

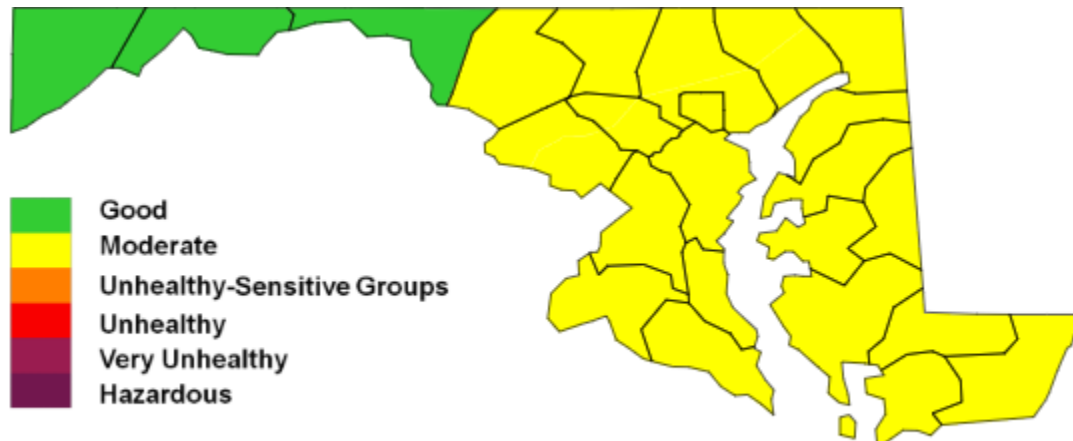
# **Inclusion of Direct Economic Efficiency in Bill 09**

Uploaded by: Husain Waheed

Position: FAV

# Global Forecasting System and Impact Affecting Health and Economy of More Than 4.5 Million Maryland Citizens

03-14-24



## Air Quality Forecast Discussion

Global Forecasting System is utilizing advanced remote sensing technologies to predict health and economic impacts to 4.5 million Maryland citizens from March 14-16, 2024. Citizens, with the inclusion of direct economic efficiency specifications, standards and requirements in HB 0999 can be prepared to participate in protecting health and economy in each 1-5 mile grid of the state.

## Inclusion of Direct Economic Efficiency in HB 0999

## Economic Efficiency, Continuous Innovation, Family and Community Education and Capability Development

Ask:

### Main Specifications and Standards

1. Economic efficiency directly depends on continuously collaborative innovation, individual, family and community education and capability development;

2. Economic efficiency is delivered with the help of clearly defined and implemented family and community based system of contracts, principles, practices and standards of heritage and inheritance;

3. Economic efficiency is protected and monitored for individual, family and community with the help of clarification and confirmation through binding arbitration;

4. Economic efficiency decisions are developed by research and knowledge based relevant and largest institutions for consistency with current contracting and accounting principles, practices, specifications and standards.

### **Explanation**

Economic Efficiency, Continuous Family and Community Education and Capability Development Foundations (EEFCE) are developed for individual, family and community health risk, science, technology, artificial intelligence, machine learning information utilization in real-time and economic efficiency of individuals, family members and communities. There are no costs involved.

EECFEs are based on inclusion of existing family resources for larger community as available and feasible, in accordance with the written expressed wishes of family members to benefit everyone.

Rapidly advancing and changing technology and educational resources can best be utilized collaboratively by family members. Experts, expertise and disparate resources are applied within families collaboratively and they continuously attempt to achieve excellence with input from all backgrounds. When families collaborate for education, they practice and develop low cost and highly economical solutions that become models for all family members and community,

Clearly defined and implemented family and community based system of contracts, principles, practices and standards of heritage and inheritance for greater economic efficiency are applied.

Clarification and confirmation is provided through binding arbitration by knowledge based, relevant and largest institutions with respect to consistency with current contracting and accounting principles, practices, specifications and standards.

**[HB0999](#)**

**Title**

Workgroup on Establishing a Science and Technology Best Practices and Innovation Network

### **Sponsored by**

Delegates [Hill](#), [Crutchfield](#), [Guzzone](#), [Kaiser](#), [Qi](#), [Ruth](#), and [Wu](#)

### **Status**

In the House - Hearing 3/05 at 1:00 p.m.

### **Analysis**

#### **Synopsis**

Establishing the Workgroup on Establishing a Science and Technology Best Practices and Innovation Network to identify and analyze options for establishing and maintaining a network of experts in science, technology, and industry for certain purposes; and requiring the Workgroup to report its findings and recommendations to the Governor and the General Assembly on or before December 1, 2024.

#### **Committees**

Original:

[Health and Government Operations](#)

### **Details**

Bill File Type: Regular

Effective Date(s): June 1, 2024

Creates a Task Force or Commission

**HB999\_USM\_FAV\_EEE.pdf**

Uploaded by: LaTroy Mayes

Position: FAV



**SENATE EDUCATION, ENERGY, AND THE ENVIRONMENT COMMITTEE**  
**House Bill 999**  
**Workgroup on Establishing a Science and Technology Best Practices and**  
**Innovation Network**  
**March 28, 2024**  
**Favorable**

Chair Feldman, Vice Chair Kagan and committee members, thank you for the opportunity to share our position on House Bill 999. This bill establishes the Workgroup on Establishing a Science and Technology Best Practices and Innovation Network, staffed by the University of Maryland Baltimore County (UMBC).

USM comprises 12 distinguished universities and three regional centers with distinct and unique approaches to the mission of educating students and promoting the economic, intellectual, and cultural growth of its surrounding community. These institutions are located throughout the state, from Western Maryland to the Eastern Shore. A range of institutional types complement this geographic diversity. The USM includes land-grant universities, regional universities, and HBCUs, together with universities whose missions focus on online education, professional and graduate education, and environmental education.

Learning innovation in the fields of science and technology claims a space at the intersection of familiarity, knowledge, design, analytics, and art – all in the unique context of network building across disciplines. If we're correct, these new frontiers are poised to raise new questions, new research problems and new methodologies. More importantly, the viability of learning innovation depends heavily on the policy network that emerges around its core questions. A critical mass of experts in science, technology, and industry will need to take up the challenge of researching how the ideas of learning science get translated into the formations, incentives and operations of critical public infrastructure.

House Bill 999 creates a platform to facilitate the open exchange of state-of-the-art data and information using empirical information and sound science to inform Maryland's innovation, and best practices. Evaluating, registering and establishing a readily accessible network of experts in science, technology, and industry, including expansion of existing entities and networks requires expert organization and guidance.

The Chancellor and Board of Regents understand the importance of engaging our institutions proactively to provide support and service on critical issues facing Maryland. UMBC's service to the Workgroup on Establishing a Science and Technology Best Practices and Innovation Network is an extension of our commitment.

The USM urges a favorable report on House Bill 999.

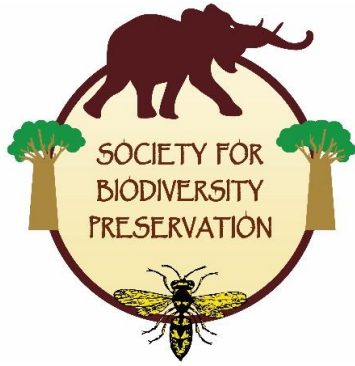


# **SBP\_Comment.pdf**

Uploaded by: shyamala rajan

Position: FAV





## SOCIETY FOR BIODIVERSITY PRESERVATION

*Conservation Custodians*

The [Society for Biodiversity Preservation](#) supports HB 0999 - Workgroup on Establishing a Science and Technology Best Practices and Innovation Network. We recommend developing and adopting clearly defined standards and best practices that improve Economic Efficiency through continued capability development and collaborative input and education of individuals and communities.

# **HB999 Sponsor Testimony-.pdf**

Uploaded by: Terri Hill

Position: FAV

**TERRI L. HILL, M.D.**

Legislative District 12A

Howard County

Health and Government Operations  
Committee

Subcommittees

Government Operations and  
Health Facilities  
Public Health and Minority  
Health Disparities



**THE MARYLAND HOUSE OF  
DELEGATES**

ANNAPOLIS, MARYLAND 21401

**The Maryland House of  
Delegates**

Annapolis Office

6 Bladen Street, Room 404  
Annapolis, Maryland 21401

410-841-3378 | 301-858-3378  
800-492-7122 Ext. 3378

Fax 410-841-3197 | 301-858-3197  
[Terri.Hill@house.state.md](mailto:Terri.Hill@house.state.md)

**March 28, 2024**

**SUPPORT**

**HB999 - Workgroup on Establishing a Science and Technology Best Practices and Innovation Network**

Dear Chair Feldman, Vice-Chair Kagan, and Members of the Education, Energy, and the Environment Committee,

**HB999** establishes the Workgroup on Establishing a Science and Technology Best Practices and Innovation Network. This initiative is vital to address the increasing need for a cohesive strategy to utilize science and technology advancements for the benefit of Maryland residents. It's an imperative, bipartisan bill that passed the house with zero opposition (**136 - 0**).

As we confront complex challenges across various sectors, such as healthcare, the environment, transportation, and agriculture, harnessing science and technology to inform our policies and practices is crucial. However, the fragmented nature of expertise and resources often limits our ability to leverage these advancements fully. With its ever-changing landscape and the emergence of tools like artificial intelligence, the tech industry underscores the necessity for legislators to have access to consistent and reliable information from a diverse group of experts.

**HB999 establishes a workgroup to:**

- (1) Identify and analyze options for creating and maintaining a network of experts in science, technology, and industry to:
  - Foster collaboration with the State and facilitate the exchange of state-of-the-art data and information.
  - Promote solution development and decision-making based on sound science, innovation, and best practices.
- (2) Evaluate methods for establishing a digital-virtual referral network and registry of experts, which will expand upon existing entities and be made available to the public.
- (3) Examine the costs associated with developing and maintaining such a network.
- (4) Provide recommendations for a science and technology best practices and innovation network, delivering their findings and suggestions to the Governor and the General Assembly by December 1, 2024.

The workgroup will comprise a diverse array of experts, including members appointed by the Speaker of the House, representatives from the private and nonprofit sectors advocating for ethical practices, as well as individuals with expertise in science, technology, and innovation from various educational institutions across the State. This composition ensures representation from historically Black colleges or universities, independent institutions of higher education, and community colleges. The group will be provided with staff and housed by the University of Maryland Baltimore County.

I urge a favorable report on HB999.

*[Handwritten signature]*

# Testimony HB0999\_EEE.pdf

Uploaded by: Tim Finin

Position: FAV

## Health and Government Operations Committee

### HOUSE BILL 999

#### Workgroup on Establishing a Science and Technology Best Practices and Innovation Network

March 28, 2024

Chair Pena-Melnyk, Vice Chair Cullison, and committee members, my name is Tim Finin, and I am pleased to be able to testify in support of House Bill 0999, introduced by Delegates Hill, Crutchfield, Guzzone, Kaiser, Qi, Ruth, and Wu. The passage of this bill will reflect leadership in the country-wide efforts addressing the societal impacts of using advanced technology such as quantum computing, cloud computing, big data and machine learning, secure systems, and artificial intelligence., especially in government.

I am a professor in UMBC's Computer Science and Electrical Engineering department and the head of the [UMBC AI Center](#). I have also held positions at Unisys, the University of Pennsylvania, Johns Hopkins University, and the MIT AI Laboratory. I have over 50 years of experience teaching computer science and conducting research on applying the latest computing technologies to problems in information systems, cybersecurity, healthcare, and artificial intelligence.

This testimony was written jointly with Vandana Janeja, Professor of Information Systems and Associate Dean for Research and Faculty Development at the College of Engineering and Information Technology (COEIT) at UMBC. She has been an educator and researcher in data analytics for over 16 years. She has co-authored community reports for the National Science Foundation and co-organized a workshop on embedding ethics in data science pedagogy. She has also served as an AAAS Science Technology Policy fellow and a data science expert at NSF in the Computer Information Science and Engineering Directorate's Office of the Assistant Director.

We are in a pivotal moment characterized by unprecedented breakthroughs in many domains, such as artificial intelligence, cloud computing, semiconductor technology, gene editing, developing RNA vaccines, and renewable energy systems. We present this testimony supporting the proposed bill to establish best practices in science and technology and create a robust **innovation network**. As experts in our fields, we believe HB 999 is critical during rapid technological changes. Such a network will support our societal advancement and provide thoughtful dialog around establishing guardrails where needed in advancing sound science, innovation, and best practices.

Technology, such as the Internet, intelligent IoT devices, and increasingly powerful AI systems, will continue to impact our society significantly, positively and negatively. We must understand how to maximize their positive aspects while minimizing or eliminating

the negative. We must remember that since no one will know everything, we need groups with appropriate and diverse expertise to evaluate the impacts of using these and other advanced technologies and to predict how they will evolve.

In this testimony, we want to emphasize the need for a network of experts to look at the emerging solutions and threats technology may pose to government systems and Maryland citizens. Fortunately, our state universities, like UMBC, have significant expertise in critical technologies. For example, UMBC researchers have led the way in applying artificial intelligence to many critical areas, such as climate change, healthcare systems, cybersecurity, language understanding, image understanding, and robotics.

Our faculty members do groundbreaking research through selective programs funded by federal and state agencies and industry partners in these areas of state and national importance. Within the COEIT, nine advanced research centers employ 100s of faculty, students, and researchers focusing on some of these critical areas. In addition, our faculty have received many coveted NSF CAREER awards in areas such as responsible AI, robotics, and large language models for scientific discovery. This research has often been done in collaboration with other universities, large and small companies, and government agencies based in Maryland.

Establishing the innovation network will allow for such unique expertise to be at the fingertips of the state to consult with and bring to bear when the legislature is considering vital decisions that impact the citizens and stakeholders. For example, as legislators develop new legislation incorporating the latest technologies, this network can bring the right experts into the mix to identify and evaluate the challenges the public and stakeholders face.

We are at the crossroads of pervasive use of advanced technologies. For example, not a day goes by when we don't hear about a company integrating AI capability into their applications, websites, or businesses. The same will permeate the state government as well. The critical thing at this point is to understand the implications of the novel technologies for all users and implementers. Since not everyone will be familiar with upcoming technology developments, an innovation network can help establish guardrails and a way of thinking ethically and responsibly. It can also support advancing new technologies to make systems more efficient.

The innovation network proposed in this bill can support understanding the many new technologies being proposed and adopted across businesses, hospitals, schools, and state operations. In this era of technological advancement, expertise can sometimes be a phone call away with this network.

Thank you for your favorable consideration of House Bill 999.