



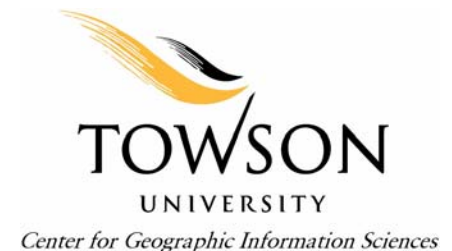
# Maryland Statewide GIS Coordination

## Strategic and Business Plan Development for *Maryland Spatial Data Infrastructure*

March 2007  
TUgis Conference

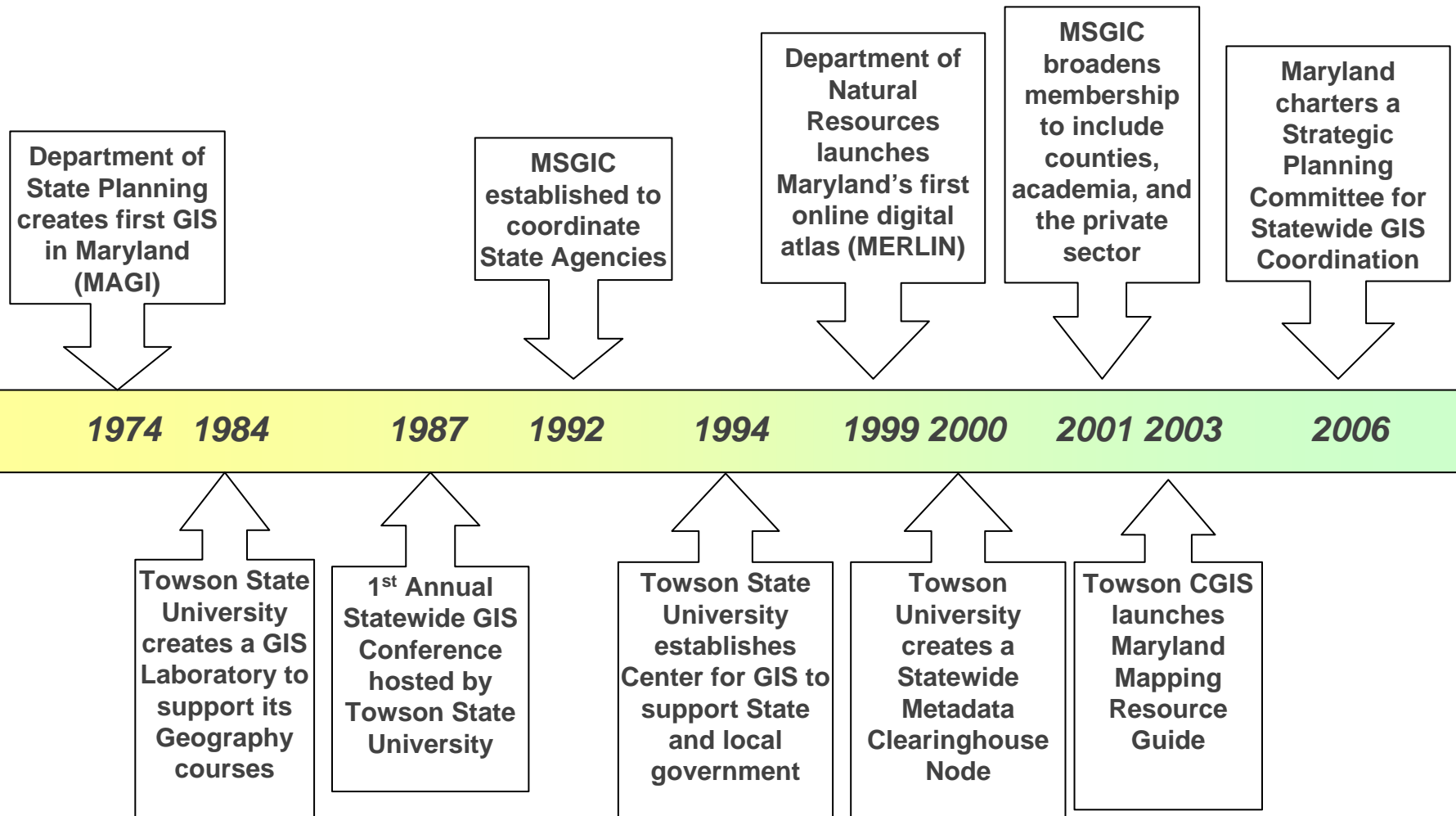
Ken Miller, Acting Director  
Watershed Services  
MD Department of Natural Resources

Matt Felton, Director  
Center for GIS  
Towson University





# Timeline of Key Milestones for Maryland GIS





## Status of GIS Coordination in Maryland

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- Virtually every aspect of government utilizes data that is geospatial in nature.
- Current coordination efforts are driven only by volunteerism.
- Coordination efforts are not as successful as possible because there is no unified approach to GIS in Maryland.
- Maryland scores extremely low on a nationwide survey of statewide GIS coordination conducted annually by the National States Geographic Information Council (NSGIC).
- A strategic plan for statewide GIS coordination has been established through a year-long process of stakeholder- and consensus-building.
- A draft business plan has been established to guide Maryland toward creating an effective Maryland Spatial Data Infrastructure (MSDI).



# Prioritization of 9 Coordination Criteria

	<i>Functional</i>
	<i>Moving Forward</i>
	<i>Impaired</i>

Criteria	Status		Priority	Progress
	2006	2007		
#1 A full-time, paid coordinator position is designated and has the authority to implement the state's business and strategic plans.			Immediate	Drafting job description
#2 A clearly defined authority exists for statewide coordination of geospatial information technologies and data production.			Immediate	Strategic plan defines governance structure
#3 The statewide coordination office has a formal relationship with the state's Chief Information Officer (or similar office).			Immediate Dependant on 1,2	Executive sponsorship via IT Master Plan
#4 A champion (politician or executive decision-maker) is aware and involved in the process of coordination.			Fundamental Ongoing	Support from State CIO
#5 Responsibilities for developing the National Spatial Data Infrastructure and a State Clearinghouse are assigned.			Dependant on 2	Unofficial but functional
#6 The ability exists to work and coordinate with local governments, academia, and the private sector.			Dependant on 1,2	Unofficial but functional
#7 Sustainable funding sources exist to meet projected needs.			Ongoing	None. Some initial awareness
#8 Coordinators have the authority to enter into contracts and become capable of receiving and expending funds.			Dependant on 1	No formal coordinating entity
#9 The Federal government works through the statewide coordinating authority.			Dependant on 1,2	No formal body to work through



# Building Upon a Foundation of Collaboration

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- Several recent projects have demonstrated the how a coordinated GIS can
  - *Save Time*
  - *Save Money*
  - *Save Lives*
- **Saving Time:** Maryland Cooperative Centerline Program
  - *HOWEVER: Long term success requires that standards are established and enforced and that awareness is maintained among the many creators and users of the data at the local, state, and federal level.*
- **Saving Money:** Maryland Imagery Acquisition Partnership
  - *HOWEVER: Long term success requires that formal structures are in place to collect monies, establish pricing, and ensure equitable distribution of data.*
- **Saving Lives:** EMMA (Emergency Management Mapping Application)
  - *HOWEVER: Long term success requires that a coordinated approach is taken to obtain, integrate, and secure GIS data from multiple disciplines and jurisdictions across levels of government.*



## Reaching the Limits of Volunteerism

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- Redundant data acquisition
- Duplicated efforts to create data or applications
- Lack of consistent standards
- Increasing complexity of GIS and related IT resources
- Slow growth of statewide clearinghouse
- Multiple, disconnected GIS communities
- No unified software procurement



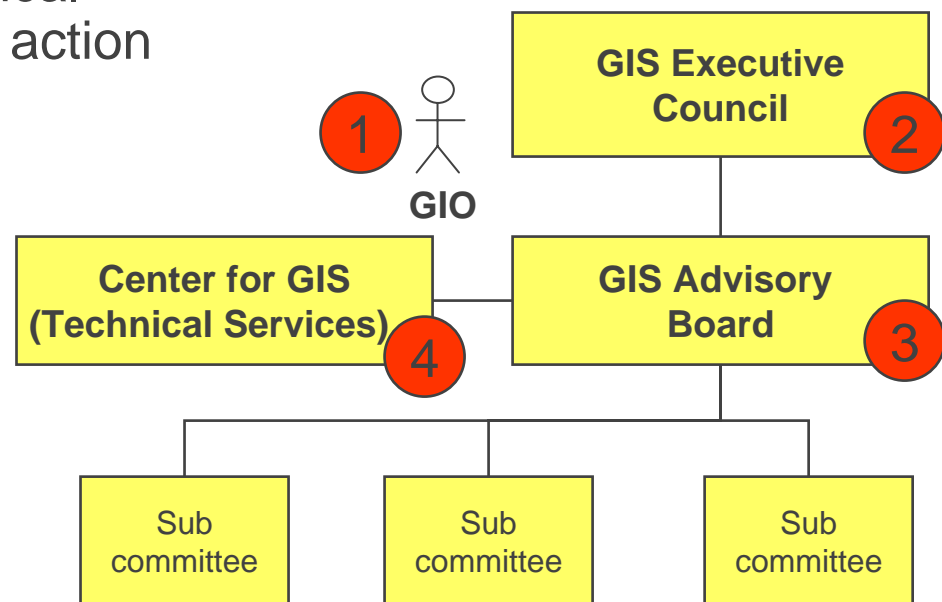
# Statewide Strategic Planning Efforts

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- One of MSGIC's "Top 3" priorities
- 2008 Maryland IT Master Plan Priority #6
  - "Standardize and consolidate Geographical Information Systems"
- Strategic Planning Committee (April 2006 – March 2007)
  - Funded through a federal grant from USGS
  - Led by Center for GIS @ Towson University in partnership w/ MSGIC
  - Executive sponsorship from State CIO
  - Created a Strategic Plan and Draft Business Plan (March 2007)
- Established recommendations for:
  - Coordinating Council
  - State Geographic Information Officer (GIO)
  - Technical Services
  - Possible funding methods

# Strategic Plan – 4 Recommendations

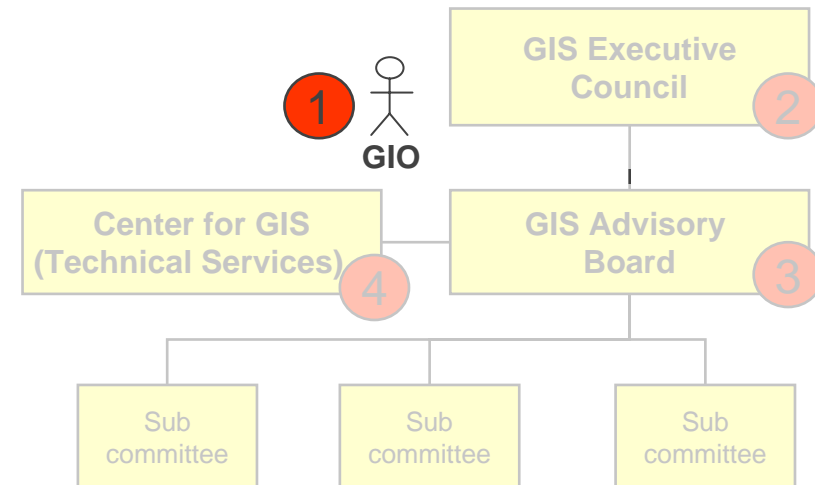
- 1. Coordinate**—Establish a state-funded, full-time Geographic Information Officer (GIO) position that reports to the State CIO
- 2. Set Policy**—Establish a GIS Coordinating Council that includes representative membership from stakeholders
- 3. Recommend**—Establish a technical advisory board that recommends action to the GIS Coordinating council
- 4. Implement**—Designate and fund Towson University as the technical support for MSDI





# Recommendation #1: Establish a State GIO

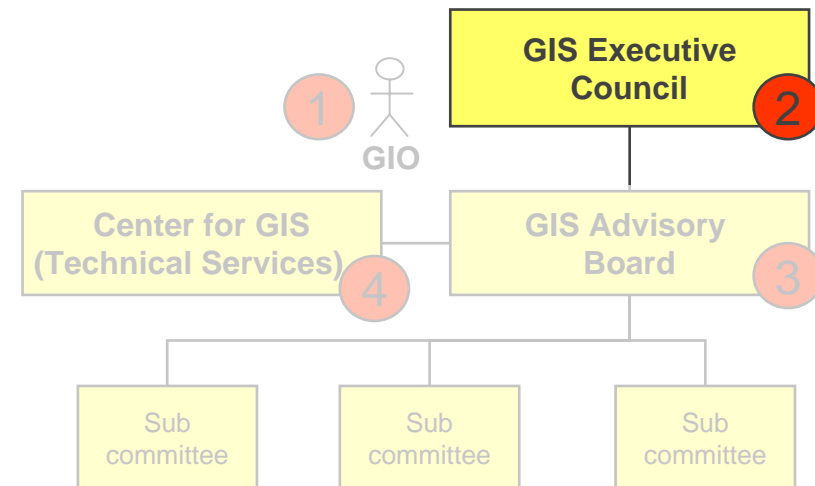
- Signatory and oversight of grants and joint funding opportunities
- Staff support for GIS Coordinating Council
- Central point of contact
- Authority to make a decision on behalf of the state
- Global perspective of the state's needs
- National representation of GIS (can communicate “all things GIS” in Maryland)
- Appropriate access to CIO, legislators, and technical resources
- Accessible to stakeholders at all levels of government and across all jurisdictions
- Build partnerships and collaboration among government, academia, private sector, non-profit, and public





## Recommendation #2: Establish a GIS Coordinating Council

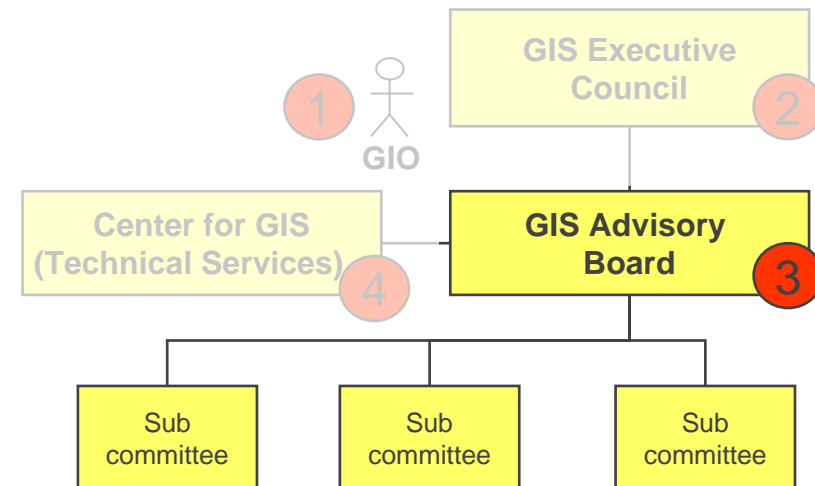
- Composition
  - Senior elected and appointed officials
  - Cross-cutting membership
- Responsibilities
  - Sets and approves policy
  - Advocacy
  - Legislation & Funding
- Meeting frequency
  - Meets quarterly





## Recommendation #3: Establish a Technical Advisory Board

- Composition
  - Senior representatives from county, municipal, state, regional, federal, academic, private, non-profit
  - Elected chair & vice chair
- Responsibilities
  - Program management oversight
  - Planning
  - Manage grants and standards compliance
- Meeting frequency
  - Meets bi-monthly
  - Subcommittees meet monthly

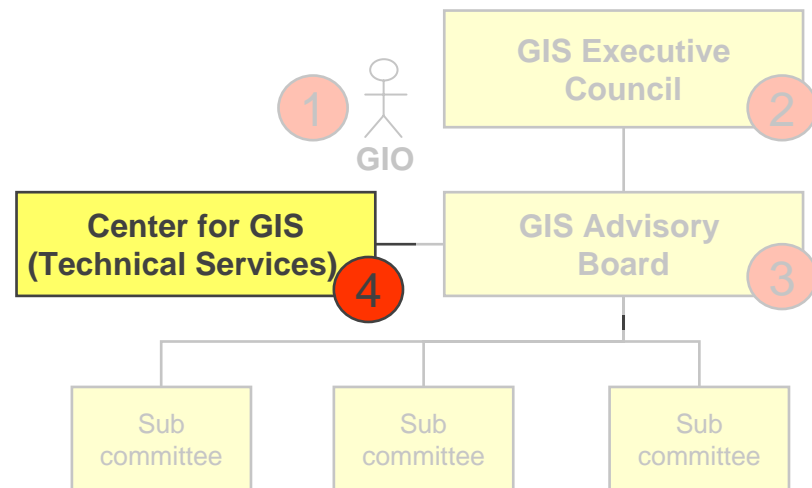




## Recommendation #4:

# Designate Towson University as Technical Support for Maryland Spatial Data Infrastructure

- Maintain Maryland's NSDI clearinghouse.
  - Responsible for populating MMRG with data and applications entries.
  - Serve as the formal location of Maryland's framework layers
- Two-tiered data repository accessible in real-time
  - Central repository of framework layers kept up-to-date via database synchronization technology
  - Catalog (metadata) for federated repository of agency-specific data
- Apply for and manage grants and other funding for **shared** applications or data
- Establish partnerships with other universities to leverage individual strengths
- Provide baseline technical assistance to GIS community in Maryland





## Intended Outcomes of a Coordinated Statewide GIS

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- Rapidly integrate and communicate government performance for StateStat.
- Effectively plan for the impact that Base Realignment and Closure (BRAC) will have on Maryland's citizens.
- Achieve a significant return on investment for the state.
- Reduce unnecessary redundancies.
- Leverage limited resources to their full potential.
- Increase emergency preparedness and regional homeland security.
- Facilitate Smart Growth efforts.
- Enhance Chesapeake Bay Restoration and Land Preservation efforts.

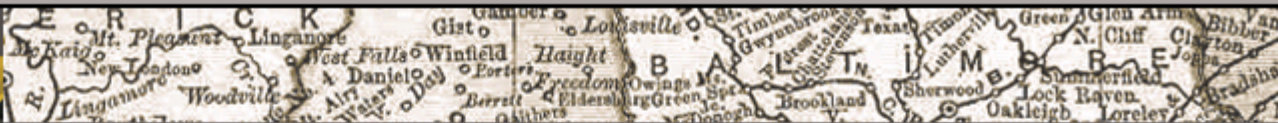


## Raising Awareness and Feedback Around Maryland

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- ESRI Regional Meetings
  - Eastern Maryland User Group (EMUG) – June 06
  - Western Maryland User Group (WMUG) – July 06 / February 07
  - Central Maryland User Group (CMUG) – August 06 / December 06
- MACo Summer Conference – August 06
- MSGIC Quarterly – October 06
- Information Technology Advisory Council (ITAC) – December 06
- Traffic Records Coordinating Council (TRCC) – December 06
- MACo Winter Conference – January 07
- MSGIC Quarterly – January 07
- TUgis Conference Senior Executive Seminar – March 07
- Other suggested venues?

Maryland GIS

Maryland Spatial  
Data Infrastructure

# Maryland Mapping Resource Guide



TOWSON  
UNIVERSITY  
Center for GIS

[MMRG Home Page](#)[MSGIC Contacts](#)[Featured GIS Activities](#)[Find Data](#)[Share Data](#)[GIS for Public Safety](#)[Background](#)[FAQ](#)[Resources](#)[Data Survey for E. M.](#)[The National Map](#)[Statewide GIS Coordination](#)[Project Overview](#)[Newsletter](#)[Tools & Talking Points](#)[Contacts](#)[Links](#)[MMRG Home Page](#) / Statewide GIS Coordination

## Statewide GIS Coordination

A partnership between the Towson University Center for Geographic Information Sciences (TU-CGIS) and the Maryland State Geographic Information Committee (MSGIC) has been awarded a federal grant to develop strategic and business plans for GIS coordination in Maryland. Maryland is one of eleven states to receive a *Future Directions Fifty States Initiative* award in 2006 to design coordinating mechanisms that will make best use of the state's diverse GIS resources.

The grant is funded by the U.S. Geological Survey through the National Spatial Data Infrastructure (NSDI) cooperative agreement program, whose mission is to help and encourage all levels of government, the private and non-profit sectors, and the academic community to share geospatial data.

The *Fifty States Initiative* grant affords the timely opportunity to define the framework of a specific plan that suits all of Maryland's GIS stakeholders and also represents a significant cost-saving for the state.

- [Project Overview](#)
- [Newsletter](#)
- [Community Tools & Talking Points](#)
- [Contacts](#)

## Relevant Links

[Maryland State Geographic Information Committee \(MSGIC\)](#)

[Towson University Center for GIS](#)

[National States Geographic Information Council \(NSGIC\) Hot Topic: Fifty States Initiative](#)

[National States Geographic Information Council \(NSGIC\) Fifty States Initiative Handout](#)



For more information visit

<http://www.MarylandGIS.net/coordination>



*Stop by the MSGIC booth  
and share your feedback  
via a short survey!*



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## Strategic Planning Committee

### Chair:

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Maryland State Geographic  
Information Committee