

**Department of Legislative Services**

Maryland General Assembly

2002 Session

**FISCAL NOTE**

House Bill 1111

(Delegate Walkup, *et al.*)

Commerce and Government Matters

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**Telecommunication and Computer Network Access - Underserved Areas**

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This bill alters the State policy for telecommunication and computer networking to address service to unserved and underserved rural areas and requires State agencies to identify ways to expand high-speed telecommunication networks to those areas. The bill requires the Department of Budget and Management (DBM) and the Department of Business and Economic Development (DBED) to submit a report to the General Assembly by January 1, 2003 regarding their progress in complying with the requirements of the bill.

The bill is effective July 1, 2002.

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**Fiscal Summary**

**State Effect:** Potentially significant increase in capital and operating expenditures beginning in FY 2003.

**Local Effect:** It is not clear whether the bill would affect local government finances as it does not specify whether local governments would contribute to the costs of computer network connections. The impact on each jurisdiction would vary.

**Small Business Effect:** Small businesses that operate in underserved areas would benefit to the extent that computer network access improves in those areas.

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## Analysis

**Bill Summary:** This bill revises the State policy on telecommunication and computer network access to specify that improved access to high-speed telecommunication and computer networking connections in designated growth areas, particularly in unserved and underserved parts of the State, will foster economic development in appropriate areas, furthering the goal of “smart growth” in the State by:

- promoting low-impact economic development that will require little additional traditional capital infrastructure and consumption of land;
- assisting community legacy and revitalization efforts in current population centers of unserved and underserved areas through promoting reinvestment in these communities; and
- facilitating the reuse of existing buildings and structures in these communities, and drawing employees from the communities and their environs.

The bill also specifies that the State network’s facilities for telecommunication and computer connections in each Local Access and Transport Area (LATA) be sited to provide suitable access for rural, as well as urban and suburban areas. The network must include, upon request of a county or municipal government, points of presence that are adjacent to the backbone in locally designated growth areas. It alters the standards to use for the computer backbone of the network from DS3 to OC3.

By July 1, 2003, DBED must identify existing and significant potential demand for access to high-speed telecommunication and data transmission services facilities in underserved rural areas of the State, in consultation with local government officials, existing businesses, and existing regional and local consortia and other groups involved with high-technology economic development in those areas.

Also by July 1, 2003, DBM must explore expanding fiber-optic cable and high-speed telecommunication and data transmission capacity into underserved rural areas that have existing and significant potential demand for fiber-optic cable.

By January 1, 2004, DBED, in consultation with DBM, must facilitate the expansion of high-speed telecommunication and data transmission services and facilities into underserved rural areas of the State by matching existing and significant potential demand with private and public providers of these services and facilities.

**Current Law:** Chapter 722 of 1997 established requirements and policy governing the State computer network and directed DBM to create a network that contained: (1) one or more specified connection facilities to connect each of the four LATAs in the State; (2) a

backbone or network comprised of and adhering to specified standards; and (3) facilities, equipment, and services required to support the network in a reliable and secure manner. The law requires that the network be accessible through direct connection and through local intra-LATA telecommunications to State and local governments, and public and private educational institutions in the State.

Chapter 722 also acknowledged, as part of the State's policy, that the alignment of interagency and educational telecommunication and networking did not serve all areas of the State equally and created a disparity between rural and urban areas.

**Background:** A backbone is a larger transmission line that carries data gathered from smaller lines that interconnect with it. At the local level, a backbone is a line or set of lines that local area networks connect to for a wide area network connection. On the Internet or other wide area network, a backbone is a set of paths that local or regional networks connect to for long-distance interconnection.

DS3 refers to a dedicated private line service designed for point to point communications; it can carry up to 45 megabytes of data per second over fiber optic cables. OC or Optical Carrier-3 refers to a fiber optic line that can transmit up to 155.52 megabytes of data per second. Fiber optics are transparent rods of glass or plastic stretched so they are long and flexible; information is transmitted as light pulses along a glass or plastic wire or fiber. It carries more information than conventional copper wire.

The Maryland Technology Development Corporation (TEDCO) has received federal, State, and non-governmental grants for eReadiness of Maryland, a project that assesses the State's computer network system, with a special focus on distressed areas. To complete the project, TEDCO will:

- lay the groundwork for continued private and public sector investment in information technology infrastructure and utilization by identifying current and future obligations;
- determine each region's strengths and weaknesses in terms of capacity, access, and use of the information infrastructure;
- develop State and regional action agendas to boost the State's capacity in the digital economy and economic viability of the identified regions; and
- measure progress on achieving goals.

**State Fiscal Effect:** The bill requires DBM to upgrade its computer network to provide a point of presence for any county that requests it and to upgrade the fiber optic cable to a faster speed (from DS3 to OC3). The cost could be significant and would depend on the

number of requests from local jurisdictions; also, the bill does not preclude the adoption of a cost-sharing agreement by the State to establish new computer facilities.

DBM has previously estimated that the cost of laying fiber cable is approximately \$125,000 per mile, depending on soil conditions, and providing a single point of presence costs \$250,000 for hardware. If one is required for all 23 counties, the cost would be \$5.75 million.

DBED indicates that it would not need additional resources to comply with the bill. For instance, TEDCO has already conducted a study, to be released in March 2002, that analyzes several data network issues addressed by the bill, such as mapping of all cable modem availability and Digital Subscriber Line (DSL) service in the State and surveying households and businesses about their usage and demand for computer network access.

**Additional Comments:** The State originally proposed net.work.Maryland as a statewide, high-speed digital network built on 300 miles of fiber optic cables that would enhance security of State agency information, bring service to underserved areas, and stimulate economic development. As part of this system, the State's construction contractor and resource-sharing partner has completed the installation of the fiber-optic cable backbone. Only one fiber between College Park and Baltimore is operational. A statewide Intranet is expected to be operational in November 2002.

However, DBM has postponed plans to develop other parts of the network, and has agreed that no funding is required in the fiscal 2003 budget. DBM is re-evaluating the cost effectiveness of net.work.Maryland and whether it can be implemented in other ways. DBM has indicated that fiber optic cable would only be constructed in the Eastern Shore counties if it becomes available through an agreement with a contractor.

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### **Additional Information**

**Prior Introductions:** A similar bill was introduced as HB 1228 in the 2001 session and given an unfavorable report by the Appropriations Committee. That bill also requested the Governor to provide appropriations from fiscal 2003 through 2006.

**Cross File:** None.

**Information Source(s):** Prince George's County, Garrett County, Department of Business and Economic Development, *Fiber Optics Technician's Handbook*, Department of Budget and Management, whatis.com, Department of Legislative Services

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