



Maryland's Geographic Information Systems

Powerful Tools,
Informed Decisions,
Positive Partnerships

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How do we make decisions on *Critical issues*?

- n Reducing crime
- n Public safety
- n Enhancing recreation
- n Containing costs
- n Educating children
- n Protecting the environment
- n Managing facilities
- n Public transportation
- n Smart Growth

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To make *informed decisions*, we have to gather the right information



n We talk

n We meet



n We study



n We debate



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To make *informed decisions*, we
have to gather the right information.
...using the best data available.



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**“I never made a bad decision
- just good decisions based
on bad data”**

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We have tools to put
better data —
and previously unavailable data —
into the hands of decision-makers,
many times *faster* than any other
tool!

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Tools that:

- n Expand your information base
- n Enhance the analysis of available options
- n Streamline the decision-making process
- n Dramatically improve your ability to select the best course of action



Geographic Information Systems (GIS)

Give decision-makers the power to make better decisions.

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Crime Reduction

Public Safety Enhancement

Siting New Schools

Scientific Research

Redistricting

SMART GROWTH

Floodplain Mapping

Site Selection & Management

Oil Spill Response

Locating Fire and Police Stations

ECONOMIC DEVELOPMENT

Superfund Cleanup

Natural Resources Inventory & Management

WETLAND PROTECTION

Permit Review

Water & Sewer Expansion

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What is a Geographic Information System (GIS)?

A tool that combines previously unrelated information into a comprehensive picture.

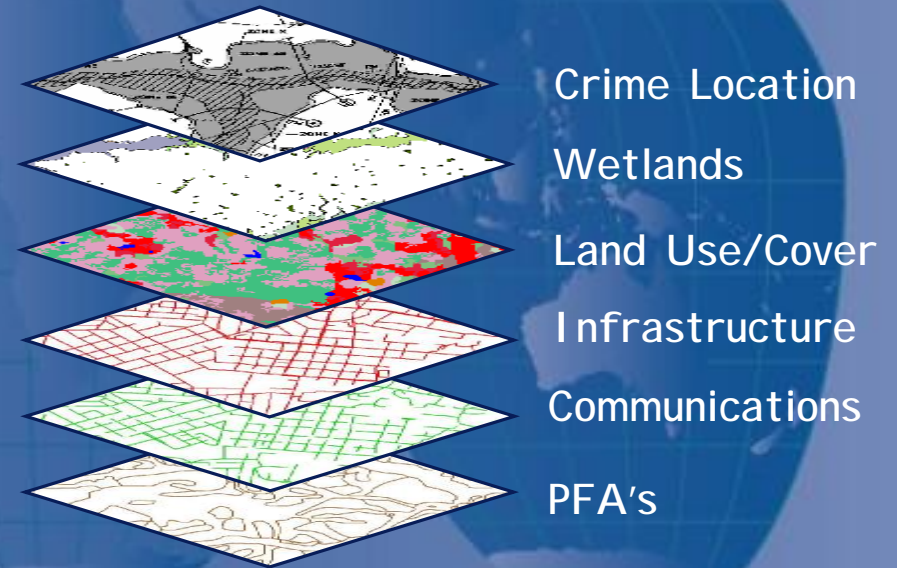
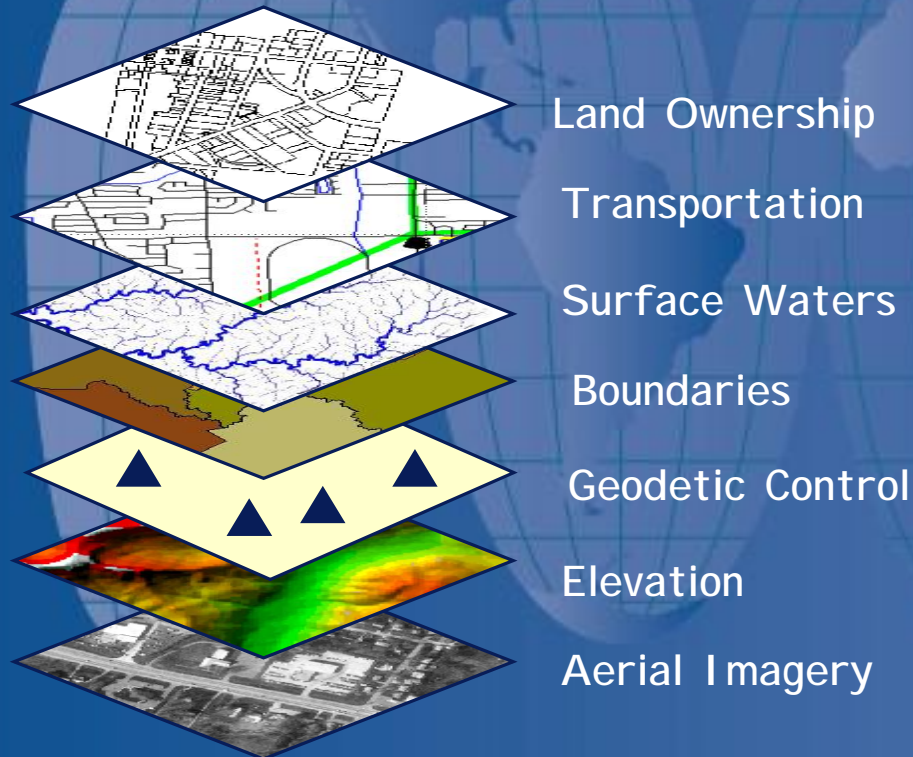
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Geographic Database

Framework Data

Thematic Data



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A simple concept.
An extremely powerful tool.

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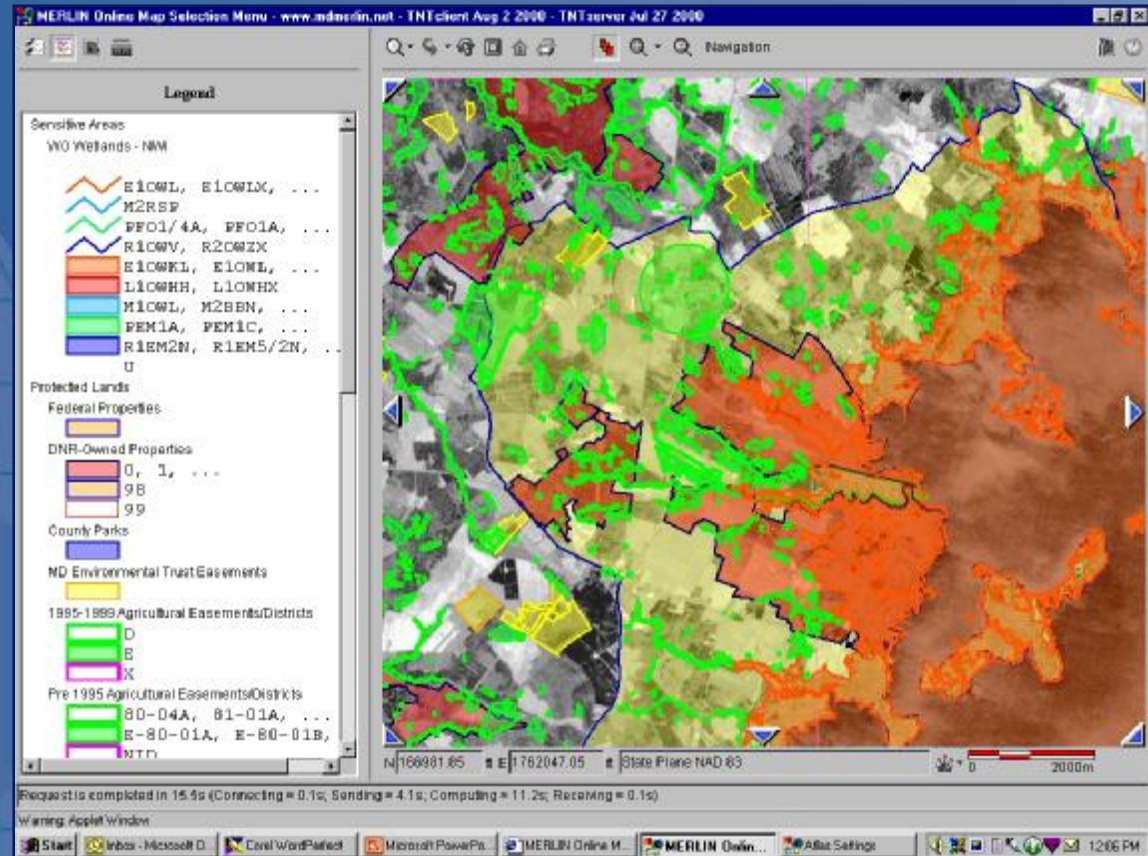


GIS gives you the power to do things that were simply impossible before.

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n The power to understand complex relationships.

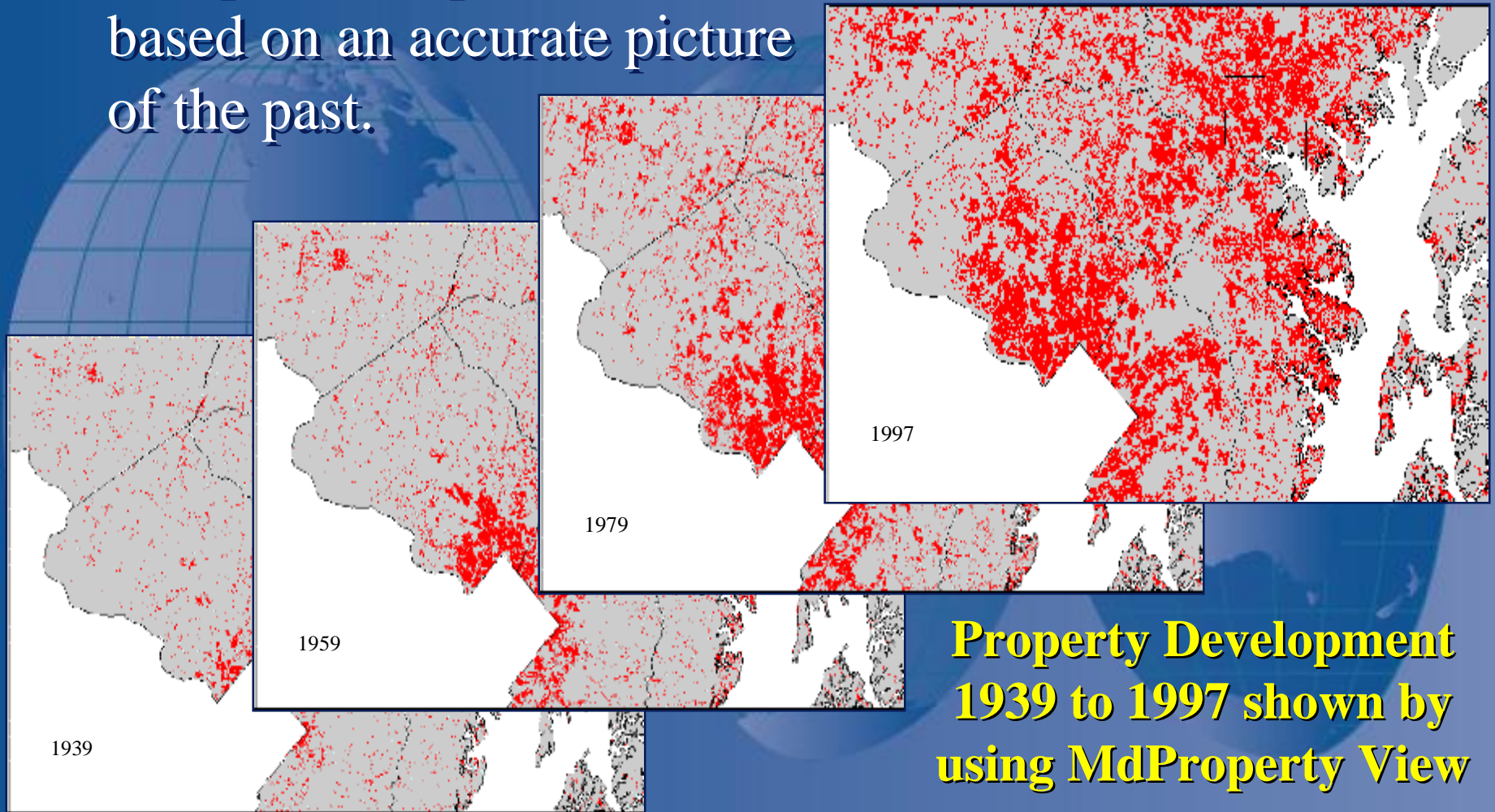


A Rural Legacy area shown with wetlands and existing public land ownership to determine if it is a “smart” acquisition

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n The power to plan for tomorrow,
based on an accurate picture
of the past.



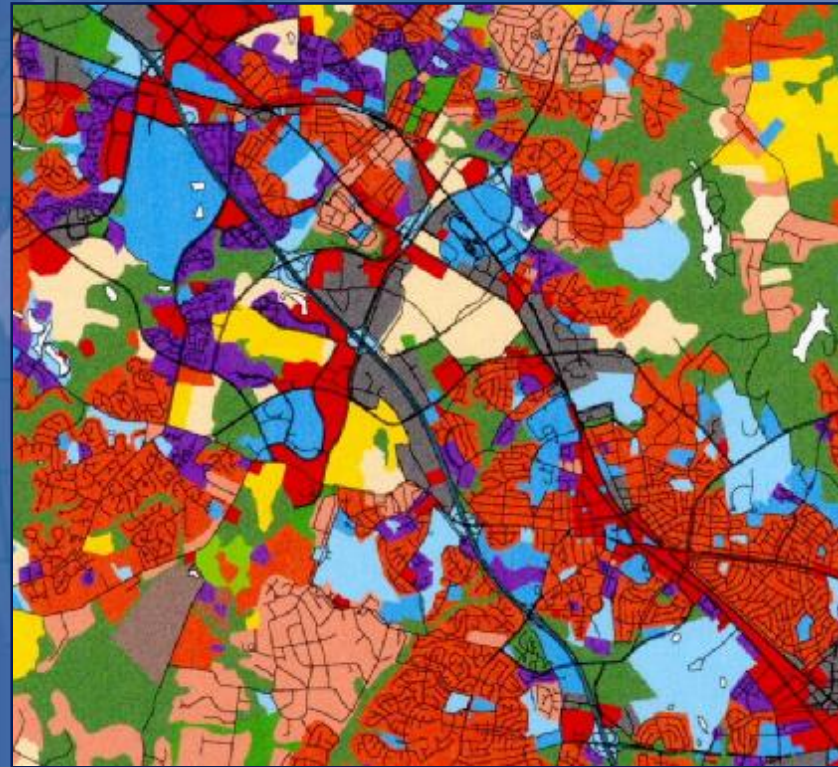
**Property Development
1939 to 1997 shown by
using MdProperty View**

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n The power to present data in a clear and compelling way.

- Low-Density Residential
- Medium-Density Residential
- High-Density Residential
- Commercial
- Industrial
- Institutional
- Extractive
- Open Urban Land
- Crop Land
- Pasture
- Deciduous Forest
- Mixed Forest
- Brush
- Bare Ground



The relationship of various Land Uses

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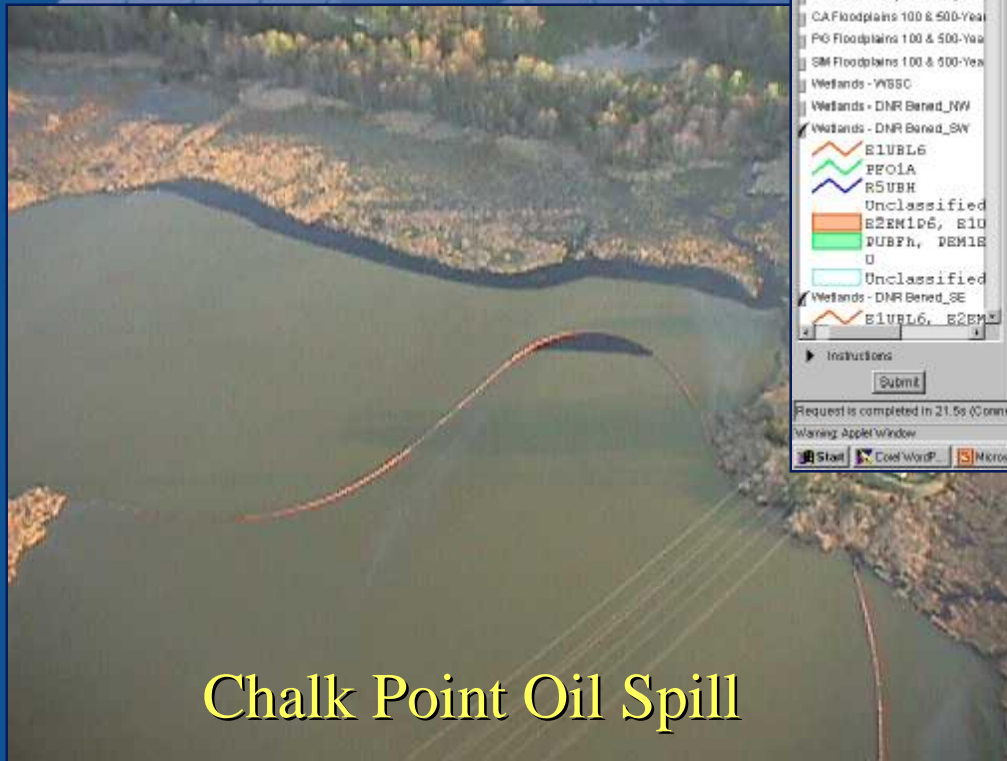
n The power to make **informed decisions.**



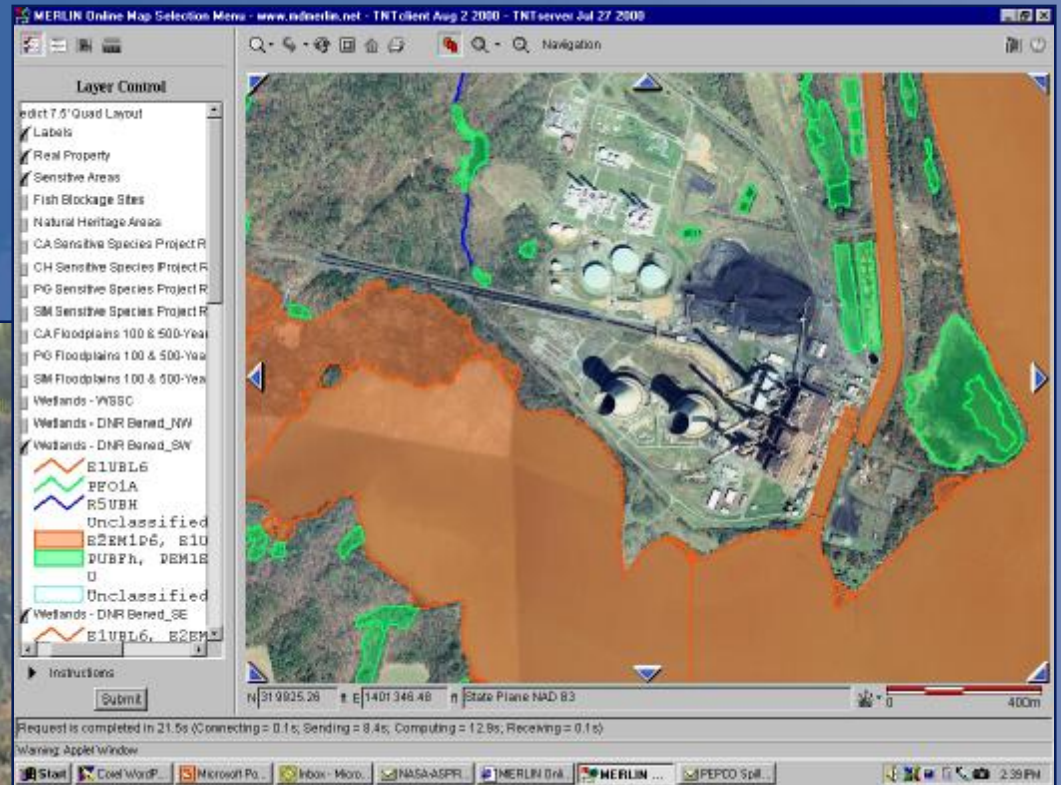
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n The power to provide information quickly in emergency situations



Chalk Point Oil Spill

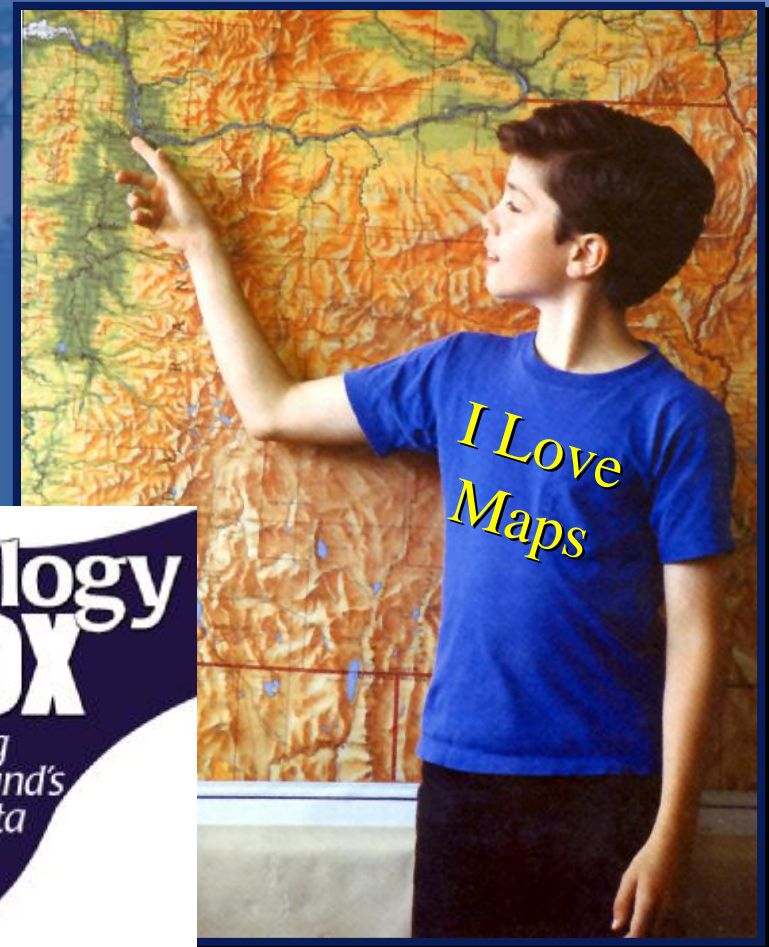
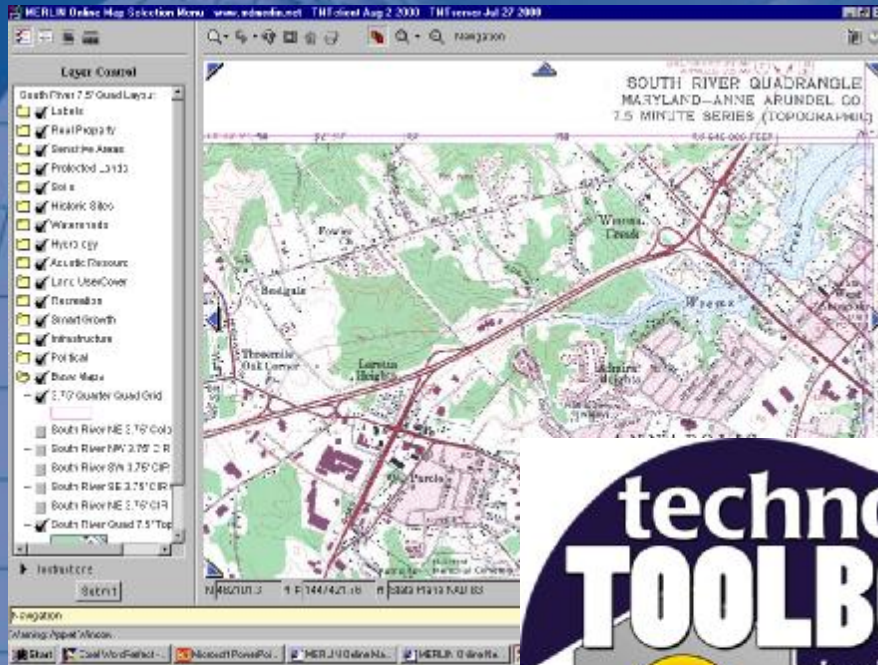


MERLIN Online & Paper Map Production

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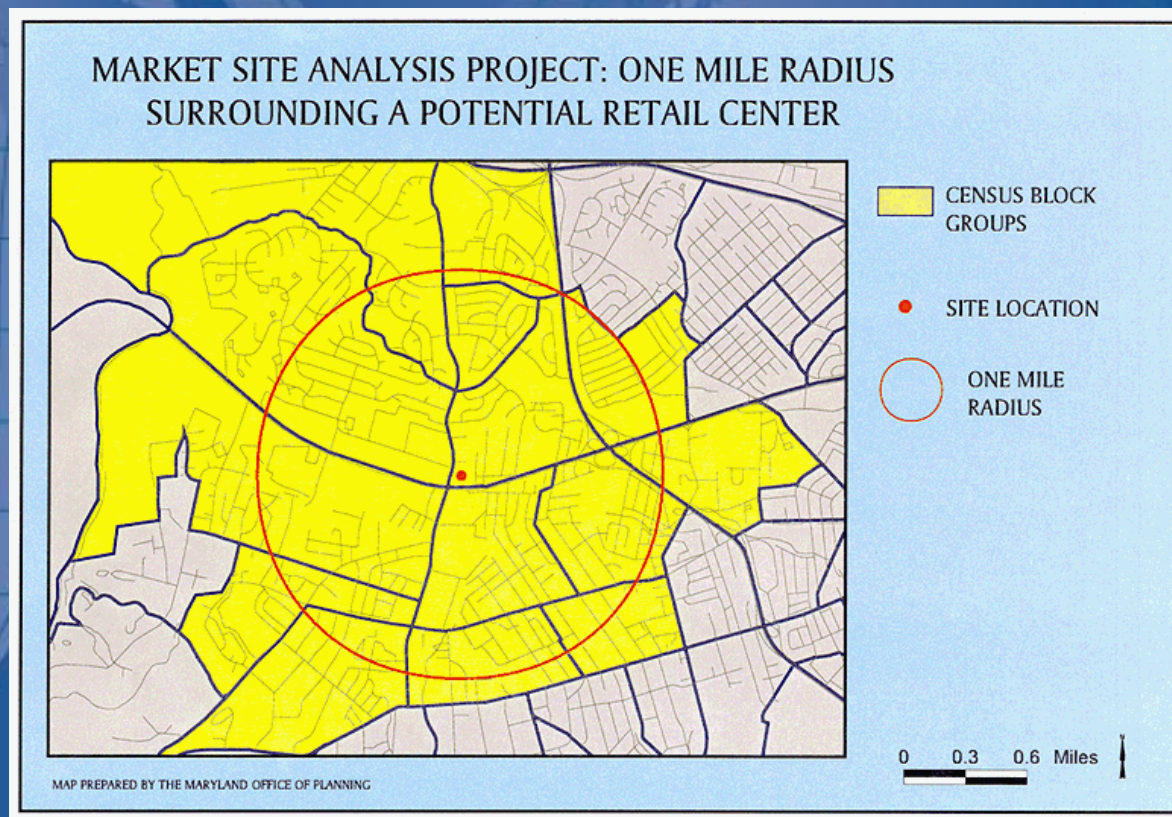
n The power to give citizens public information



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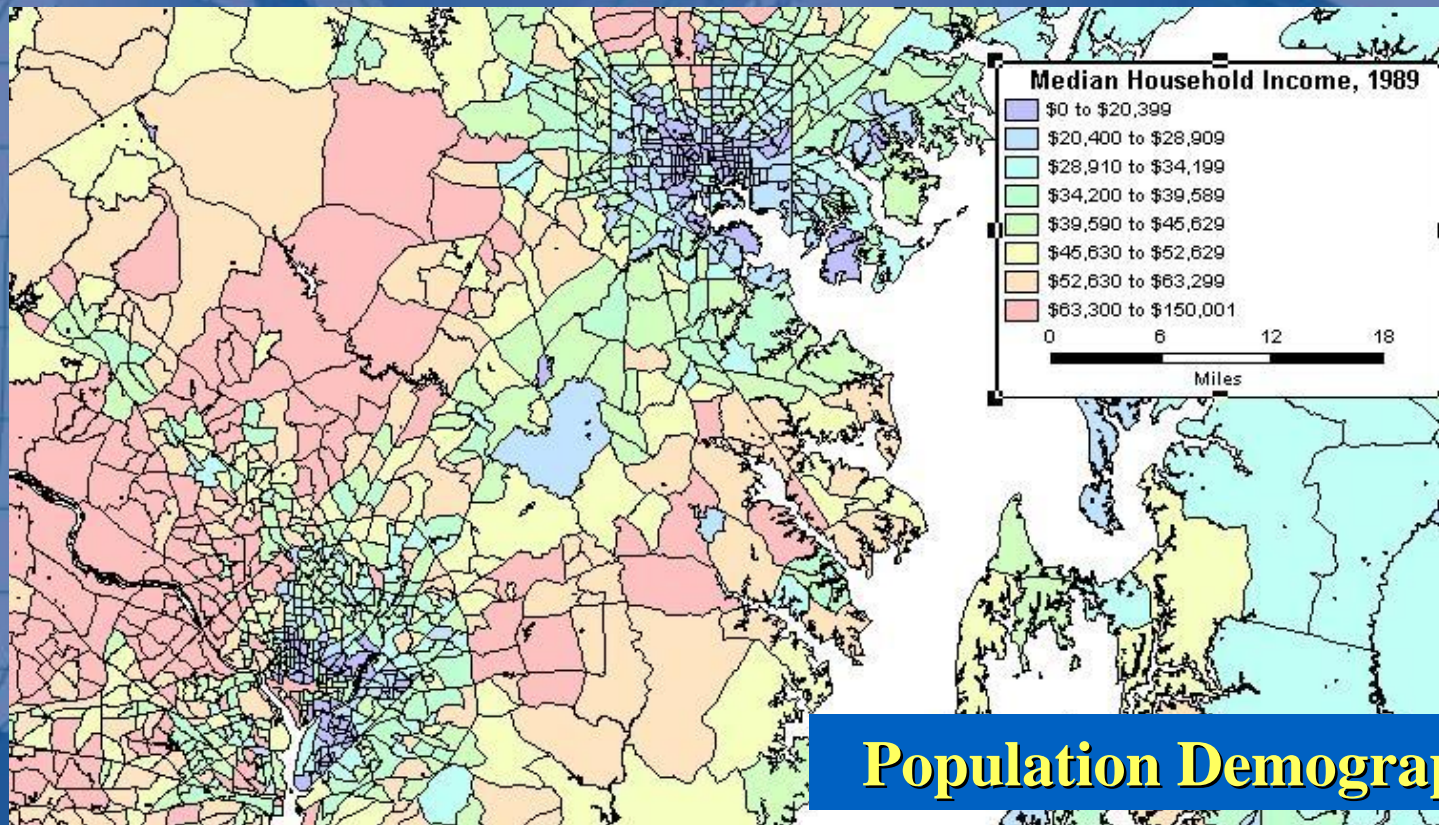
n The power to attract economic development in a manner consistent with Smart Growth



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n The power to understand where public services are needed



Population Demographics

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n The power to save time, money and even lives.



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**Agencies all over
Maryland have applied the power
of GIS
to real-world situations —
*and achieved
very impressive results.***

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**The power of GIS can be
harnessed by people at
every level,
from employees in the field to
the Governor.**

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**Any issue that involves a
location can benefit from the
application of GIS . . .
no matter how big or small.**

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....but we need to do more
in Maryland to effectively
use this tool...

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Standards

Information Architecture

Data Maintenance

Training

Data Models

Collaboration

Formal Agreements

High-speed
Networks

Data Management

Schedules

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Standards

Information Architecture

Data Maintenance

Training

Data M

Collaboration

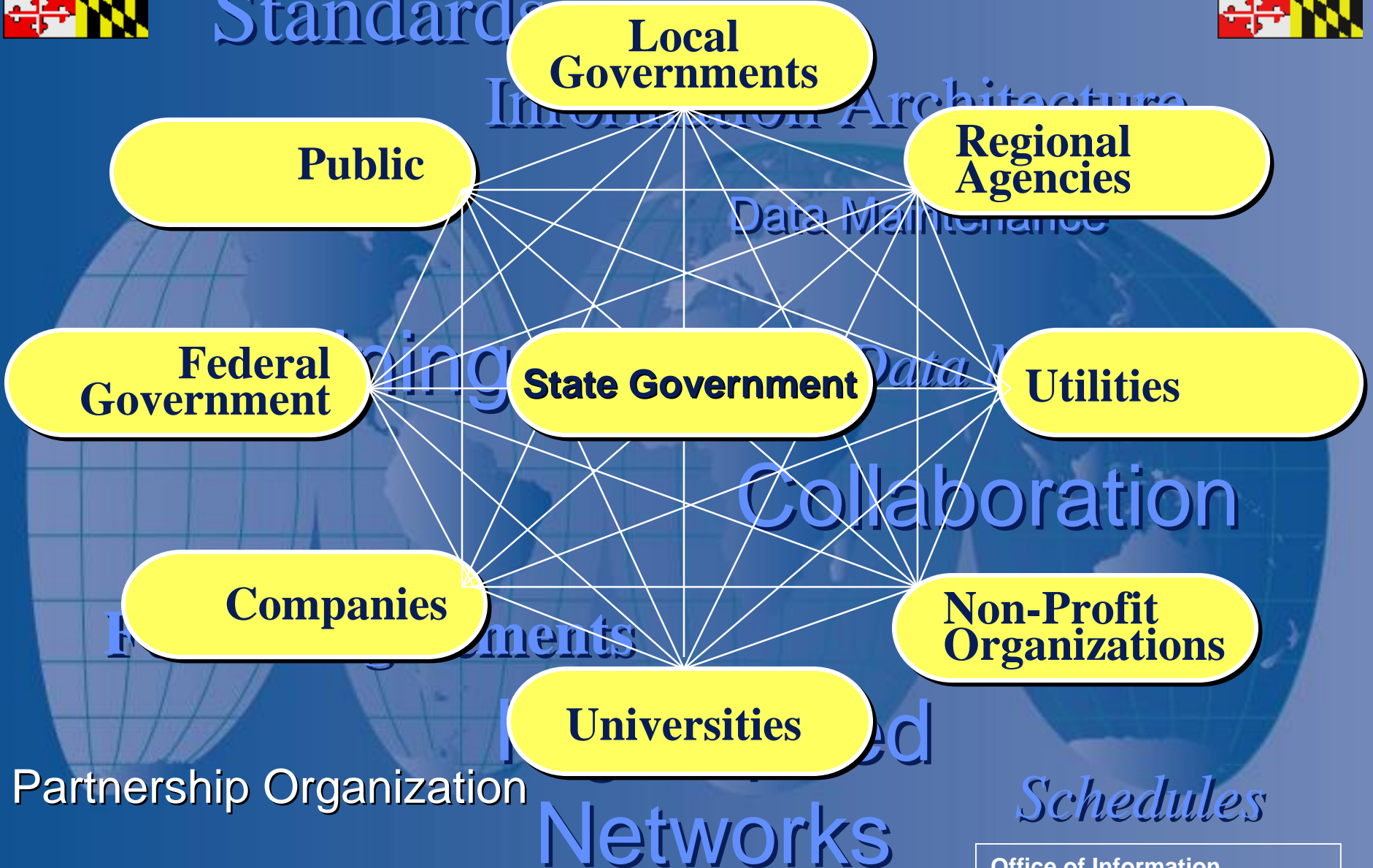
Partnerships

Ad

Partnership Organization

Networks

Schedules



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Maryland State Government Geographic Information Coordinating Committee (MSGIC)

Volunteer Committee

Appointed Reps – but Everyone is Welcome

Identify & Resolve Issues

Coordinate between agencies

Establish clear policies and guidelines

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Strategic Planning in 2000



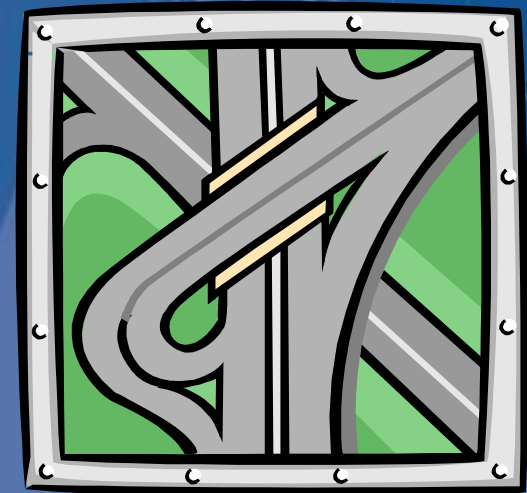
- n Third Strategic Planning Effort
- n 74 Representatives from
 - 30 State Agencies
 - 11 Local Agencies
 - 10 Federal/Private
- n Met for 2 Days
- n Identified New Issues
- n Developed new 5-year Plan (October 25)
- n Plan Adopted (January 10)

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GIS in Maryland is at a Crossroads

- n Need better coordination
- n Too much work for volunteer committee
- n Significant program & policy issues
- n Public is demanding access
- n Need to foster
 - Business Development
 - Economic Growth
 - Smart Growth



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New Mantra for the 21st Century

Where are the nearest
Day Care Centers? Is this neighborhood safe?

Is Light Rail nearby?

**“You can’t have e-government
without g-government”**

because 80% of data is GEOGRAPHIC

Can I Develop this lot?

Where is the best Boat Ramp?

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New Demands

Web-based Portals

Tie to results with increased reporting requirements

Large Diversity of Applications

Agencies not using GIS still have a large demand for services

Appropriate Classifications for Staff

Make data more available and easier to use by an even greater variety of users

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New Solutions

More formal organization with full-time staff

Broaden MSGIC's Membership

New organizational structure

Funding Options

Adjust mission for ongoing project needs

Actively coordinate training needs

Create partnerships for data development

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Evaluating MSGIC



n Strengths

- Expert People
- Significant Data and Tools
- Existing Structure
- Experience
- Management support

n Limitations

- Staffing & classification
- Diversity of applications
- Non-participation (organization & individual)



Critical Success Factors

- n Need to be proactive
- n Integrate with “mainstream” IT
- n Implement GIS standards
- n Integrate into agency business practices
- n Consider GIS on front-end of projects & legislation
- n Improve customer service
- n Increase public use of data and tools
- n Raise awareness, appreciation and demand of GIS
- n GIS becomes a fundamental part of most jobs

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White House OMB Initiative

*Spatial technologies are essential for
governance in the 21st century*

State Creates an Implementation Team

Federal government offers:

Technical Assistance Team

Financial Solutions Team

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Maryland's Implementation Team

Led by State Government

Academia

Local Government

Public Utilities

Expanding the Agenda

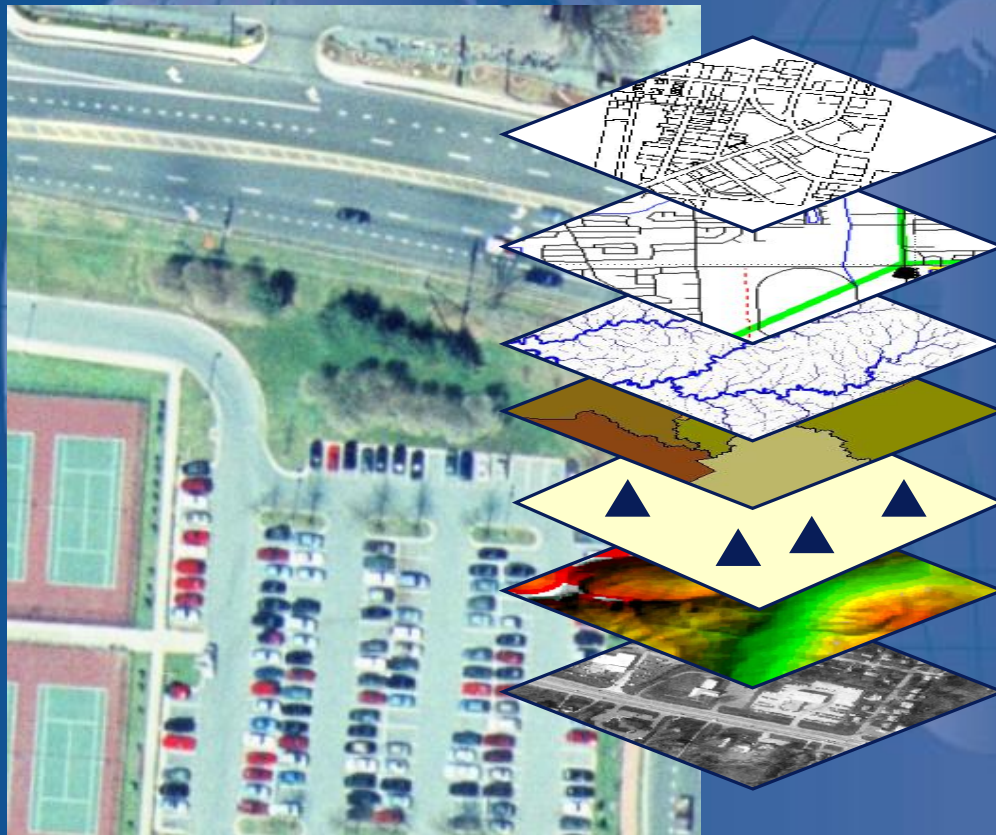
Private Sector

Non Government Organizations

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Mapping Maryland at 1 inch = 200 feet



Land Ownership \$6-50 Million

Transportation

Surface Waters

Boundaries

Geodetic Control

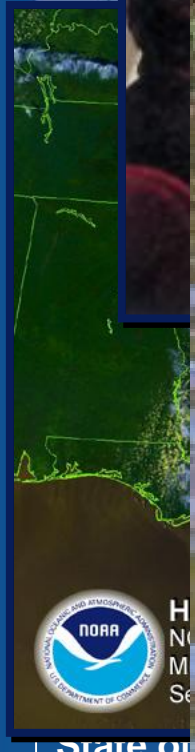
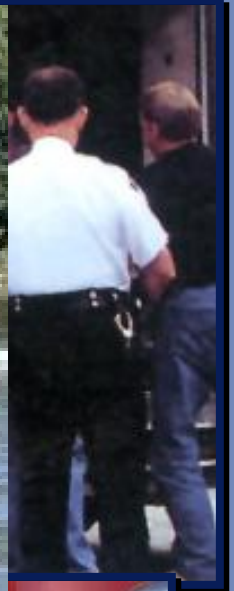
Elevation \$5.5 Million

Aerial Imagery \$825 K

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Everyone will use the same data to meet their missions





Where do you fit in?

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Tap into the power of GIS ...

- n Be aware of existing GIS resources — use them to organize, analyze and present important information.
- n Cooperate with MSGIC in building Maryland's corporate geographic database.
- n Support MSGIC to foster cooperation and collaboration around the state.
- n Support GIS initiatives and partnerships at the local, state and federal levels.
- n Integrate GIS with other IT activities to ensure we are planning for the future.

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Short Term Needs.....

- n Adopt GIS job classifications
- n Examine Options for obtaining full time staff and operating funds
- n Technology Analysts need to learn our standards
- n Support the Implementation Team



The Maryland State Government Geographic Information Coordinating Committee (MSGIC)

Will Soon Become

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Geographic Information Systems

Put the power in your hands.

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Questions ?

<http://www.msgic.state.md.us>

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