



Maryland's
Geographic Information Systems

Powerful Tools,
Informed Decisions,
Positive Partnerships

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

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



n We talk

n We meet



n We study



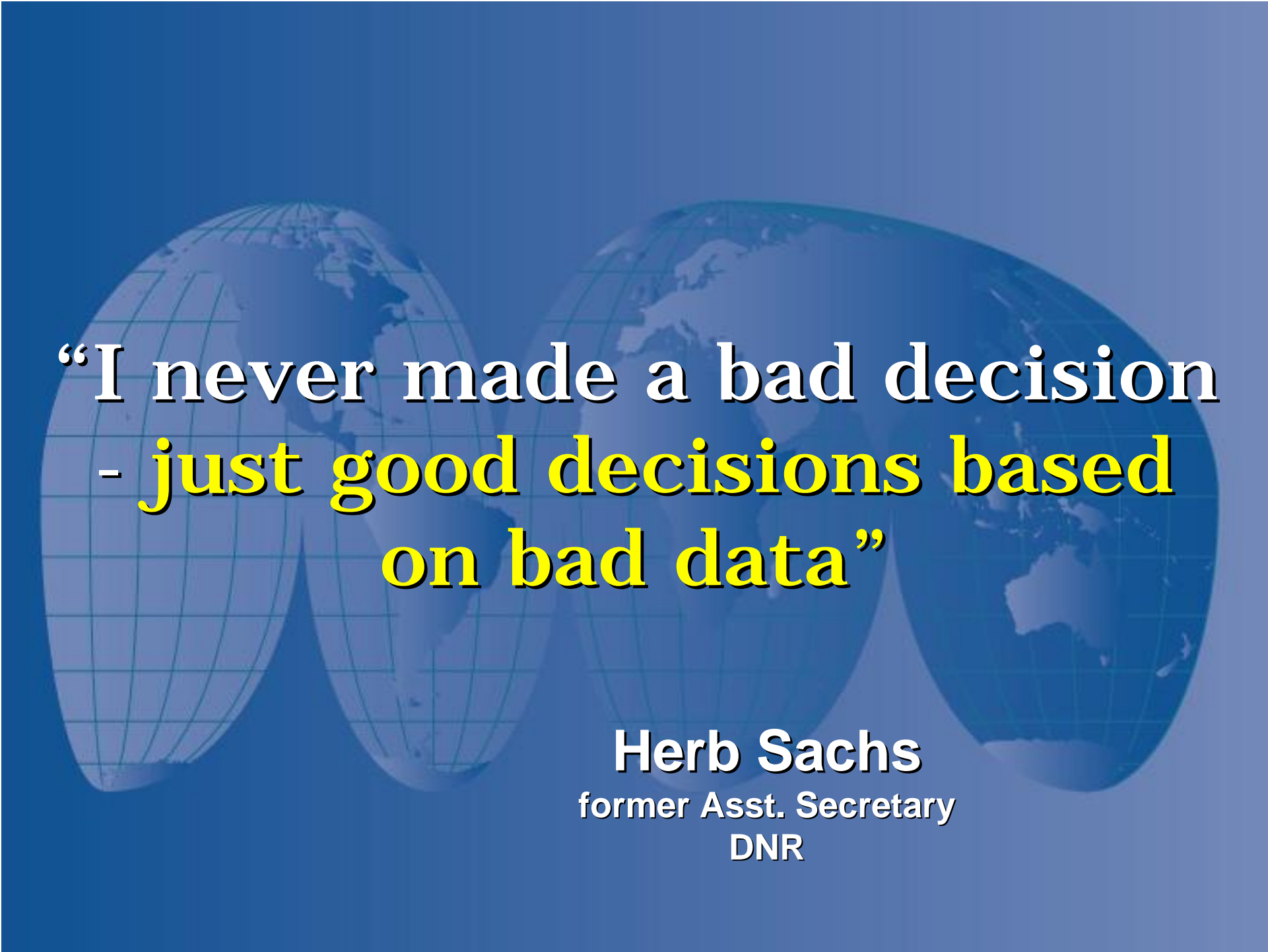
n We debate



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


...using the best data available.



The background of the slide is a solid blue color. In the center, there are three overlapping, semi-transparent globes showing the Earth's continents and grid lines. The globes are arranged in a slightly overlapping, horizontal line.

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

Herb Sachs
former Asst. Secretary
DNR



We have tools to put
better data —
and previously unavailable data —
into your hands, many times *faster*
than any other tool!

Tools that will:

- 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.

Crime Reduction

Public Safety Enhancement

Siting New Schools

Scientific Research

Redistricting

SMART GROWTH

Floodplain Mapping

Facility/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



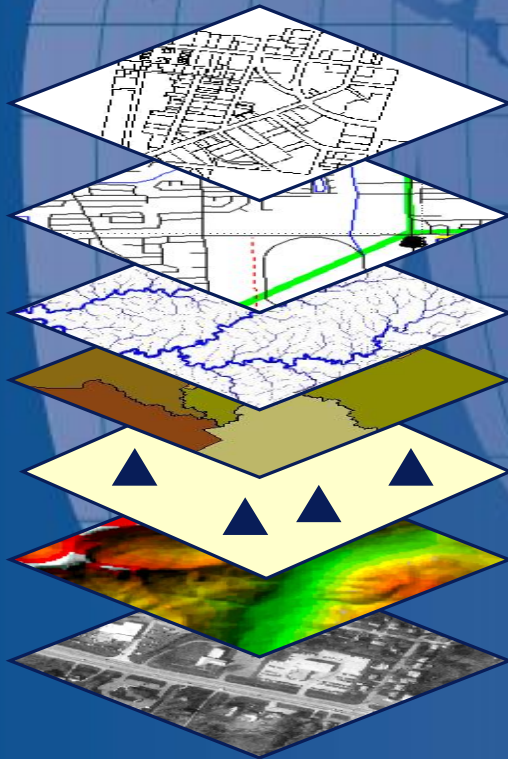
What is a Geographic Information System (GIS)?

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

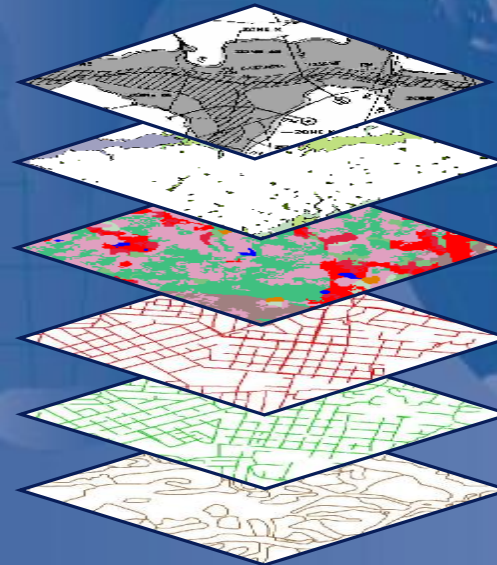
Geographic Database

Framework Data

Thematic Data



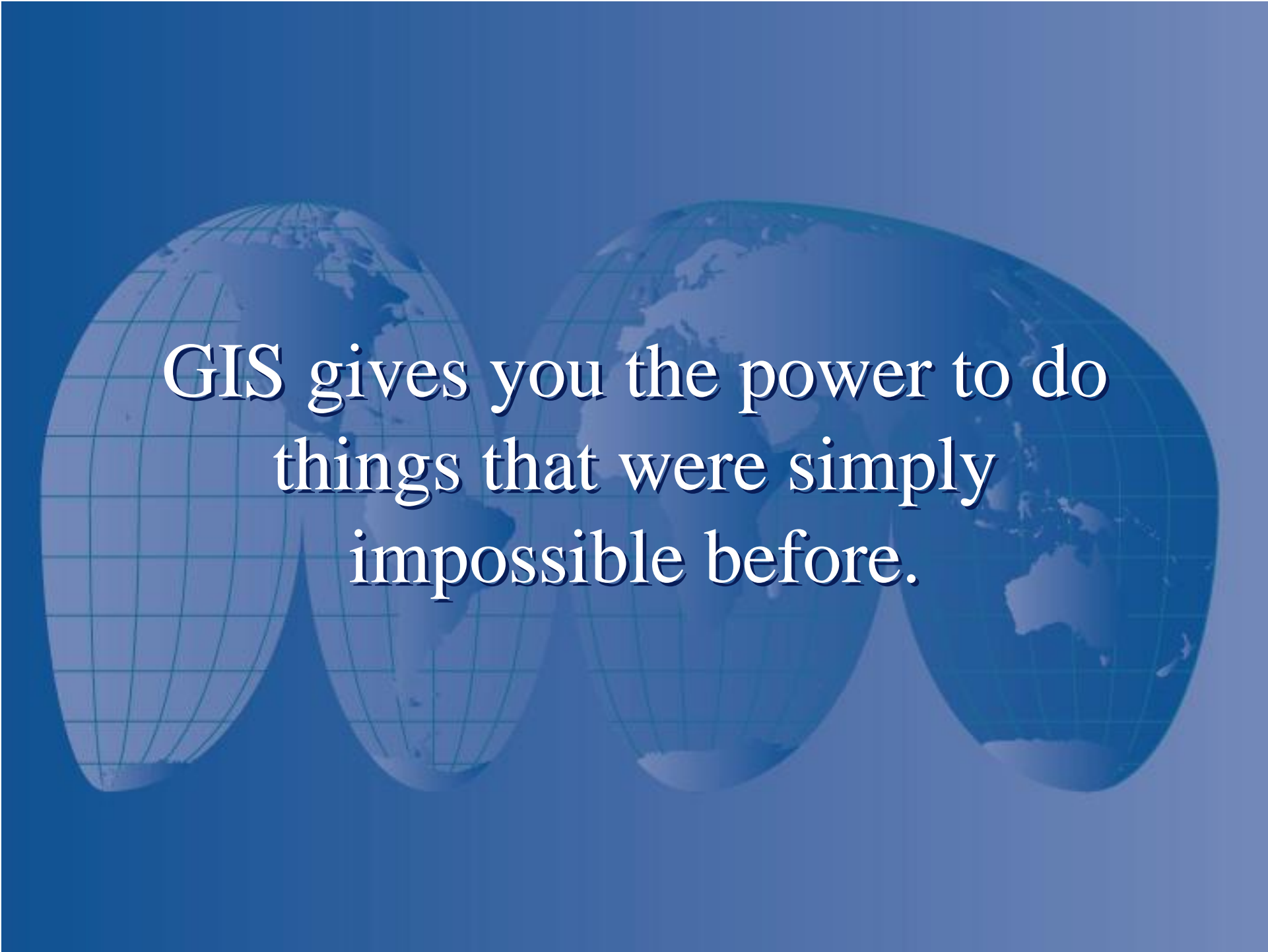
Land Ownership
Transportation
Surface Waters
Boundaries
Geodetic Control
Elevation
Aerial Imagery



Crime Location
Wetlands
Land Use/Cover
Infrastructure
Communications
PFA's

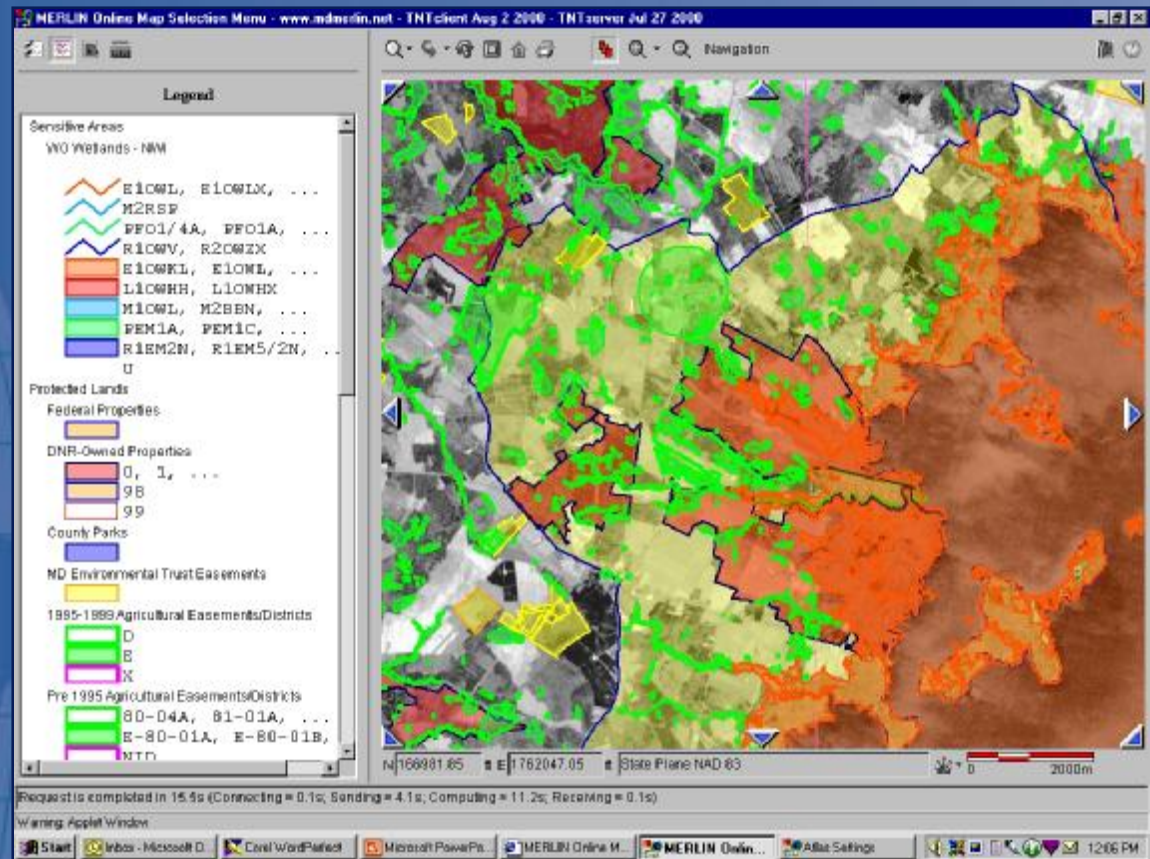
The background of the slide is a solid blue color. In the center, there are four overlapping globes of the Earth, each showing a different perspective of the planet. The globes are rendered in a lighter shade of blue, creating a sense of depth and global connectivity. The text is centered over the globes.

*A simple concept.
An extremely powerful tool.*



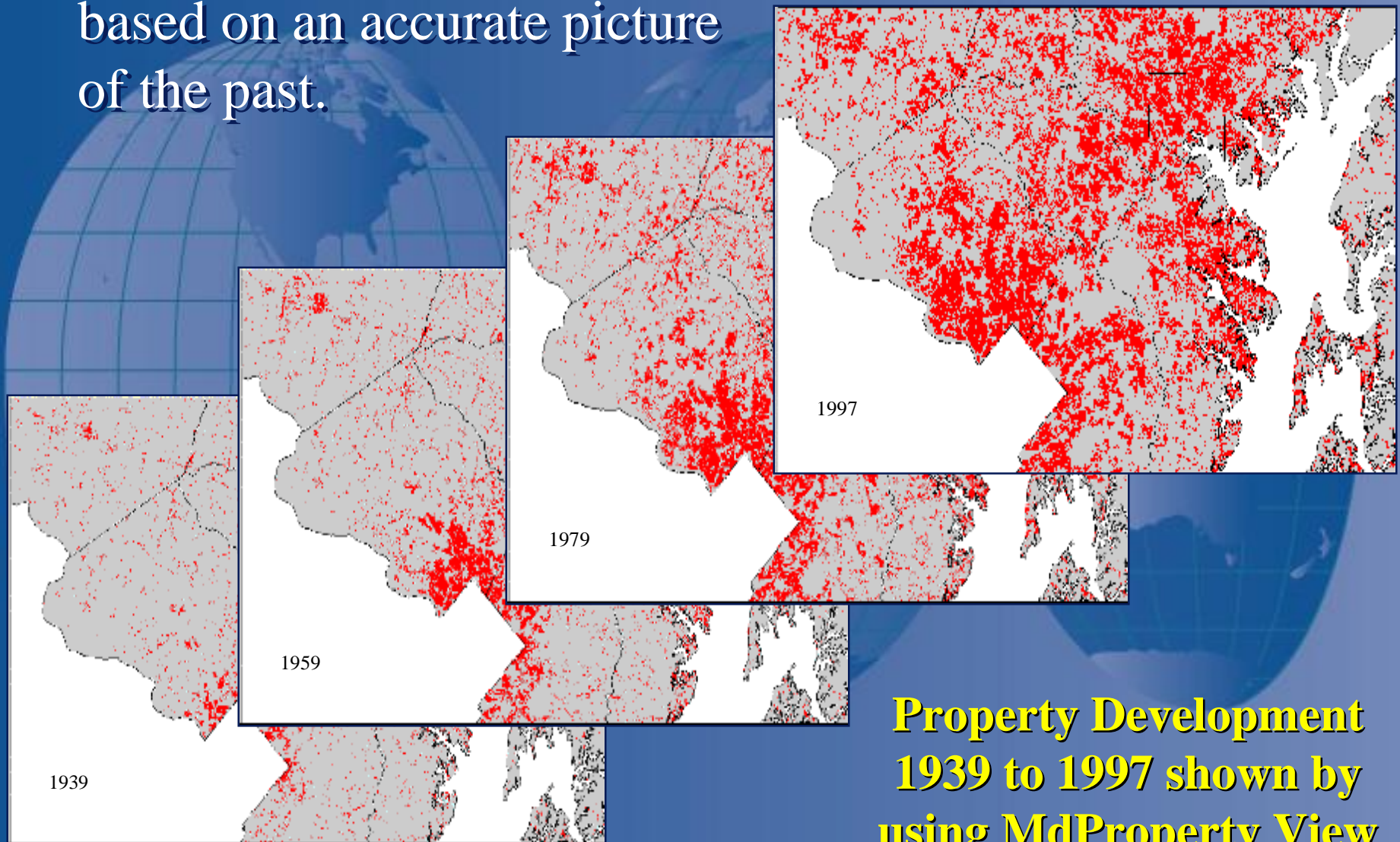
GIS gives you the power to do things that were simply impossible before.

n The power to understand complex relationships.



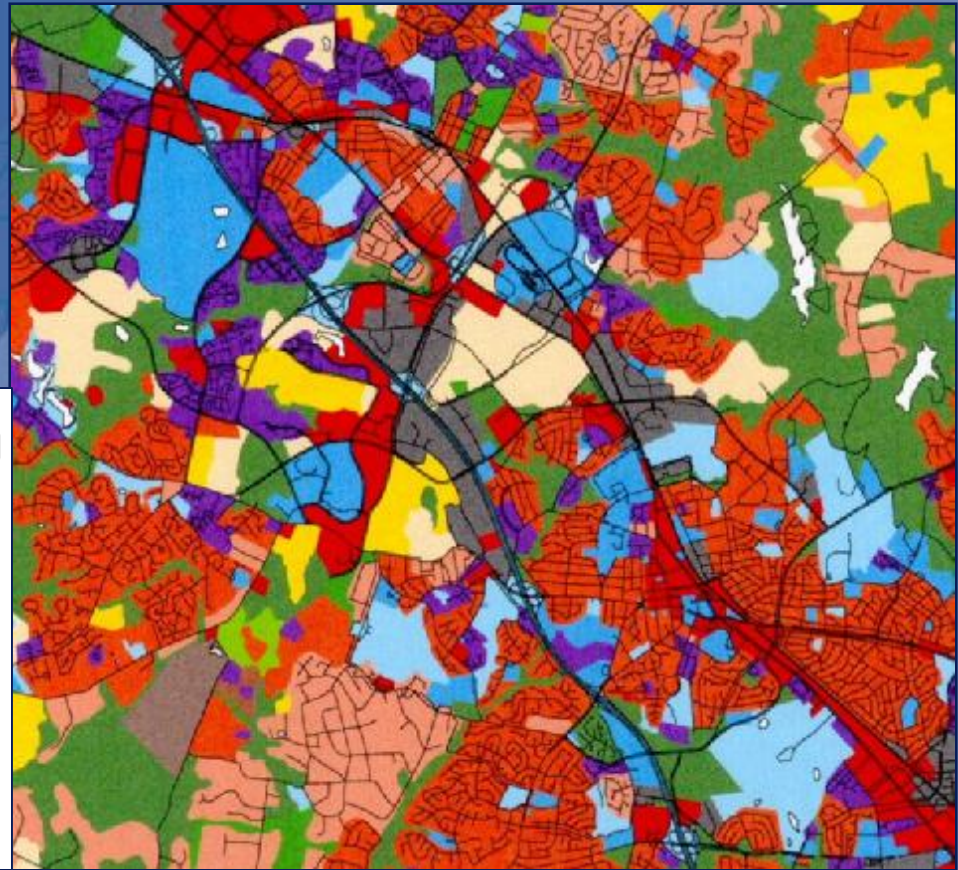
A Rural Legacy area shown with wetlands and existing public land ownership to determine if it is a “smart” acquisition

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**

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

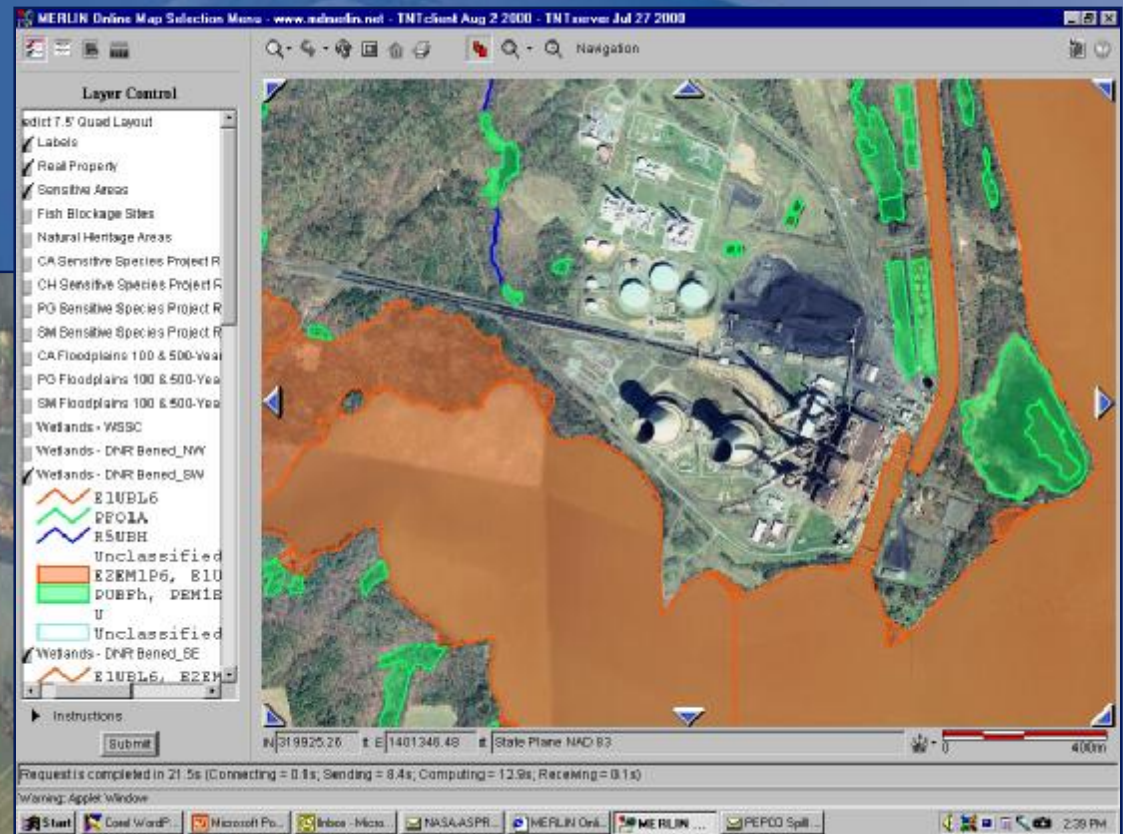
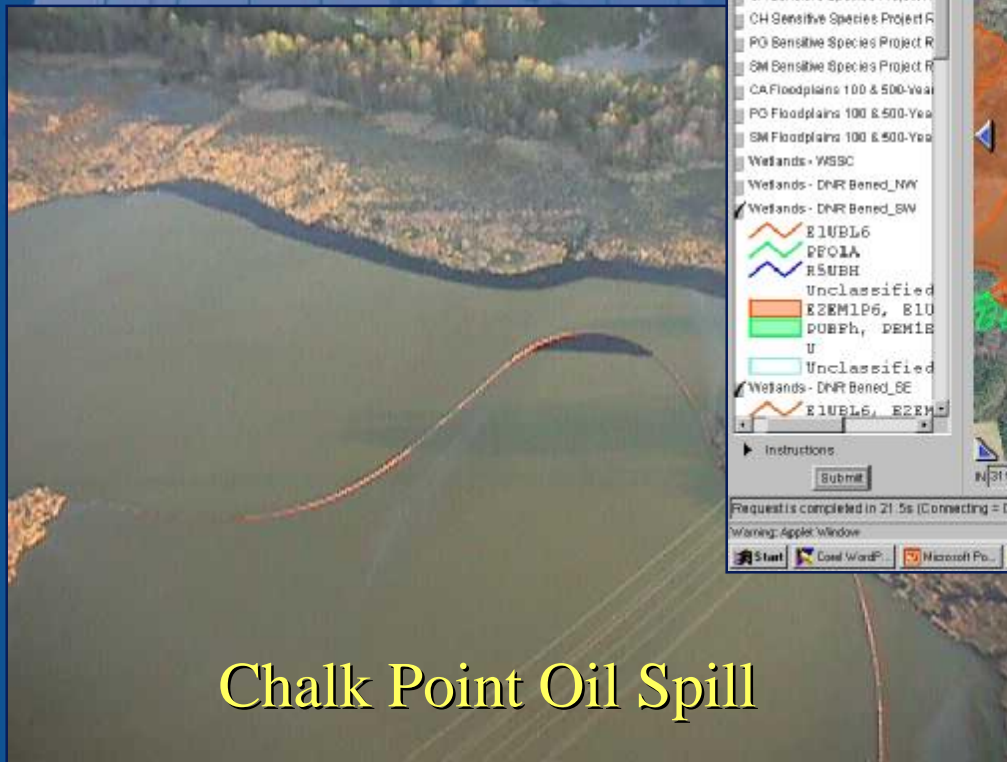


The relationship of various
Land Uses

n The power to make informed decisions.



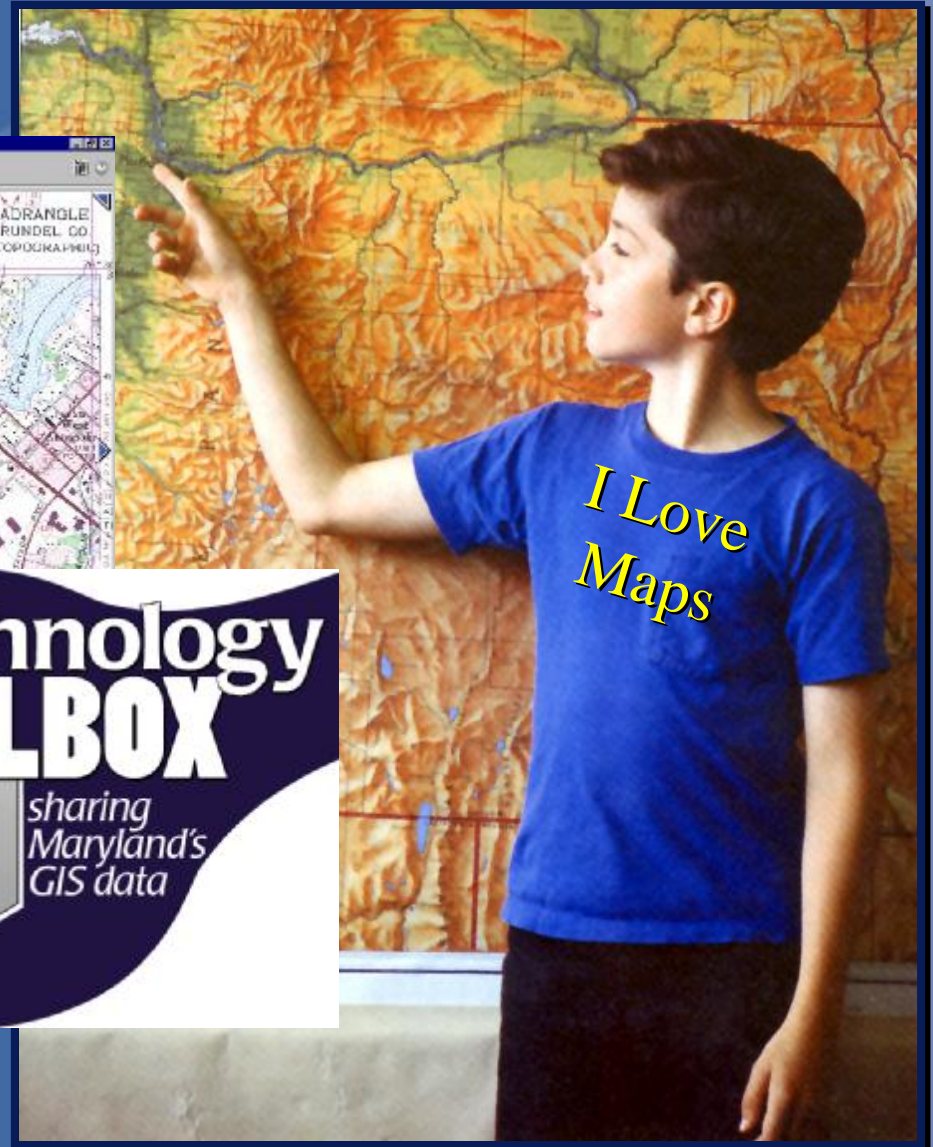
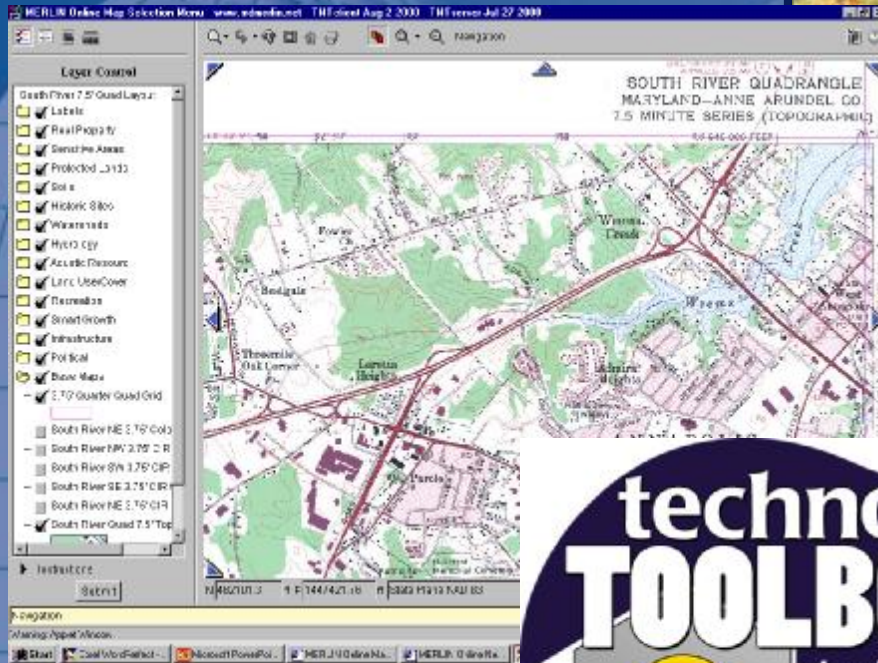
n The power to provide information quickly in emergency situations



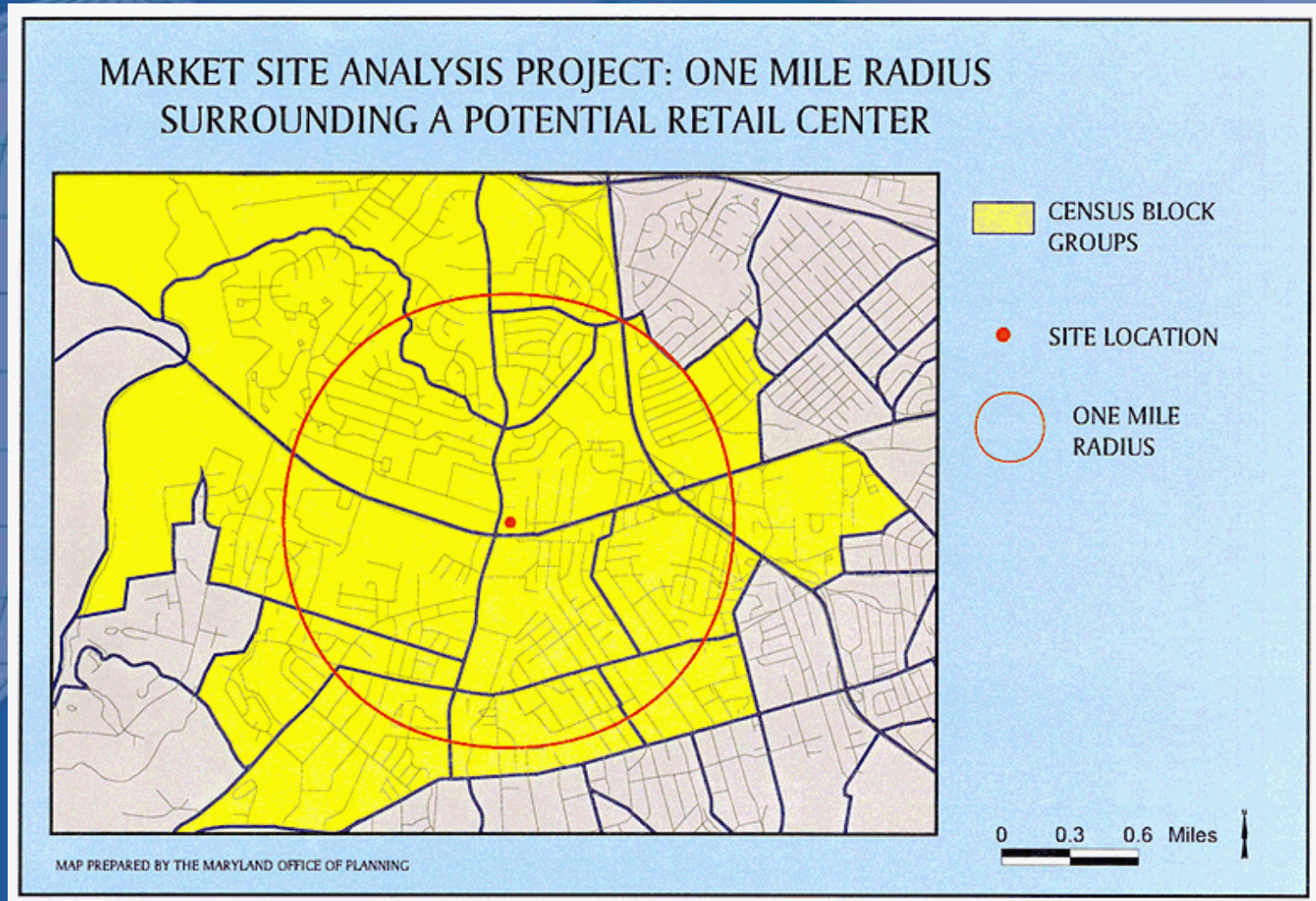
Chalk Point Oil Spill

MERLIN Online & Map Production

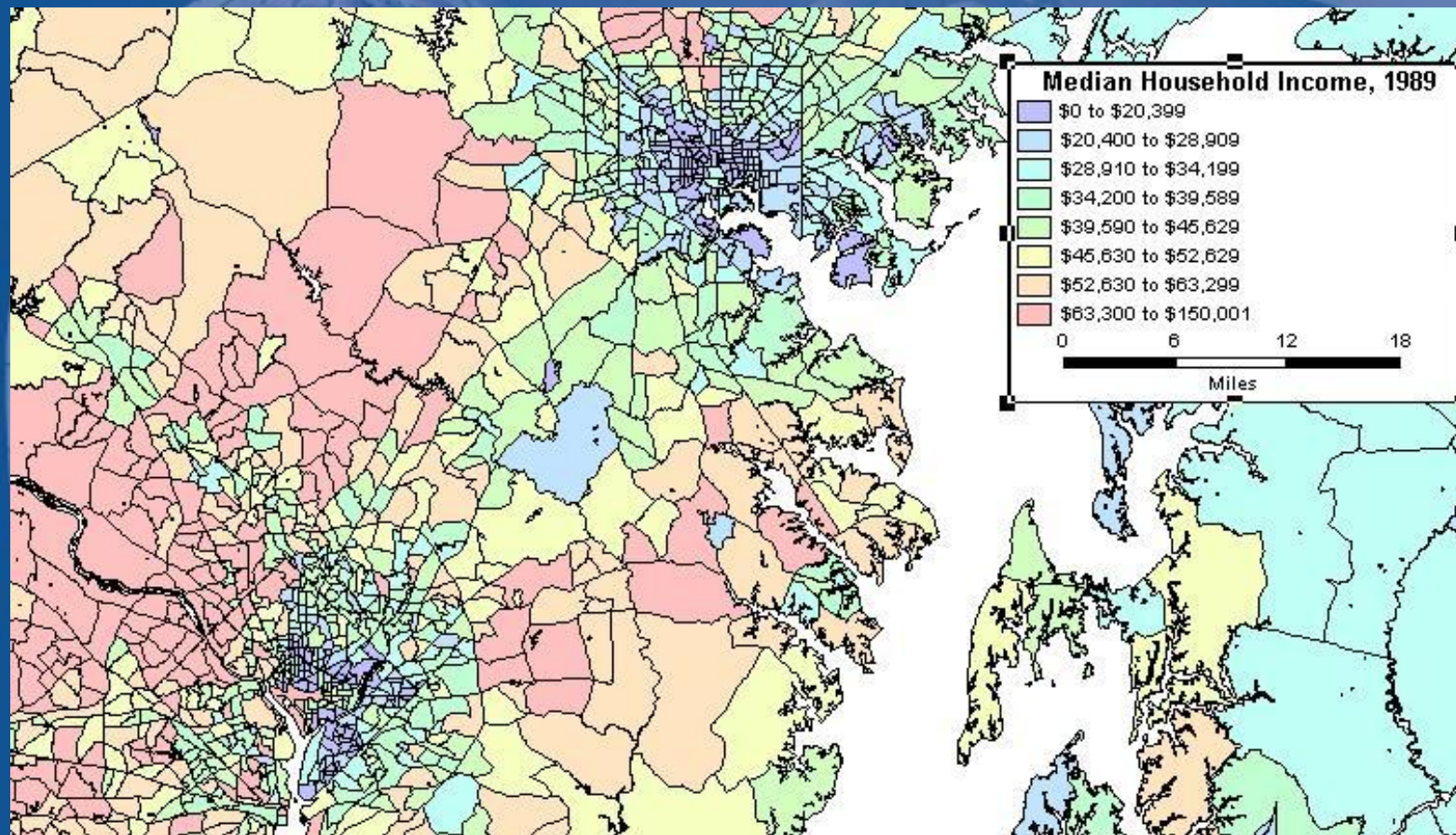
n The power to give citizens public information



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



n The power to understand where public services are needed




Population Demographics

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





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




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...

Standards

Information Architecture

Data Maintenance

Training

Data Models

Formal Agreements

Collaboration

**High-speed
Networks**

Data Management

Schedules

Standards

Information Architecture

Data Maintenance

Training Data

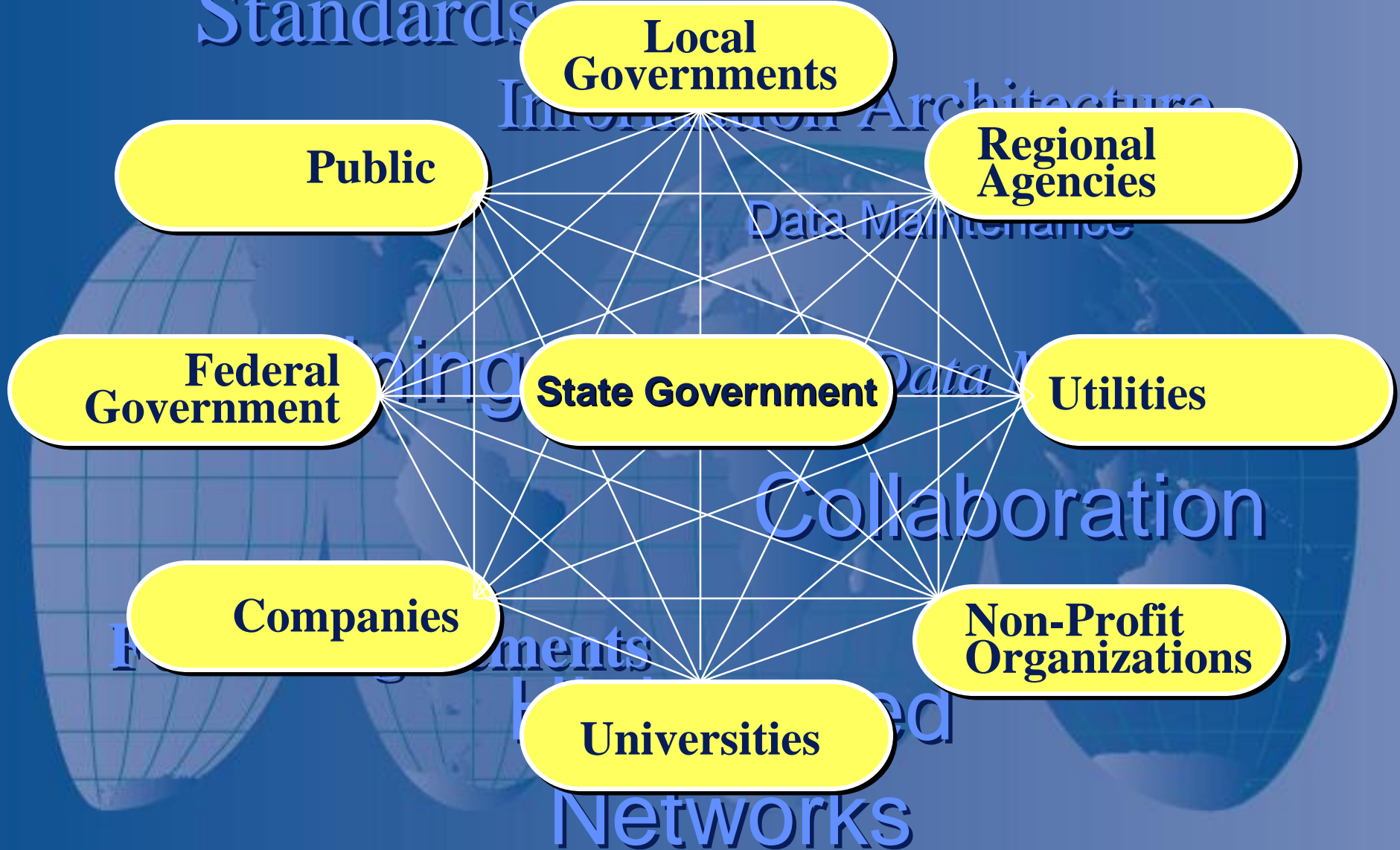
Collaboration

Agreements

Networks

Synchronized Schedules

Partnership Organization





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

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)**

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



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?

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

New Solutions

More formal organization with full-time staff

Broaden MSGIC's Membership

New organizational structure

Secure funding

Adjust mission for ongoing project needs

Actively coordinate training needs

Consider use of Capital Funds for data development

New Focus Areas

The background features three overlapping globes of the Earth, rendered in a light blue color with a grid of latitude and longitude lines. The globes are positioned horizontally across the middle of the slide, with the leftmost one being the most prominent and the rightmost one being the most faded.

- n Mapping Indicators of Child Well-Being
- n Enhancing Maryland's Smart Growth Program
- n Supporting the eMaryland Initiative

Evaluating MSGIC



n Strengths

- Expert people
- Significant Data
- Existing Structure
- Experience
- Mid-level management support

n Limitations

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

Critical Success Factors

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

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



Maryland's Implementation Team

Led by State Government

Academia

Local Government

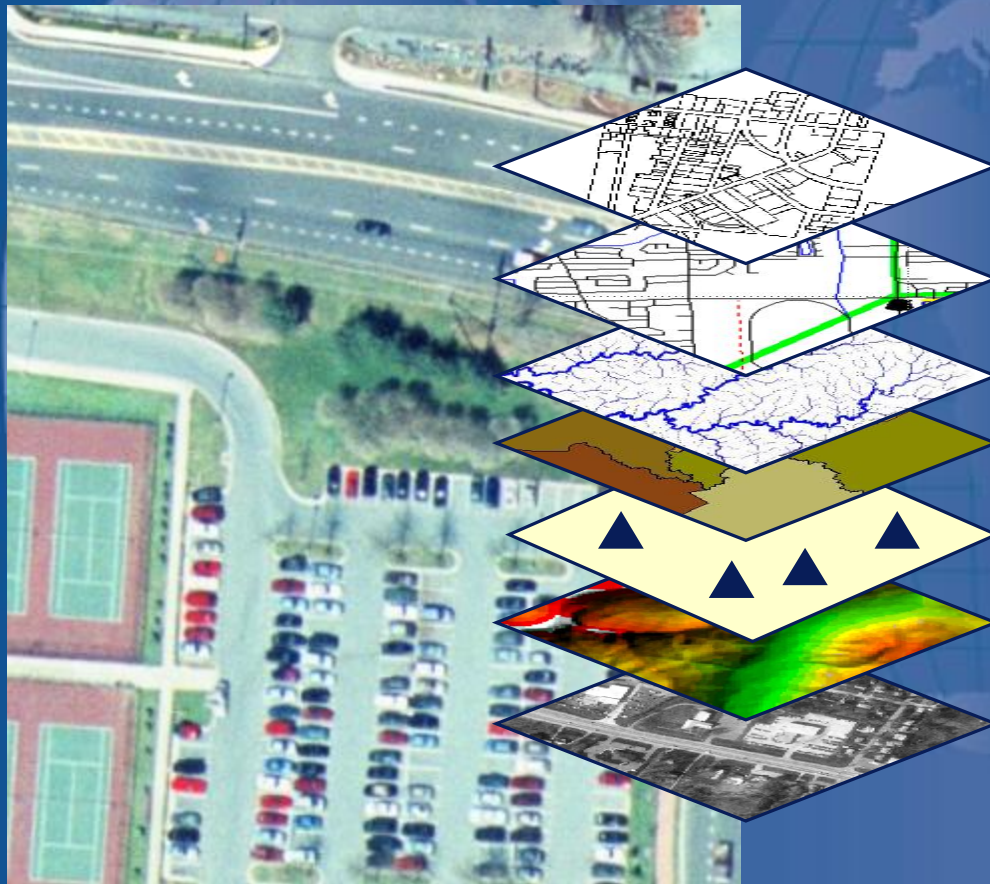
Public Utilities

Expanding the Agenda

Private Sector

Non Government Organizations

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

Everyone will use the same data to meet their missions



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The image features a solid blue background. In the center, there are three overlapping globes of the Earth, each showing a different view of the continents. The globes are rendered in a lighter shade of blue, creating a subtle 3D effect. Overlaid on the globes is the text "Where do you fit in?" in a yellow, serif font with a white outline. The text is centered horizontally and vertically across the three globes.

Where do you fit in?

Tap into the power of GIS ...

- n Utilize your existing GIS resources — 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 continued funding of 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.

Short Term Needs.....

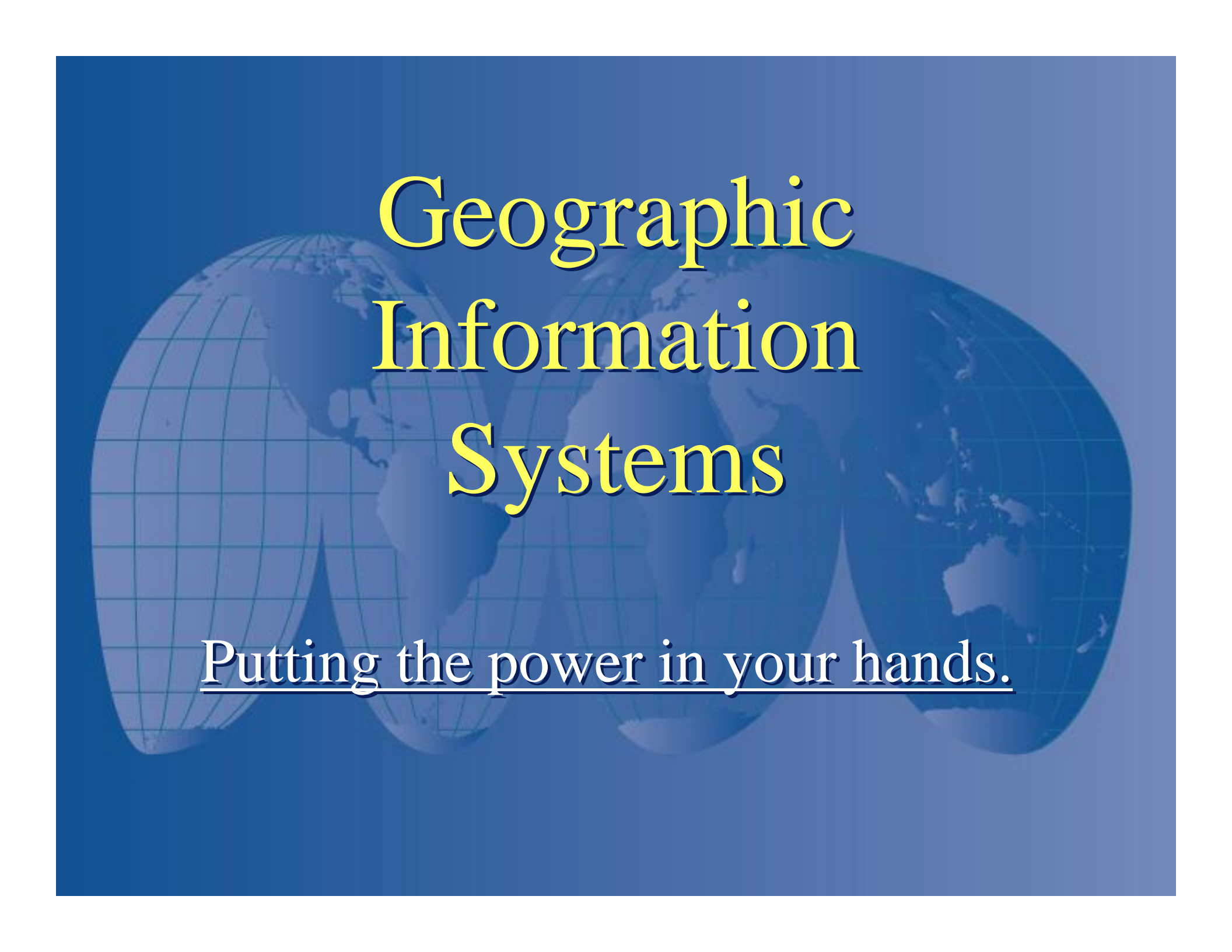
- n Adopt GIS job classifications
- n Three full time staff for GIS Coordination
 - Manager, technical & administrative
- n Operating funds for coordination
- n Technology Analysts need to learn our standards
- n Support the Implementation Team



The Maryland State
Government Geographic
Information Coordinating
Committee (MSGIC)

For More Information

www.msgic.state.md.us



Geographic Information Systems

Putting the power in your hands.

