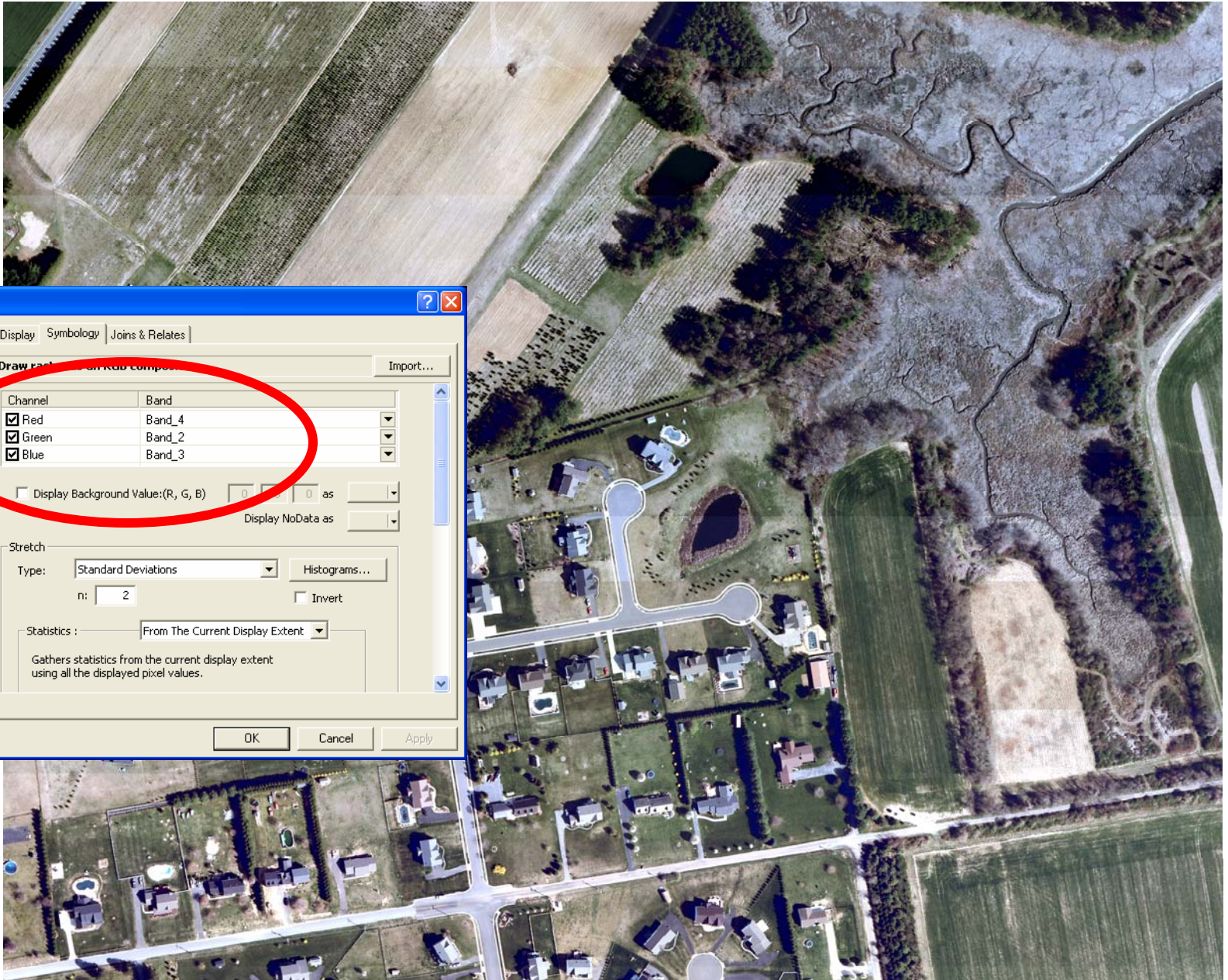
Display Background Value:(R, G, B) 0 0 0 as [] as []
Display NoData as []

Stretch
Type: Standard Deviations Histograms...
n: 2 Invert

Statistics: From The Current Display Extent

OK Cancel Apply





Layer Properties

General | Source | Extent | Display | Symbology | Joins & Relates

Show: Stretched
RGB Composite

Draw raster as RGB composite

Channel	Band
<input checked="" type="checkbox"/> Red	Band_4
<input checked="" type="checkbox"/> Green	Band_2
<input checked="" type="checkbox"/> Blue	Band_3

Display Background Value:(R, G, B) 0 0 as

Display NoData as

Stretch

Type: Standard Deviations Histograms...

n: 2 Invert

Statistics: From The Current Display Extent

Gathers statistics from the current display extent using all the displayed pixel values.

OK Cancel Apply



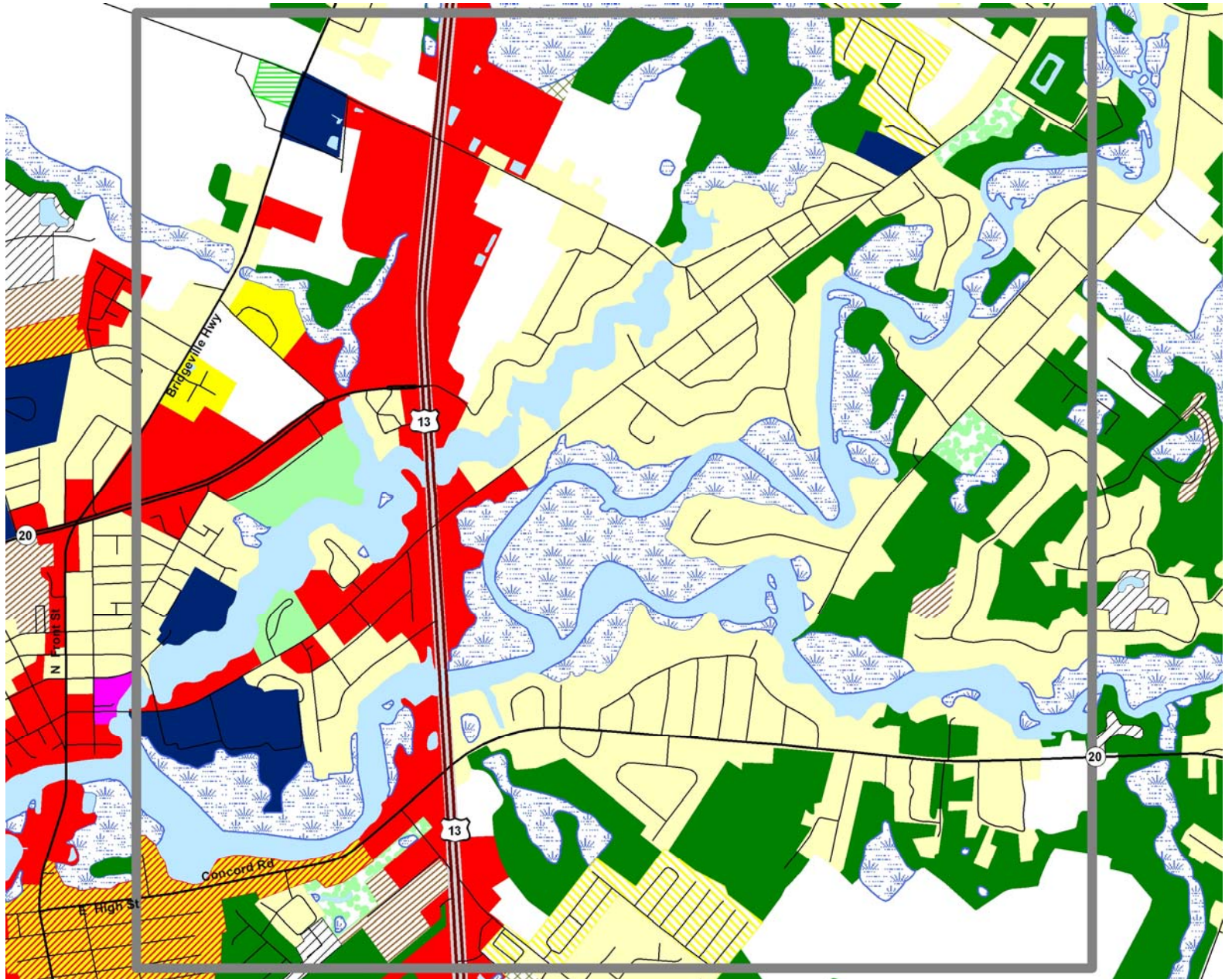


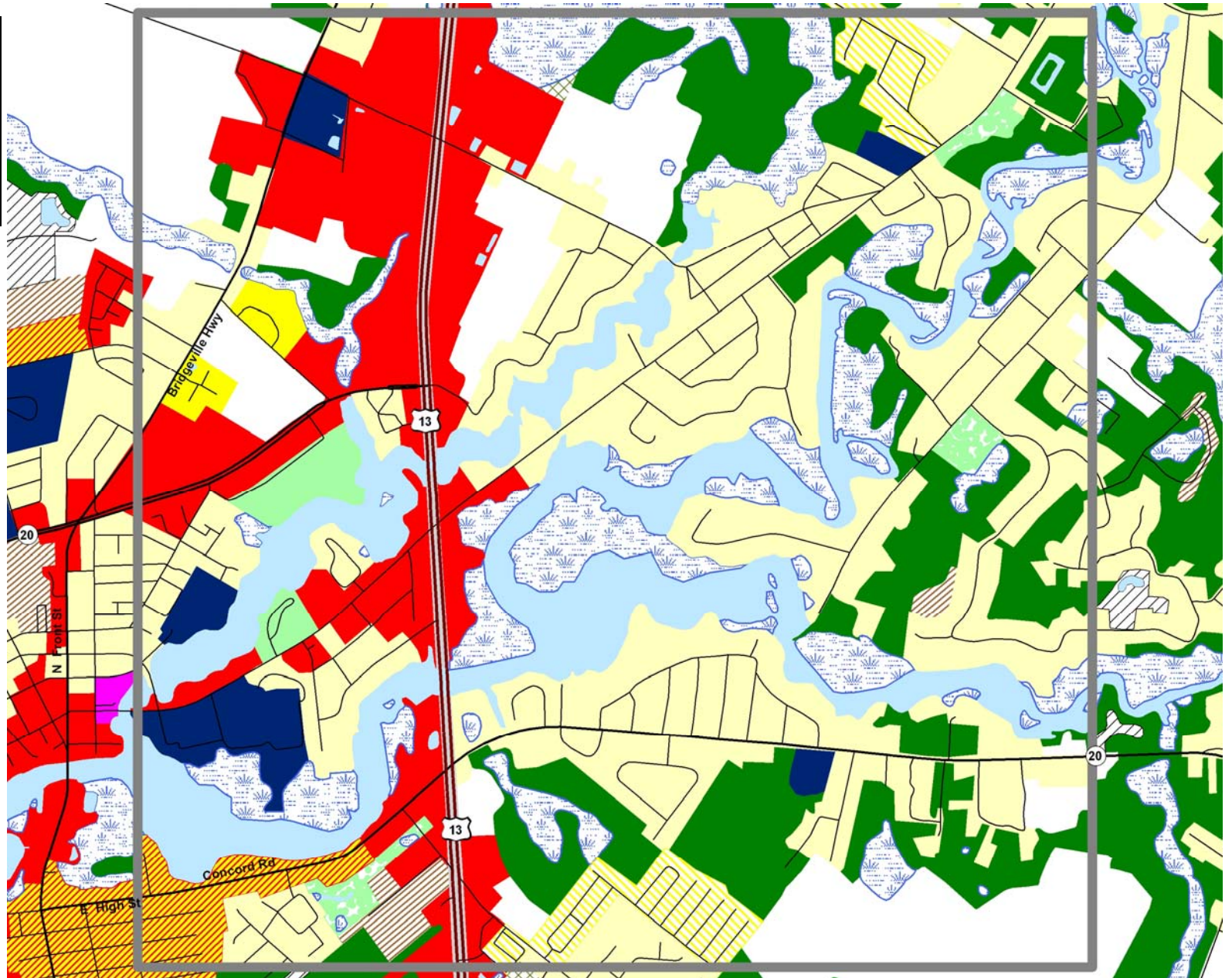














Schedule (Tentative)

- Orthophotography
 - Sussex – Late October
 - Kent – Early November
 - New Castle Co. – Late November
- Land Use/Land Cover
 - Starting with Sussex Co. in December or January
- Contours – January or February



An Examination of Address Data in Delaware

September 19, 2007

David Racca
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Research
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DOE Find School Utility

<http://gis.doe.k12.de.us/WEBSITE/districtMaps>

Delaware Department of Education **Interactive School District Map**

Layers

Visible Active

- Elementary Schools
- Intermediate & Middle Schools
- Votech Schools
- High Schools
- Charter Schools
- All Public Schools
- Private Schools (K & Higher)
- Private Schools (K Only)
- Day Care Centers
- Wilmington
- School District
- City / Town
- Zip Codes
- Highways
- Number Below Poverty

Find Schools For The Address Below

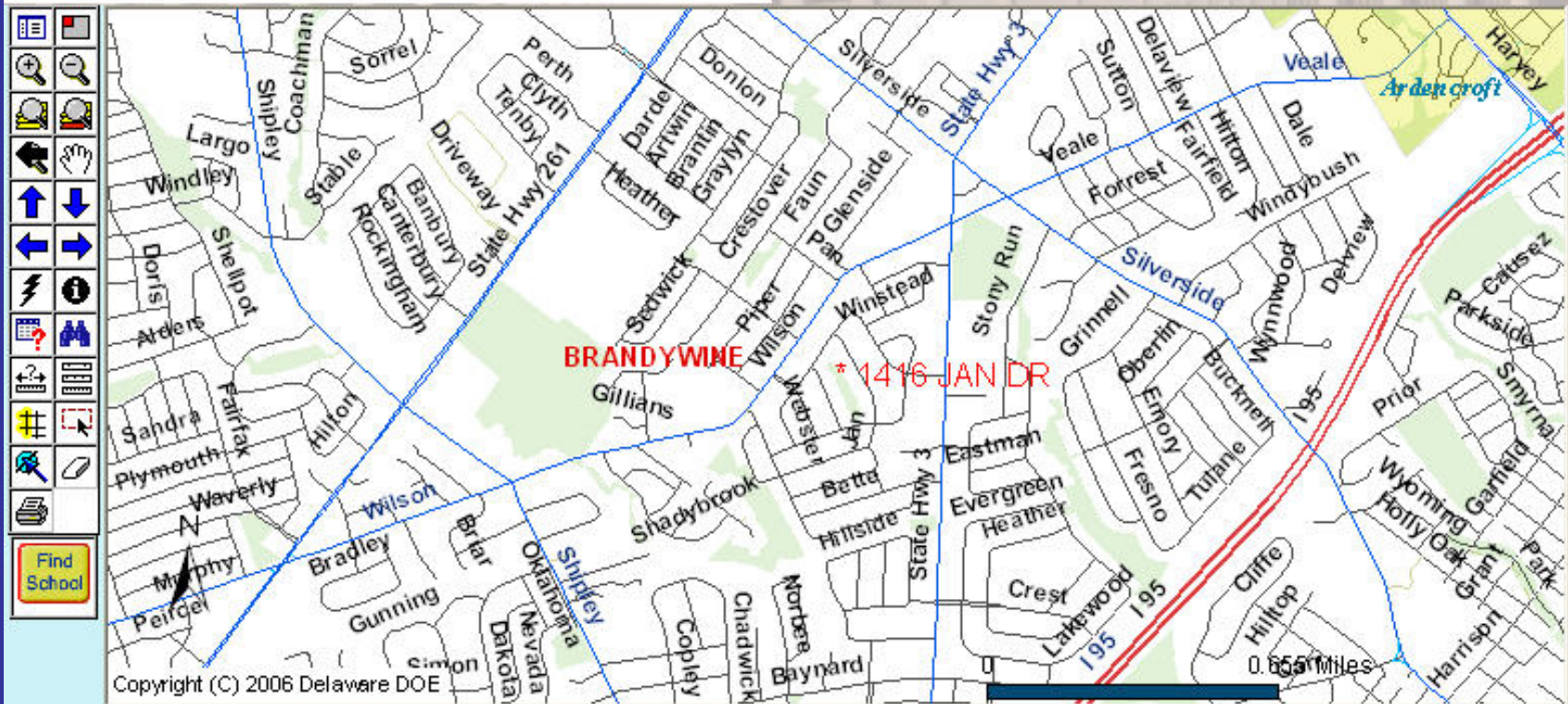
Specify Number and Street

Zipcode (optional):

To Find Schools Using The Map:

Zoom to the area of interest. Click "Find School" and then click the location in the map.

Technology Management and Design **Instructions**



Find Schools For This Location?

[YES](#)

[NO](#)

Brandywine School District

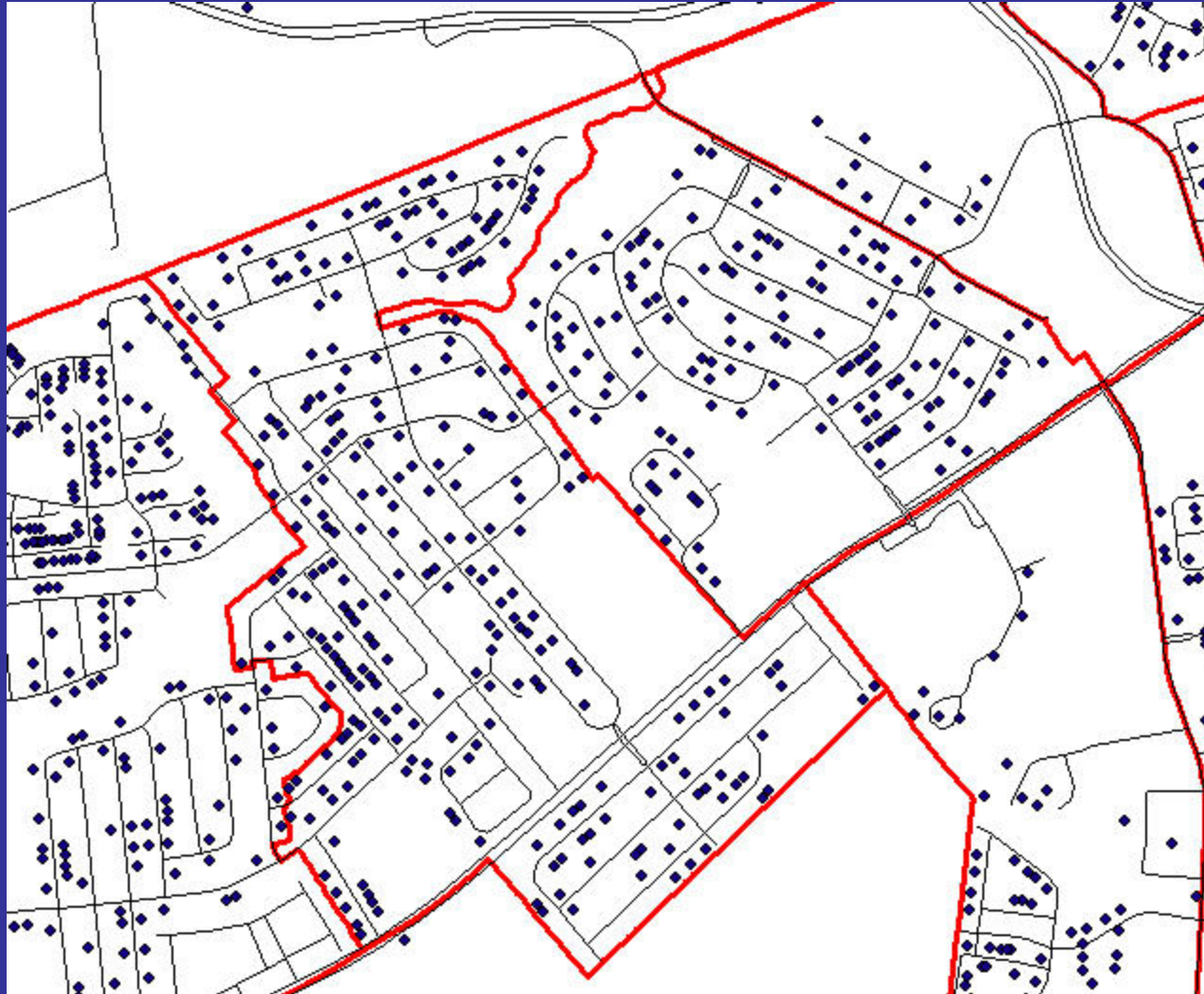
1416 JAN DR
19803

School		Grade
CARRCROFT ES 503 Crest Road Wilmington, DE 19803	Map It Test Scores Profile	Kindergarten
		01
		02
		03
HARLAN ES 3601 Jefferson Street Wilmington, DE 19802	Map It Test Scores Profile	04
		05
		06
TALLEY MS 1110 Cypress Road Wilmington, DE 19810	Map It Test Scores Profile	07
		08
MT PLEASANT HS 5201 Washington St. Ext. Wilmington, DE 19809	Map It Test Scores Profile	09
		010
		011
		012

Goals

- To provide the most complete and accurate address matching file for Delaware
- To provide a composite of available address information that could be utilized by ARCIMS
- Investigate various sources for address data.
- Develop a method that could standardize the processing and format of the various sources.

A need for accuracy



Sources of Address Data

- Point files from each of the 3 counties
- Centerline files from each of the 3 counties
- TeleAtlas Product Centerline
- Tiger 2004 centerline
- Postal Service Master Location Index
- Numerous available address lists

Advantages of a composite based on point locations

- Point address data is available and is accurate to the tax parcel. Accuracy is important.
- Address locations generated from center lines are interpolations and most centerlines include ranges considerably outside the actual address ranges
- Converting to points allows for a comparison of the various data sources
- Addresses occur on places not streets

Comparison of 3 sources

Layers

- nctaxaddr
- DE_New_Castle_County
- DE_Centerline
- centerline83
- nctax

Selected Attributes of centerline83

OBJECTID	ROAD_NUM	PRE_DIR	SUF_DIR	LOL	HOL	LOR	HOR	ZONE_LEFT	ZONE_RIGHT	SECTOR_LEF	SECTOR_RIG	ZIP_R	ZIP_L	JURIS	QC
2393	0			791	817	790	816	N2	N2	24	24	19711	19711	2	<Nu

Selected Attributes of DE_Centerline

FID	Shape	OBJECTID_1	L_F_ADD	L_T_ADD	R_F_ADD	R_T_ADD	POSTAL_L	POSTAL_R	COUNTY	COMMUNI_R	COM
4485	Polyline	57575	601	899	600	898	19711	19711	New Castl	HIGHLANDS AT THE RIDGE	HIGHLANDS AT TI

Record: 1 Show: All Selected Records (1 out of 90880 Selected) Options

3703	S	B	00800	00803		ARBERN	PL	19711	C071		
3704	S	B	00804	00805		ARBERN	PL	19711	C071		
3705	S	B	00806	00899		ARBERN	PL	19711	C071		

Processing

- Standardize all 9 source files. Road types using postal service standards. Column names using TIGER (fename,fdirp,fdirs,ftype)
- Correct some obvious errors, various screens in programs
- Generate possible addresses from address ranges
- Geocode addresses back to centerlines.
- Generate XY's, for regeneration later
- Combine databases removing duplicates
- Assumption of accuracy was point, county centerline, teleatlas, tiger04

An example result on a DOE student address list

(% hit rate, across school districts)

	TIGER	TELE ATLAS	POINT	CLINE	COMP
KC	71	87	66	X	91
SC	44	64	57	61	82
NC	91	95	89	95	96

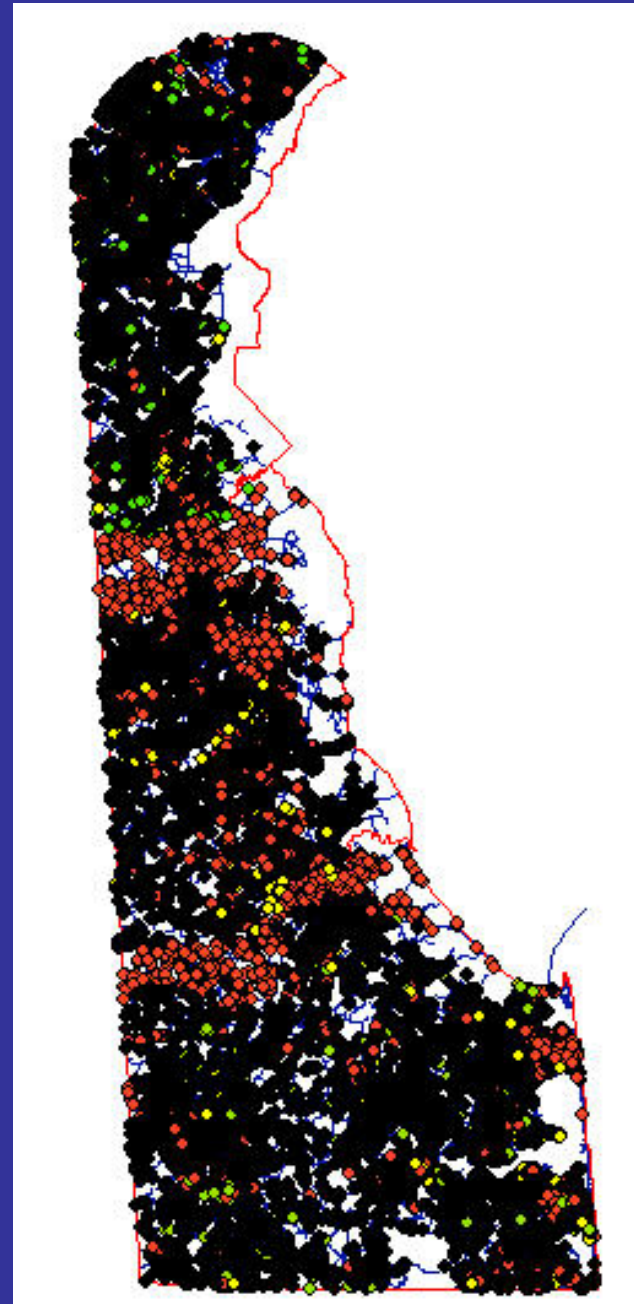
Image of sources

Black = Point

Green = Line

Red = Teleatlas

Yellow = TIGER



Sources of the DOE Match

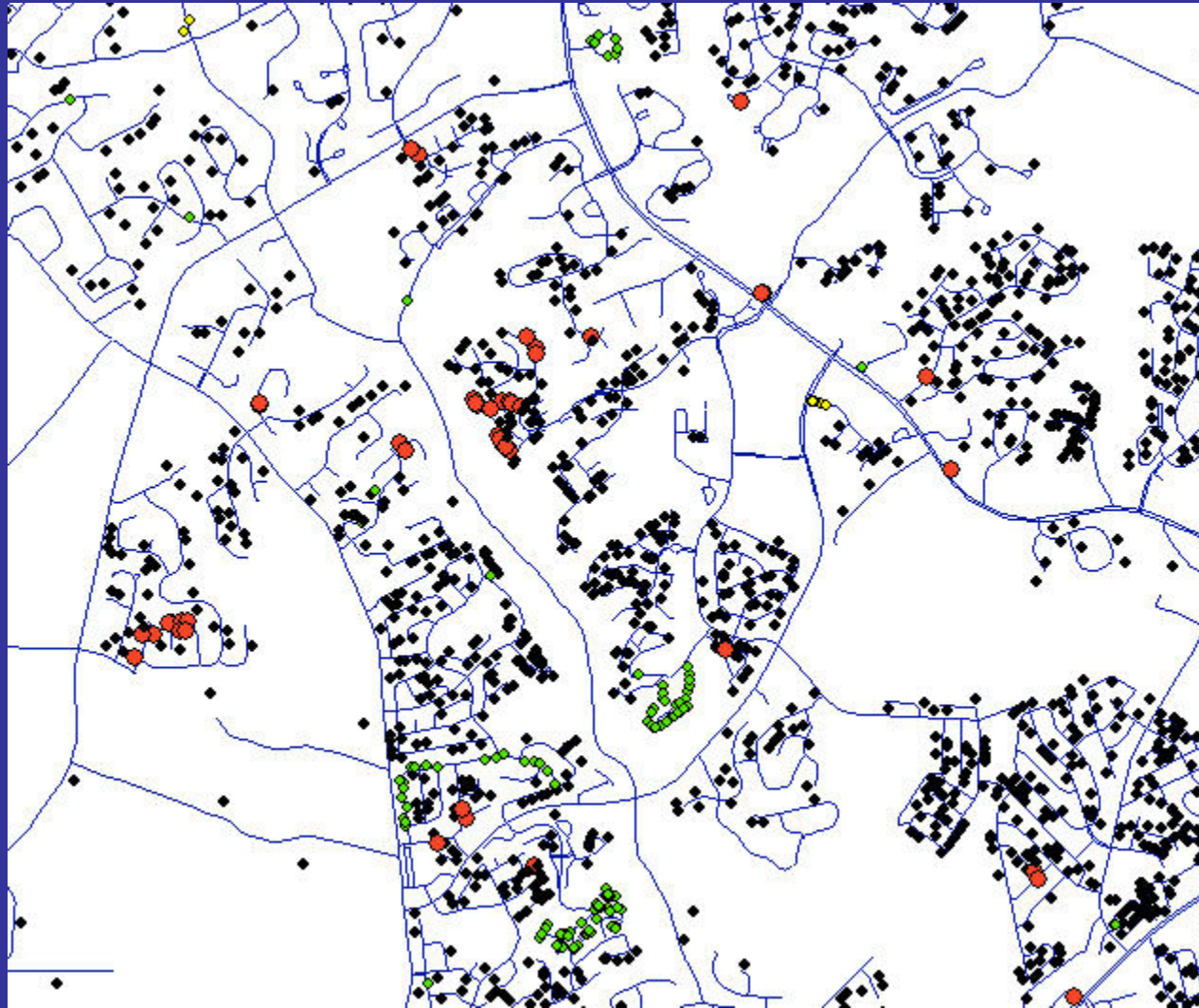
(% of county for each source)

SC	%
Point	66
Line	7
Atlas	23
Tiger	4

KC	%
Point	50
Atlas	44
Tiger	5

NC	%
Point	91
Line	4
Atlas	4
Tiger	1

Examination of results of the composite finds where things need to be fixed.



Address and Locational Tools Are Framework

The framework is a collaborative community based effort in which these commonly needed data themes are developed, maintained, and integrated by public and private organizations within a geographic area.

Framework has three aspects: Data, Procedures and technology for building and using the data, and Institutional relationships and business practices that support the environment.....

The framework is designed to facilitate production and use of geographic data, to reduce costs and improve service and decision making.....

It provides the most common data themes geographic data users need, as well as an environment to support the development and use of these data.....The framework represents "data you can trust" -- the best available data for an area, certified, standardized, and described according to a common standard..... It provides a foundation on which organizations can build by adding their own detail and compiling other data sets.(FGDC)

Uses of Address Data

- Public Safety
- Education
- Health
- Facility Planning
- Any situation where there are a set of clients referenced by addresses
- Valid Addresses
- Identifying jurisdictions

Features of a good approach to developing address resources

- Point based and as spatially accurate as possible
- Counties and local agencies and other sources are partners, not just data providers. Involvement and oversight. Users are partners as well.
- Product that grows with continued use and feedback, a building process, continued maintenance, a continuous yearly program
- Community oversight approach to identify yearly priorities, appropriate and detailed specifications, and strategic use of resources
- Analysis, proofing, detailed inspection and editing
- Its about the data
- Completely in public domain, no restrictions on use, all data, tools, coding, interfaces, and related products are free, documented, and readily available

Features of a good approach to developing address resources (continued)

- Apartments, condominiums, 2 line addresses
- Shopping centers, commercial centers
- Alias tables, cleanup code, special cases, cross references
- Links to other data: parcels, places
- Specific fixes learned over time
- Mechanisms for feedback: process to county, user to process, process to user
- Place file
- Other collections: intersection file, community file ...
- Web based batch geocoder, documentation, download, and support site



Enterprise GIS @ DTI

DGDC September 19, 2007

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DTI eGIS Initiative

- DTI is working on a project to establish an Enterprise (state-wide) Geographic Information System (eGIS) service at DTI.
- The intent of this project is to position DTI to support the needs of the GIS community. An enterprise GIS solution provides a means to support GIS related applications, and a way to share geospatial data across State organizations as well as with users that are not on the state network.
- Fact Sheet and Request for Resources Memo was distributed to IRM's, DeINUG and TechMacc the last week of August.



DTI eGIS Initiative

- An eGIS solution consists of many components:
 - ✓ State-Wide software standards (Jan '07)
 - ✓ State-Wide licensing (July '07)
 - Centralized database for public data
 - Mechanism for secure interchange of data
 - Standard, reusable architecture for applications
 - Web Services



Statewide Licensing (ELA)

- DTI signed an Enterprise License Agreement with ESRI for the State of Delaware, effective July 1, 2007.
- What it includes:
 - All core ESRI software, including ArcGIS Desktop & extensions, ArcGIS Server software, ArcGIS Engine, and a limited number of ArcPAD licenses and ESRI UC conference registrations.
 - The agreement includes all State Agencies, except for Education (K-12 & Higher Ed).



Statewide Licensing (ELA) Update

- Pricing structure is defined.
 - Separate pricing for new purchases and for annual maintenance.
 - Volume discounts offered on new purchases.
 - Annual maintenance is 20% of the agency purchase price.
 - Maintenance for FY '09 will be due July 1, 2008.
 - Please contact DTI if you have already processed PO's for FY '08.
- Detailed documentation forthcoming, contact Kim Cloud for more information.



Tele Atlas Data Web Site

- DTI established a web site with a secure directory to help distribute the Tele Atlas data.
- We are required to limit access to the data due to the terms of the agreement with Tele Atlas.
- To request access, send an e-mail to:
DTI_GIS@state.de.us
 - State employees will work with their ISO to request access to the secure directory via Peregrine Service Center.
 - Non-State employees will work with Kim Cloud to request access.
- URL: <http://gis.dti.delaware.gov>



Logistics & Next Steps

- Please take an inventory of your licenses and document a 'wish-list'.
- Please contact Kim Cloud if you already paid maintenance for FY 2008.
- Cost structure and related documentation will be posted online.
- Do not make any payments to ESRI, please notify DTI if ESRI contacts you to pay maintenance.