

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

Meeting Summary
Quarterly DGDC/SMAC Meeting
1:00 p.m., August 8, 2003
Paradee Center
Dover, DE

Attendance List:

Mike Mahaffie State Planning Coord.
Sandy Schenck DGS
Lillian Wang DGS
Paul Sample Legislative Council
Dick Sacher UD/RDMS
Peter Owosu-Donkor Dover/Kent MPO
Dan Blevins WILMAPCO
Frank Pisani WILMAPCO
Chad Lauderbaugh DeIDOT
Mollie Raley DeIDOT
Ken Bleadow DeIDOT
Kevin Neilson Public Service Comm.
Tripthi Mathew DHSS
Lyn Anderson Labor
Tripp Fischer DNREC
Debbie Sullivan DNREC
Rick Rutter DEDO
Jarrod Doucette UD/WRA
Andrew Homsey UD/WRA
C. VanDeusen Morris & Ritchie
Todd Hyer Morris & Ritchie
Dawn Hunter VanNote Harvey
Mike Eismeier EIS

Welcome and Introductions

Mike Mahaffie began the meeting at 1:15 p.m. The meeting started with attendees introducing themselves.

Information Updates

Orthophotography Project

Mike Mahaffie reported that the state's Homeland Security and Public Safety people have asked that we not make the new, high-resolution orthophotography available over the internet until they can determine the level of security risk that doing so would create. Mike has met with them to talk through the potential risks and has submitted a memo and white paper on the subject to Governor Minner.

Mike reported several possible outcomes:

1. The data will be available through the DataMIL as planned;
2. The data will be made available through DataMIL with selective blurring over areas of concern (or with areas clipped out);
3. The data will be simplified to a lesser resolution and made available via the DataMIL;
4. The data will only be made available to selected people; or
5. The data will not be available (Mike was not fond of this option).

GIS and Education Working Group

Lyn Anderson reported on activities by this Working Group over the last several months. She handed out a detailed update (attached) and highlighted several key activities, including a meeting with teachers, administrators and educational technical experts to discuss ways to bring GIS and spatial data into the classroom. Lyn reported that teachers want to use GIS in a seamless world and that GIS appears to have a PR problem; teachers need to learn that spatial data exists.

As a start, teachers and GIS Community members have agreed to form a “hub” to connect the education and GIS communities, and share information and ideas. A GIS in Education listserv has been created for the hub. An internet site will follow.

Lyn also noted that GIS professionals will work with educators to add some GIS information and content to future in-service days and to a planned Educational Technology Conference in April of 2004. She expects the DGDC to participate in cluster training courses. Anyone interested in helping the Working Group should contact Lynn.

GIS Day 2003

Debbie Sullivan gave an update on ideas for GIS Day 2003, which is in November. She has several ideas for GIS-related reading to lower grade-level classes. Mike Mahaffie noted that there may be an opportunity to partner with the Survey Community to unveil a monument marking the population center of Delaware, based on the 2000 Census. Dan Blevins noted that WILMAPCO had put together a transportation package for schools that uses mylar overlays over base maps of familiar areas like Christiana mall to show how maps are made. Those interested in GIS Day activities should contact Debbie.

GIS Training at UD

Dick Sacher announced that UD has arranged with ESRI to offer two GIS courses in March 2004 at the new UD GIS Lab. The Courses will be March 22-26 and will be about geodatabases. More information and registration details can be found on the ESRI web page.

2002 Land Use and Land Cover Data

Michelle Hutchinson, of EarthData International, gave an overview of the Land Use/Land Cover (LULC) data collection process used in updating Delaware’s LULC dataset based on the new orthophotography. A draft dataset is available for comment (http://www.state.de.us/planning/info/lulcdata/2002_draft_lulc.htm) through September. Comments should be routed through Mike Mahaffie.

Some issues identified in the project involved the rapid development of some portions of the state. Michelle noted that there were places where she needed assistance from the Office of State Planning Coordination and from local planning agencies to determine what the changes were. She has asked that additional input be provided for specific “question points” that will be provided to data users as part of the review of the draft 2002 LULC Data Set now available. Michelle also noted that she is waiting for a final version of the state boundary lines from DGS and the US Census Bureau to help complete the project. She also noted that the LULC data set is most accurately viewed at scales of 1:4000 or smaller.

Mapping the Non-Motorized Transportation Network

Dan Blevins, of WILMAPCO, gave a presentation (attached) on the project that WILMAPCO has undertaken with DeIDOT to use the new orthophotography to map out sidewalks and trails throughout the state. WILMAPCO has brought in interns to work on the project for New Castle County. DeIDOT is handling the project for Kent and Sussex Counties. Sidewalk data can be added to the transportation network data to help transportation planners plan the non-motorized side of the transportation street. The project is expected to be completed by fall 2003.

Roundtable Discussion: Data Projects

Mike Mahaffie, OSPC

Mike is working on an update of the state's *Strategies for State Policies and Spending* maps. He is working with the UD's WRA staff on a spatial analysis model for the *Strategies* update. He is also trying to put together new polygons of the Rights-of-Way of major transportation routes, with DeIDOT, and has been working with Facilities Management on a data set of locations of State facilities.

Mollie Raley, DeIDOT

Mollie is working on a bicycle transit study and on regional transportation plans in several areas.

Lyn Anderson, Labor

Lyn asks for input on uses others may have for "good business location data." She hopes to establish a policy (or law) to require that labor data be reported by location of work, rather than by the location of the human resources office of a firm, as is now the case.

Lillian Wang, DGS

Lillian is deep into a project to create 100k geology maps of all of Delaware through the USGS STATEMAP funding program. Areas north of the C&D Canal are now in draft form.

Andrew Homsey and Jarrod Doucette, UD/WRA

Aside from working with the Office of State Planning Coordination on the *Strategies* map update, Andrew reports that WRA has been working with local governments (notably Dover, of late) on establishing their own GIS functionality. This work is related to work that WRA has undertaken in support of local comprehensive plans.

Peter Owusu-Donkor, Dover/Kent MPO

Peter reports that the MPO has been working on environmental justice policies using TIGER data from the 2000 US Census.

Mike Eismeier, EIS

Mike reports that his company, Enterprise Information Solutions, is working with the Delaware State Police to update the DELJIS Crime Data system. They are putting in Oracle database and supplying query tools so the crime analysis units can use the spatial component of the data. He notes that he has done some work with DNREC and DeIDOT as well.

Wrap Up

The meeting adjourned at 3:30 p.m.

GIS in Ed Update
DGDC/SMAC Meeting
August 8, 2003

A new approach – ask the teachers what they want; what should the role of the GIS professional community be with respect to education?

July 15th – Meeting with teachers and administrators. The purpose was to develop goals for the GIS in Ed working group. Over 2 hours of discussion moderated by Bill McGowan. Very fruitful.

Message: Teachers want to use GIS as a seamless tool across the curriculum. All learning now is processes rather than content/results so GIS fits in perfectly – analysis, comparing, contrasting, etc. GIS has a PR problem. Get out there and make teachers aware of it and its usability.

Projects underway as a result of the meeting:

Statewide Professional Day – October 10th – Full day GPS/GIS Training for teachers

Tripp Fischer, Debbie Sullivan, Lyn Anderson, Nicole Minni

The Delaware Council for Social Studies – 45 minute overview of GIS, will also be presented on October 10th – Mike M.

GIS Day – organized by Debbie and Tripp – an online GIS problem to solve? need to clarify teacher ideas from the meeting – please send any ideas to either Debbie or Tripp

Develop a HUB – Set up a listserv for communication between teachers, administrators and GIS professionals. (DOE, DGA, Working Group) Mike M will draw up an MOA to formalize the effort of groups to work together to further the use of GIS in schools. An Internet resource and communication site will be built to reinforce this effort. Perhaps a repository for topnotch lesson plans by grade level and curriculum area will be included. Perhaps also it will be a location to grab data in an easy way.

Other ideas:

April 28, 29 – Delaware Instructional Technology Conference – 45 minute “seed planters” (model lesson plans using GIS in the classroom)

Year-long Project – a plan initiated by Christina Lief to use Shields as a pilot site to build a model of how GIS can be brought into the schools. She believes that Shields is an ideal location because of the following:

- 1) A principal that is open to introducing GIS this school year
- 2) A large computer lab

- 3) A computer lab administrator
- 4) Support from parents that have GIS expertise (3 that I know off)
- 5) A teacher (B. Hudson) that has shown interest
- 6) Free ArcView software for the year
- 7) Free Resource Book + CD for the teachers
- 8) A recognized need to increase teaching of Geography and possibly use GIS to meet this need.

After-school training sessions on finding and using data – end of October
Attend and present at an I tug meeting (Instructional technology users group?)

Develop Cluster training – a long-term in-depth educational experience for teachers – 90 hours over a maximum of 5 years. Teachers who complete a cluster training receive a pay raise. It would, perhaps include the GIS classes at the University.

Grant Writing to raise funds for projects/training/or maybe to pay for teachers to build lesson plans over the summer that would be posted on the Internet site and available for all teachers to use

Mentors – Teachers stated that they would be more likely to try to use GIS if they knew they could call a professional for help

If you find any of these ideas interesting and you'd like to share your talents, please contact me or Mike Mahaffie to lend a hand.

Thanks!

Lyn Anderson
Department of Labor
lyn.anderson@state.de.us
302-761-8064

Mike Mahaffie
State Planning Coordination
mike.mahaffie@state.de.us
302-739-3090

Use of 2002 Aerial Photos in the Development of a Non-Motorized Inventory for the State of Delaware

A joint effort between:



Department of Transportation 

The logo for the Department of Transportation, featuring the text "Department of Transportation" in a black, serif font, followed by a stylized logo consisting of three overlapping, curved lines forming a triangular shape.

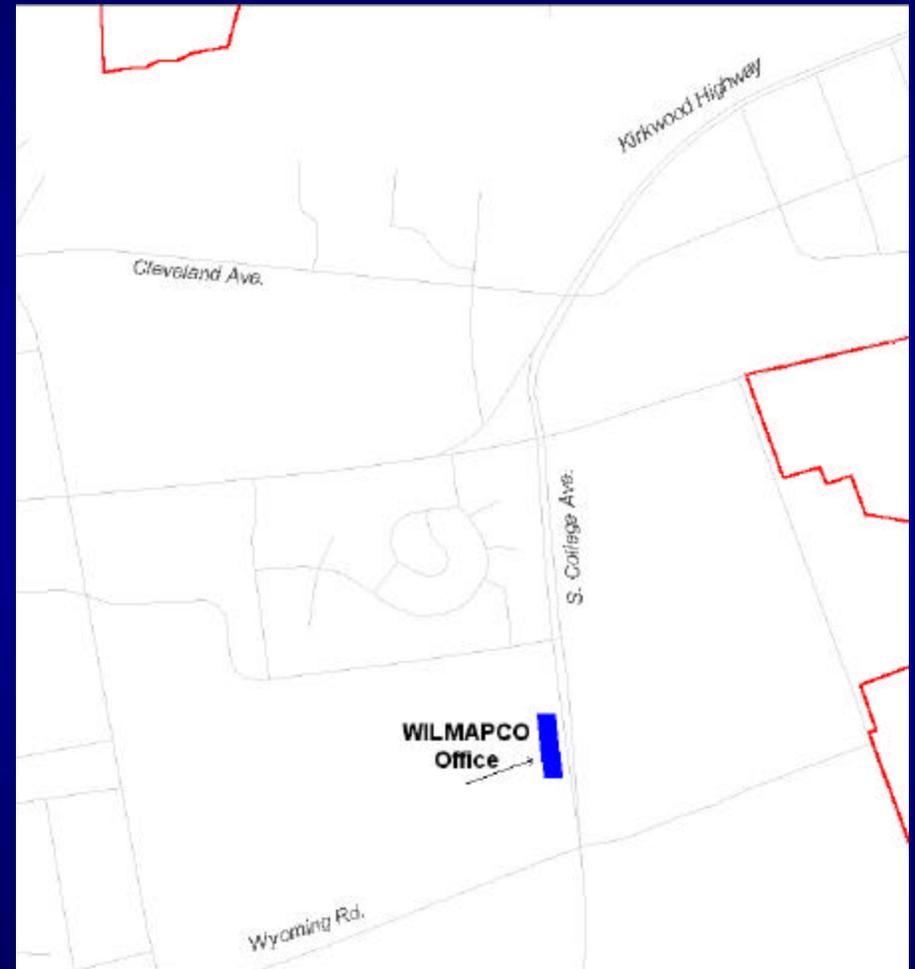
Project Overview:

- **Originated from WILMAPCO Long Range Plan and Livable DE Initiatives**
- **To develop a Statewide Inventory of all Delaware Sidewalks, Crosswalks and Footpaths**
- **Produce a quality spatial dataset that can be easily updated and widely used for a variety of purposes**



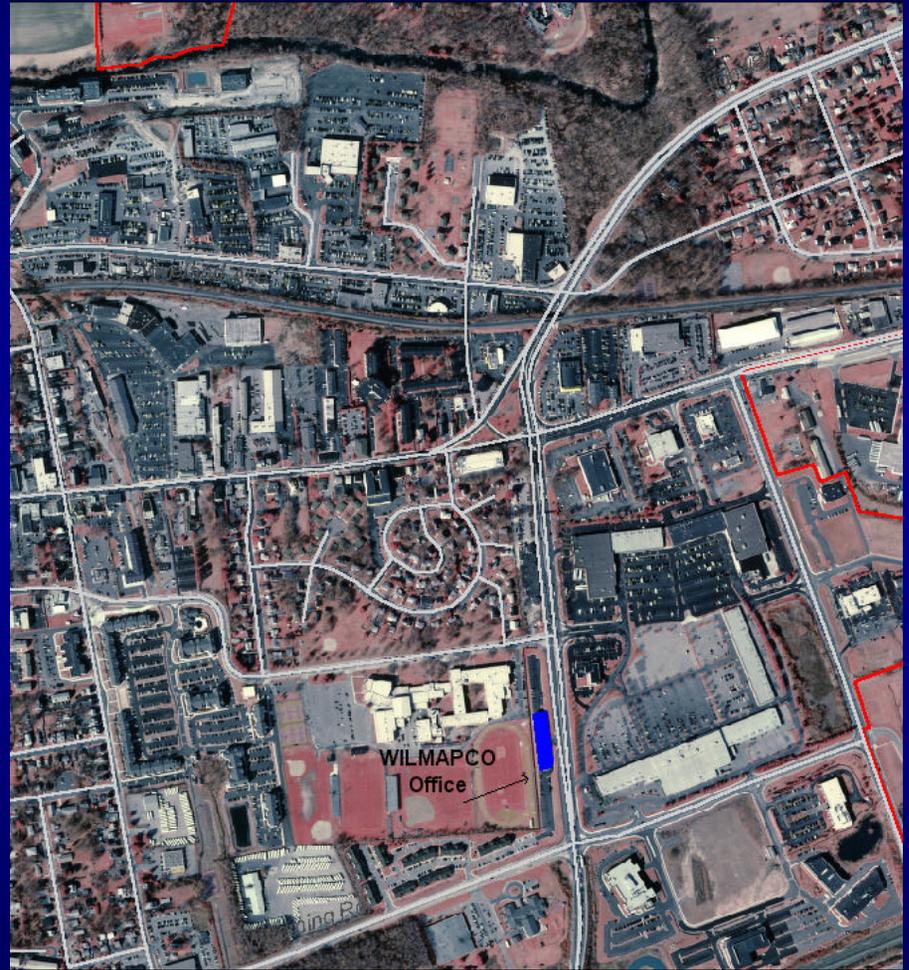
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- Geographic Information Systems (GIS) Technology
- 2002 Aerial Photography and Roadway Centerlines



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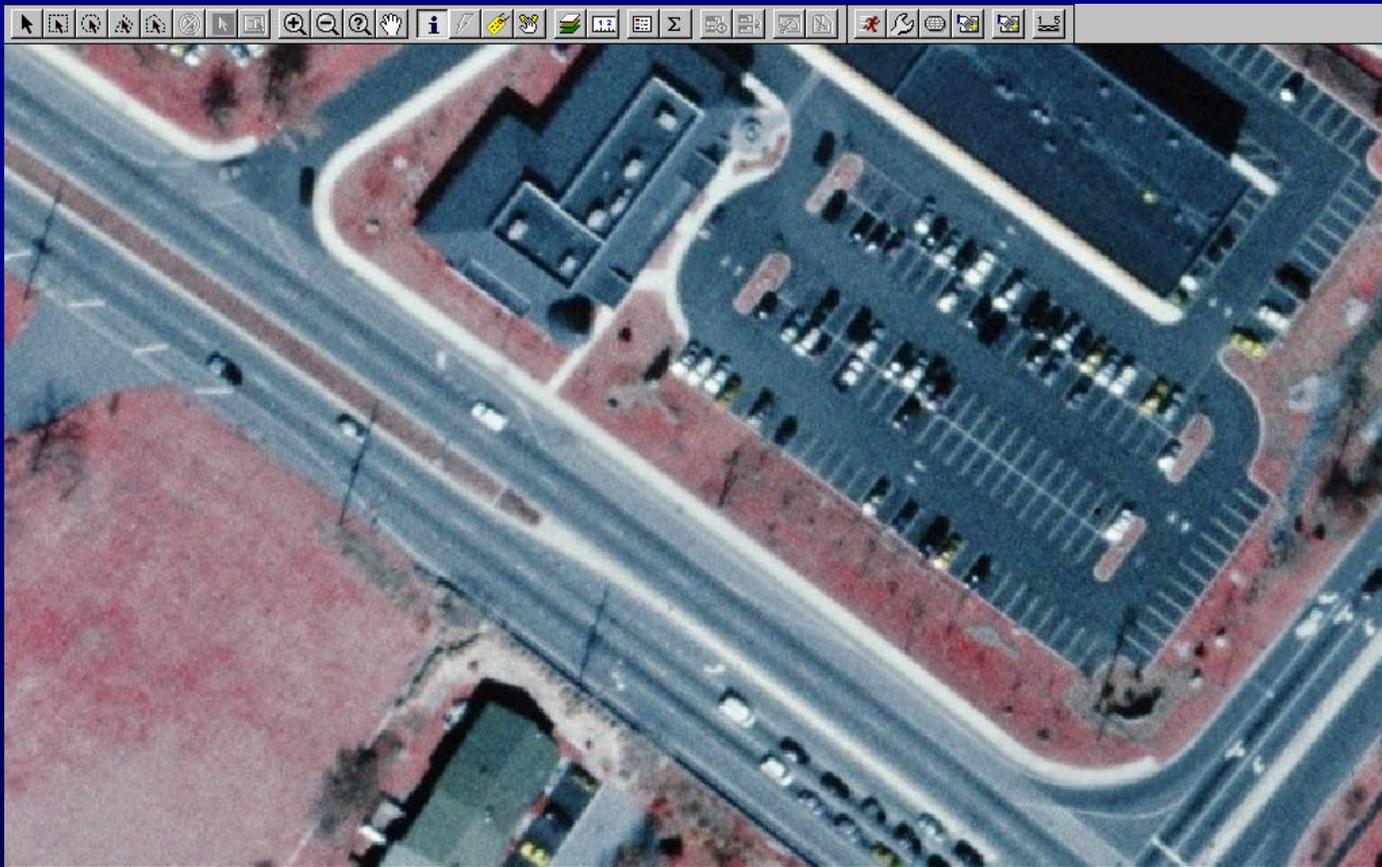
Field Name (Type)	Description	Entered / Derived	Acceptable Entries	
Rdway_ID	DelDOT's Road ID Number	Entered	Should match <i>rdway_id</i> in the centerline file.	
Sidewalk_ID	This will be a unique identifier for each sidewalk	Derived	Should be <i>County + rdway_id + Beg_MP</i>	
Facility_Type	Separates entries into categories	Entered	S - Sidewalk C - Crosswalk F - Footpath	
L_Dir	Lane Designation	Entered	NB, SB, EB, WB	
Beg_MP	DelDOT's Beginning mile point from centerline file	Entered	Should match <i>beg_mp</i> in the centerline file.	
End_MP	DelDOT's Ending mile point	Derived	Should match <i>end_mp</i> in the centerline file.	
TOT_length	Total Length of Sidewalk	Derived	<i>end_mp - beg_mp</i>	
Material_Type	Material composition	Entered	C – Concrete A – Asphalt	D – Dirt U - Unknown
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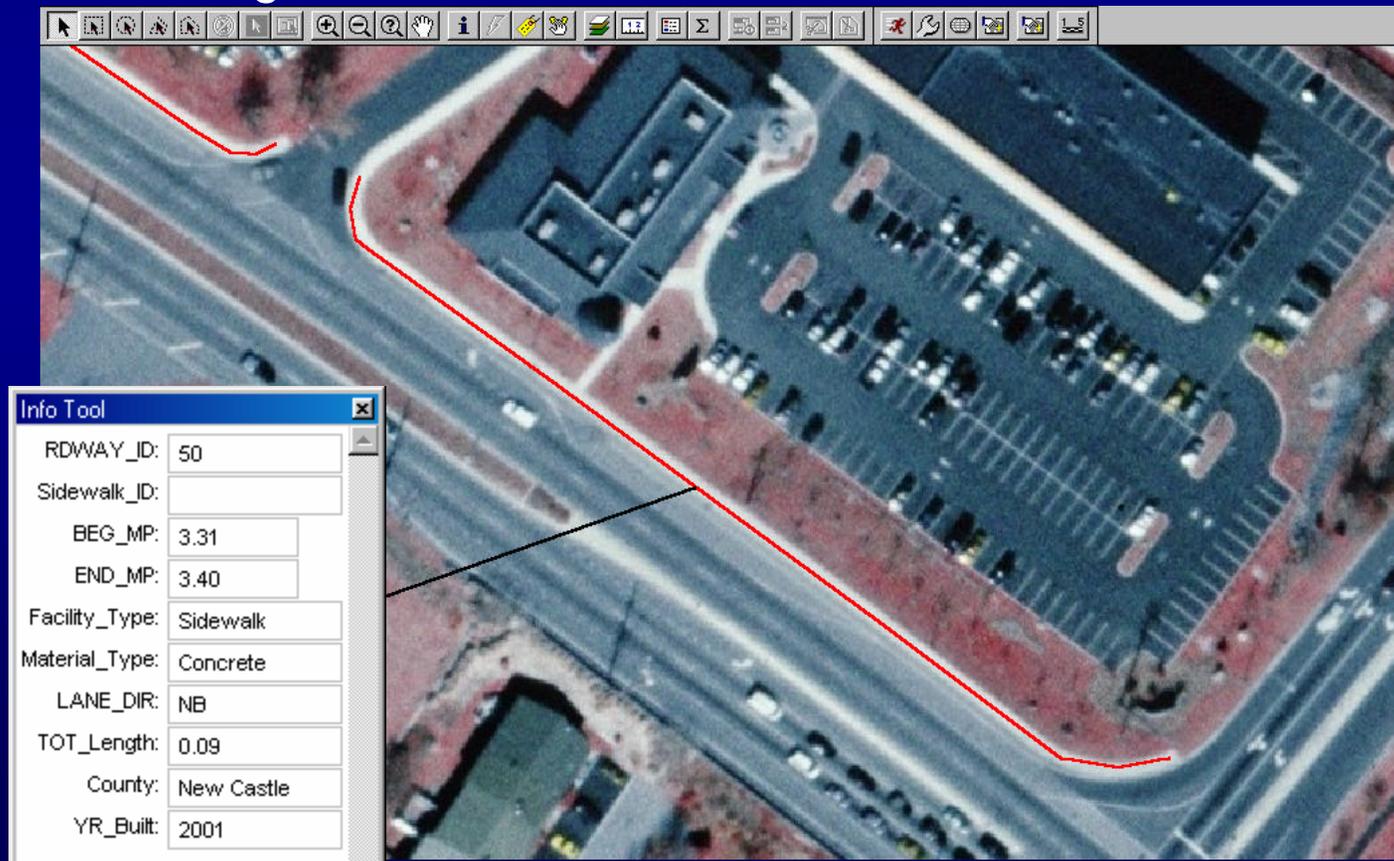
Data Collection Methods:

- Manual digitizing of all facilities:
 - Classifying all existing Sidewalks, Footpaths and Crosswalks



Data Collection Methods:

- Manual digitizing of all facilities:
 - Classifying all existing Sidewalks, Sidepaths and Crosswalks
 - Identifying the roadway ID and beginning milepoint location
 - Identifying pavement type (Concrete, Asphalt etc.....)
 - Year segment was built







Legend

- Crosswalks
- Footpaths
- Sidewalks

Current Status:

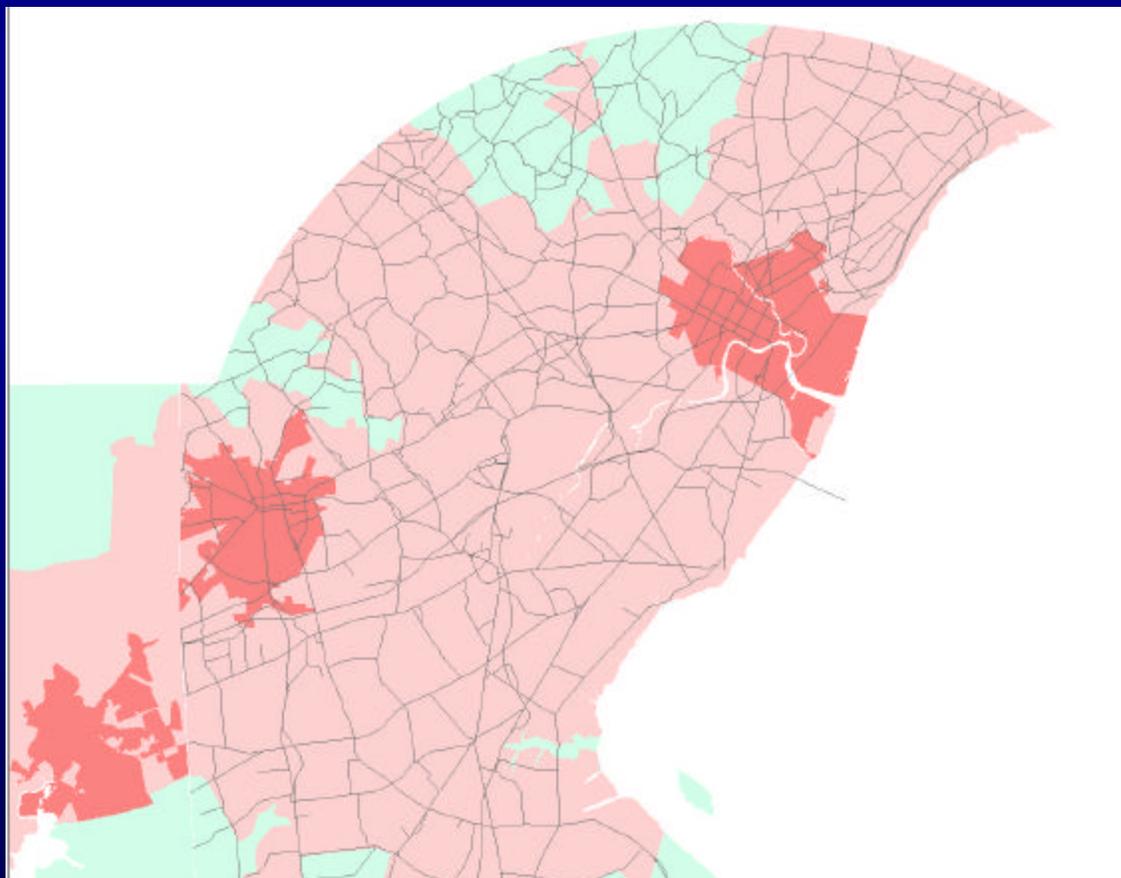
- Approximately 50% Complete, in NCC.
 - Kent County Complete, Sussex Underway
- Data Extraction performed by GIS Interns from Univ. of Delaware
- City of Wilmington, subdivisions and Cecil County to be completed at later date
- QA / QC Checks to be made by staff
- Field checks necessary

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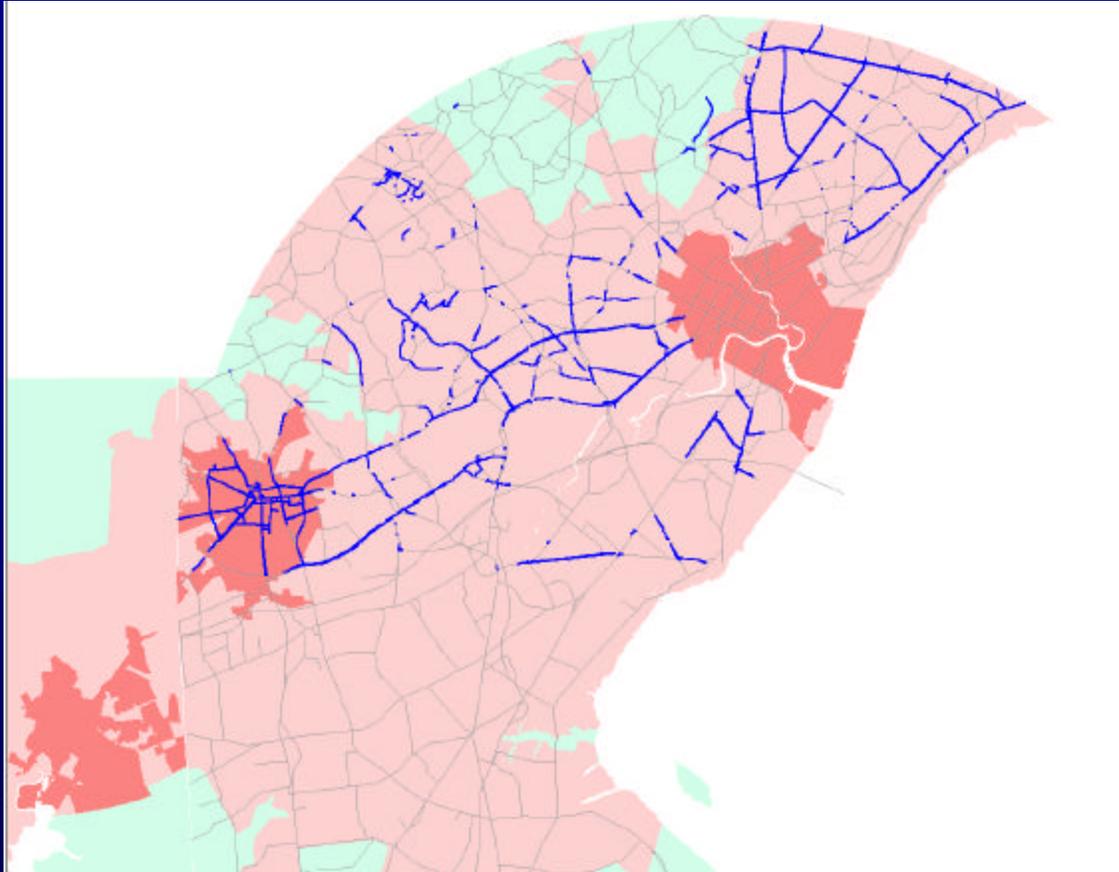
Estimated Completion date: Fall 2003

Future uses:



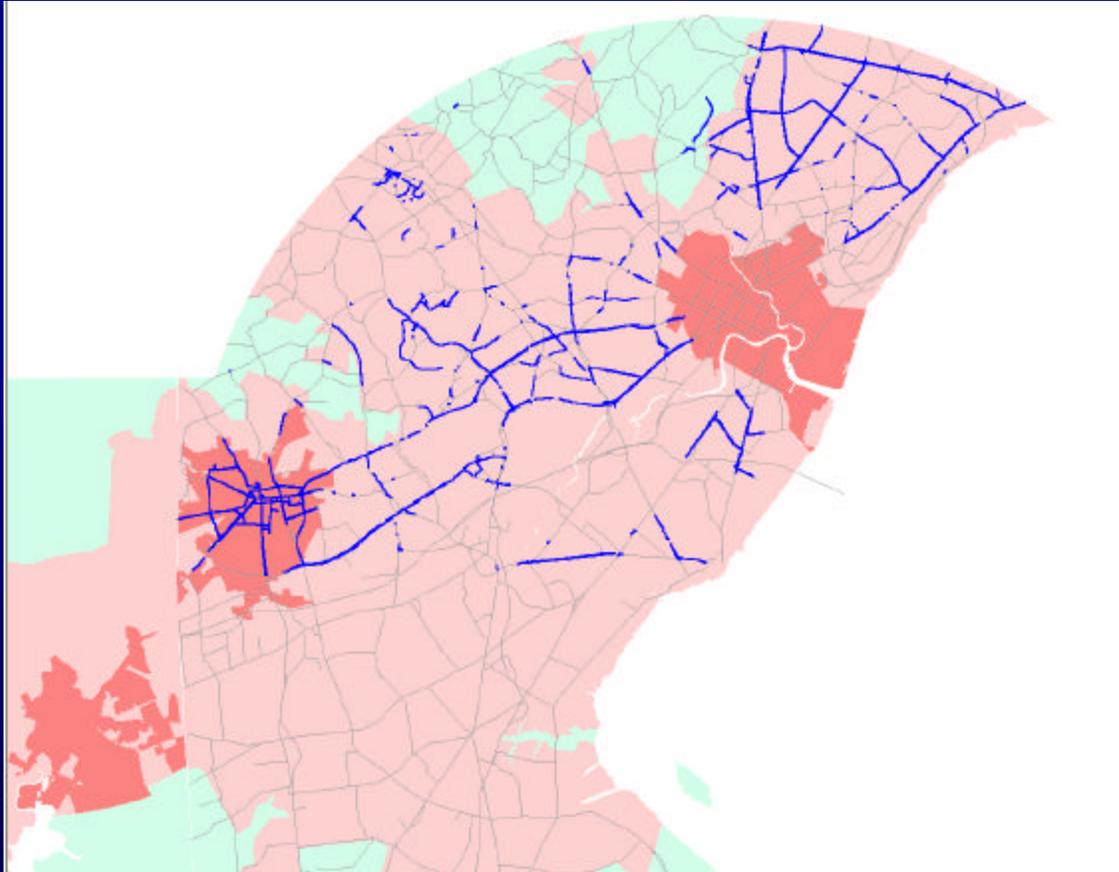
Future uses:

- Analyze existing coverage in region
- Use to set up maintenance schedule / cost analysis
- Use in Annual Effectiveness Review / Track progress of RTP Policies
- Use in development of future TIP projects based on needs assessment



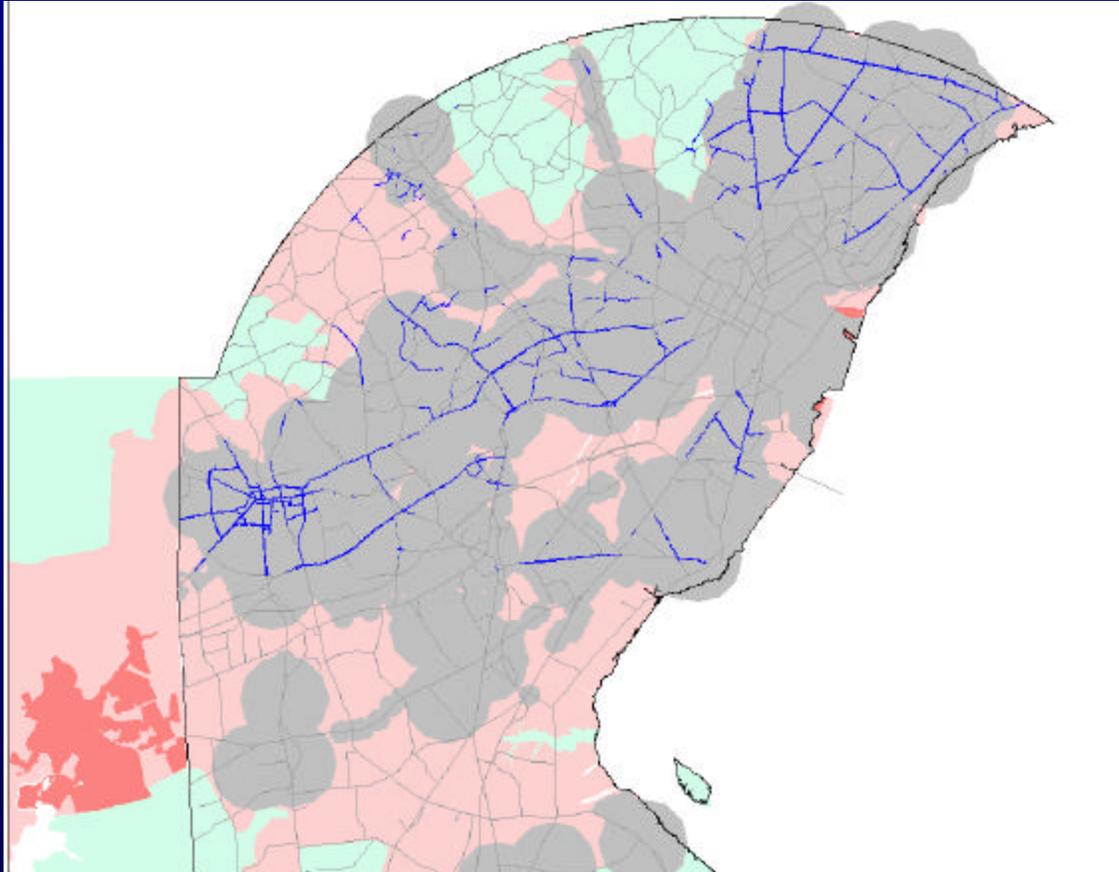
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Additional Work / Update Schedule

- Add existing facilities (i.e. shared access shoulders along roadways, etc)



Additional Work / Update Schedule

- Add existing facilities (i.e. shared access shoulders along roadways, etc)
- Update Quarterly / Annually
- Sources for updates:
 - New Castle County Development Approvals
 - TIP Projects containing non-motor facilities
- Verify / Update using 2007 aerial photos



Questions????