

D006E02.01
Capital Appropriation – PAYGO
Board of Public Works

Public Safety Communications System (Statewide)

GO Bonds	\$5,000,000	Recommendation: Approve
PAYGO FF	\$400,000	
Nonbudgeted	\$3,200,000	

Bill Text: Provide a portion of the funds for property acquisition, design, construction, and equipping of a public safety communications system.

Project Description: Construct a statewide Public Safety Communications System to provide the State with a new, modern wireless 700 MHz communications system. This 700 MHz communications system will link several large State agency users (e.g. Maryland State Police (MSP), Maryland Department of Transportation, Maryland Transportation Authority, and the Department of Natural Resources) as well as multiple smaller agencies (e.g. the Maryland Department of Environment, and the Departments of Juvenile Services and Public Safety and Correctional Services).

The benefits of the new system include interoperability (the ability of different agencies to readily communicate with another, something currently lacking) as well as data and not just voice transmission. The system will also replace existing equipment that is becoming difficult to repair because it is obsolete and replacement parts are difficult to obtain.

The State has found temporary solutions to the issue of interoperability. MSP has over 30 mobile units (an ACU-1000 Modular Interconnect System) that allow ten different agencies on ten different frequencies to set up “talk groups” allowing limited interoperability. While these units have proven effective in allowing officers from one agency to use their own agency’s radio system to directly communicate with officers from other agencies operating on a different frequency band, they are not useful for first responders since they have to be moved to the incident scene. Public safety agencies maintain that a statewide 700 MHz public safety communications system is the ultimate permanent solution to interoperability.

Note: Numbers may not sum to total due to rounding.

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D006E02.01 – BPW – Capital Appropriation – PAYGO

The system will operate using a new frequency spectrum (24MHz at 764-776MHz and 794-806 MHz) that the Federal Communications Commission (FCC) is scheduled to release in the 700 MHz frequencies on December 31, 2006, and has been designated for public safety use. This spectrum is currently occupied by TV channels 60 through 69. These broadcast channels must move from these frequencies December 31, 2006, or when 85% of households have access to digital television signals, whichever is later. One recent estimate noted that only 14% of the current television sets are capable of receiving digital television signals either directly or through a converter box. While the FCC is still moving ahead with preparations to open the 700 MHz frequency to public safety use, several key deadlines have passed without compliance, and there is concern that the current December 31, 2006, transition deadline will not be met.

When the spectrum does become available, the State will have five years to demonstrate utilization of the available frequencies or lose the rights to use them. The ongoing investments in the public safety communications system should be demonstration enough.

Finally, it should be noted that the 700 MHz system will also be interoperable with local public safety communications systems that are being developed in the 800 MHz spectrum, ensuring that first responders regardless of jurisdiction can effectively and easily communicate with one another. This interoperability depends on local jurisdictions developing their own 800 MHz system and the availability of mobile, portable, and base station equipment radio equipment that can operate in both bands. Again, concerns about implementation delays will delay budgeting for such equipment and in turn possibly delay development of this equipment by manufacturers.

- ***Proposed Fiscal 2005 Expenditures:*** As shown in **Exhibit 1**, the fiscal 2005 funding proposed through the PAYGO appropriation and capital bill supports a variety of projects in 13 jurisdictions: Baltimore, Charles, Calvert, Carroll, Caroline, Cecil, Dorchester, Harford, Montgomery, Somerset, St. Mary's, Wicomico, and Worcester counties. The projects are primarily tower construction, the construction of equipment shelters, and the installation of microwave dishes.

Exhibit 1
Proposed Fiscal 2005 Expenditures
(\$ in Millions)

<u>County</u>	<u>Project</u>	<u>Cost</u>
Charles	Microwave dishes (11); tower and shelter construction.	\$1,560,000
St. Mary's	Microwave dishes (4)	440,000
Harford	Microwave dish	110,000
Calvert	Microwave dishes (4) and fiber connections	490,000
Carroll	Microwave dishes (3)	330,000
Caroline	Microwave dish	110,000
Somerset	Microwave dish; tower and shelter construction	460,000
Baltimore	Microwave dish; tower rehabilitation and shelter construction	490,000
Dorchester	Microwave dishes (4); tower and shelter construction	780,000
Wicomico	Microwave dish	110,000

D006E02.01 – BPW – Capital Appropriation – PAYGO

<u>County</u>	<u>Project</u>	<u>Cost</u>
Statewide	Coordination	40,000
Statewide	Soil borings (10)	30,000
Statewide	Contingencies	50,000
Total	General Obligation (GO) Appropriation	\$5,000,000
Cecil	Microwave dish	100,000
Montgomery	Microwave dish	100,000
Somerset	Microwave dish	100,000
Worcester	Microwave dish	100,000
Total	Federal PAYGO Appropriation	\$400,000

Note: Federal funds for microwave dishes do not include the cost of installation that is built into the cost for dishes funded with GO proceeds. The contingency funding will be used to cover those installation costs.

Source: Department of Budget and Management

In addition, as shown in **Exhibit 2**, the project will receive the equivalent of another \$3.2 million in in-kind contributions from local jurisdictions and a pending resource-sharing agreement.

Exhibit 2
Public Safety Communications System
Fiscal 2005 – Non-budgeted Funds

<u>County</u>	<u>Project</u>	<u>Cost</u>
Cecil	Microwave dishes (2); tower and shelter construction (2)	\$900,000
Carroll	Land purchase	125,000
Howard	Reuse of surplus towers (3) in Cecil, Dorchester, and Frederick counties	700,000
Charles	Use of existing towers through pending resource-sharing agreement (5)	1,475,000
Total		\$3,200,000

Source: Department of Budget and Management

Project Data

(\$ in Millions)

<i>Description</i>	<i>Prior Authorization</i>	<i>2005 Request</i>	<i>2006 Estimate</i>	<i>2007 Estimate</i>	<i>2008 Estimate</i>	<i>2009 Estimate</i>
Acquisition	\$0.000	\$0.125	\$0.000	\$0.000	\$0.000	\$0.000
Planning	2.751	0.000	0.000	0.000	0.000	0.000
Construction	12.872	5.575	6.700	6.700	6.700	6.700
Equipment	10.425	2.900	6.700	6.700	6.700	6.600
Total	\$26.048	\$8.600	\$13.400	\$13.400	\$13.400	\$13.300

Total Project Cost: \$103,998,000 Estimated Completion Date*: 2011

*Estimated completion date assumes future level of funding at the same level as proposed in the Capital Improvement Program until complete and that the total project cost does not grow in that time.

Issues

1. Public Safety Communications System: Fiscal 2005 Build-out and Funding Schedule Reveals Major Changes

In the 2003 session, in its analysis of the public safety communications system, the Department of Legislative Services (DLS) expressed concern about the pace of build-out for the system. The project was initially conceived as a 10-year project with funding at \$10 million per year, with a completion date of 2010. Based on the pace of build-out and identified funds, DLS noted that completion would not occur until 2023. DBM noted that in the first four years of the project, it had received only 32% of the funds that had been anticipated for the project in that time period.

At the 2003 capital budget hearings on the 700 MHz system, DBM indicated that it had entered into a number of agreements with local jurisdictions to share communications infrastructure. Specifically, DBM indicated that they could take advantage of the infrastructure being developed by localities as part of the development of their own 800 MHz public safety communications networks.

D006E02.01 – BPW – Capital Appropriation – PAYGO

It was also noted in last year's analysis that since September 11, 2001, significant amounts of federal grant funds had been made available for purposes that could include the public safety communications system. While the State certainly had accessed these federal funds, none had been directed to the public safety communications system.

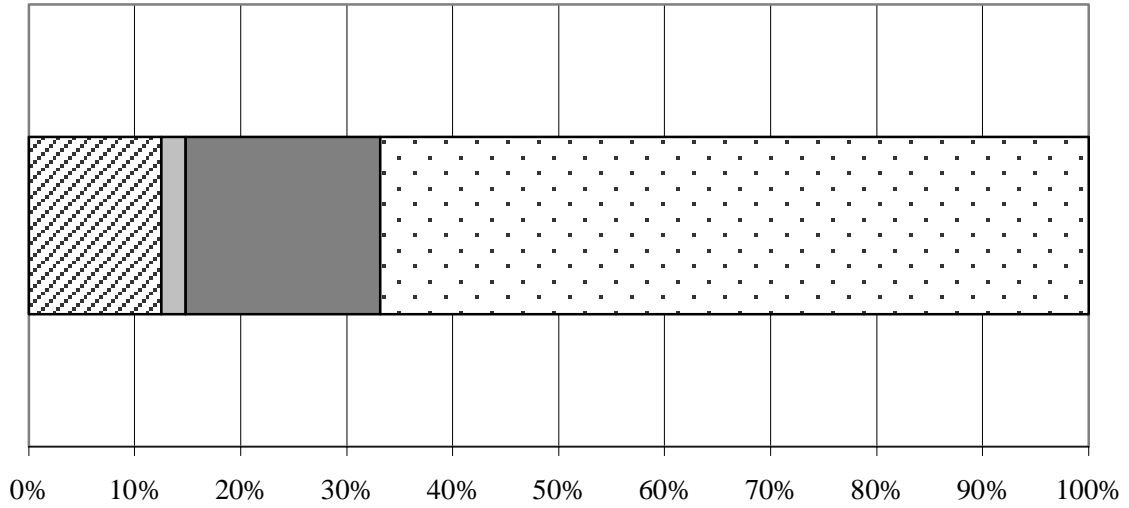
During the 2003 session, the budget committees adopted *Joint Chairmen's Report* narrative requesting DBM to report back on cost estimates for the build out of the State's 700 MHz system that took into account local contributions as well as requesting the department to seek out federal funds. Based on that report as well as an increase in the out-year funding to be provided for the 700 MHz system in the *Capital Improvement Program (CIP)*, the build-out and funding schedule for the system has changed dramatically. As shown in **Exhibit 3**:

- In the 2003 session, prior year funding plus the fiscal 2004 appropriation represented 14.8% of total project costs. This year, prior year funding plus the fiscal 2004 appropriation represents 25% of total project costs. This is due to a combination of DBM adding almost \$9.9 million in non-budgeted funds (local contributions) to prior year funds plus revising the total cost of the system down by just over \$5 million based on revised engineering estimates and lower than anticipated prices for towers.
- In the 2003 session, only 33% of the total cost of the 700 MHz system was covered by prior year expenditures, proposed expenditures, and planned expenditures in the CIP. This year 85% of the total cost is covered by prior year expenditures, proposed expenditures, and planned expenditures in the CIP. Even allowing for the additional year of funding, this significant change reflects the revised project total cost, the addition of non-budgeted funds and a small amount of federal funds, as well as the out-year GO funds in the CIP rising back to \$10 million a year. The change in the proposed fund mix is shown in **Exhibit 4**.
- If non-budgeted funds are realized and the out-year funding proposed in the CIP is budgeted as proposed, the estimated completion date for the project is brought forward to 2011. While still two years behind the original schedule, it is a little more visible than this time last year.

With all but two counties, Charles and Baltimore, either actively participating or expressing an interest in participating in the build-out of the Public Safety Communications System, DLS's major issue with the project remains the lack of federal fund utilization. The fiscal 2005 budget includes \$400,000 in federal PAYGO funds authorized under the USA Patriot Act of 2001. While it is good to see federal fund participation in the 700 MHz system, the dollars available under the USA Patriot Act are small compared to dollars available from other programs such as in the federal Department of Homeland Security as well as the Department of Justice. It is to be hoped that DBM can expand the utilization of federal dollars in the future.

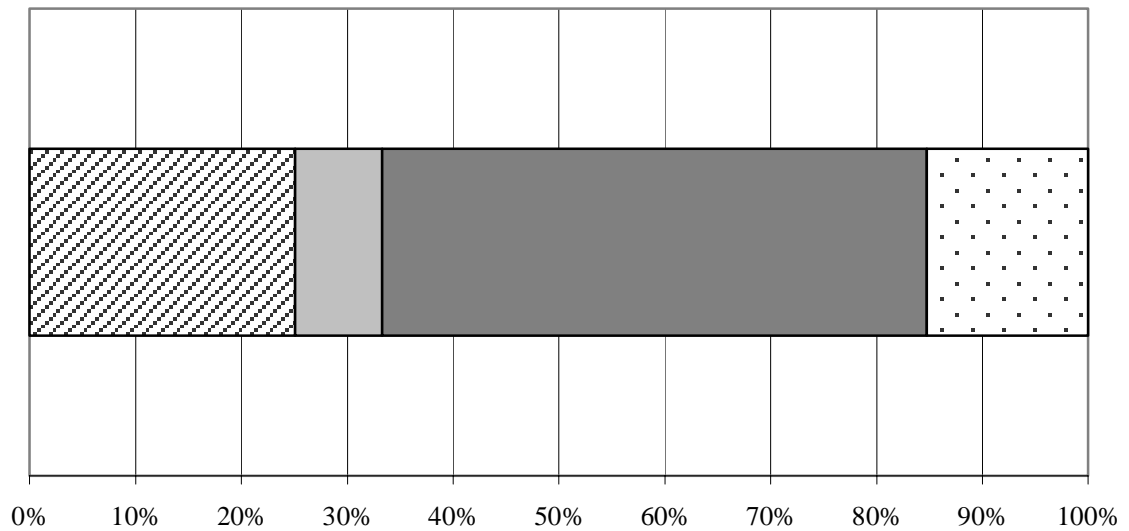
Exhibit 3
Public Safety Communications System
Build-out Schedule

2003 Session



▣ 1999-2003 ▣ Proposed 2004 ▣ 2005-2008 CIP ▣ 2009 and beyond

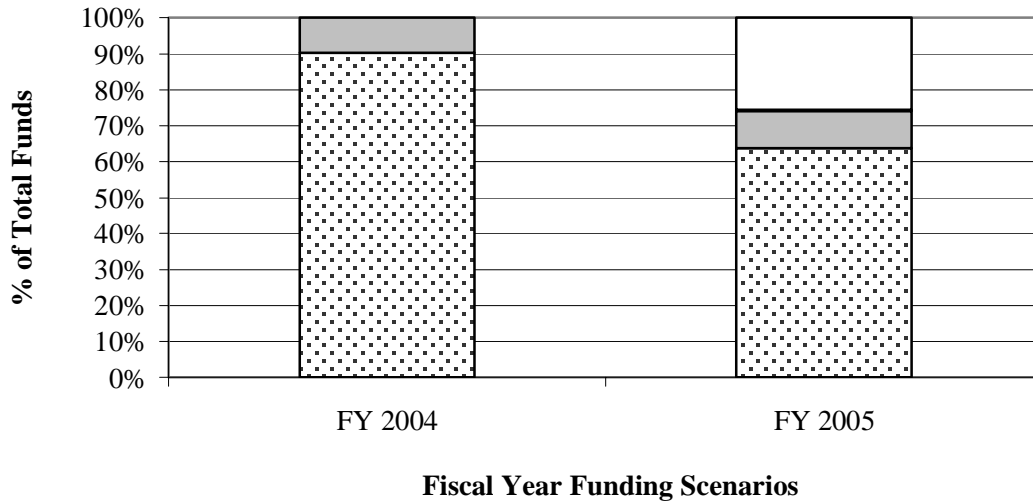
2004 Session



▣ 1999-2004 ▣ Proposed 2005 ▣ 2006-2009 CIP ▣ 2010 and beyond

Source: Department of Legislative Services; Department of Budget and Management

Exhibit 4
Public Safety Communication System
Build-out Funding Scenarios
Fiscal 2004 – 2005



■ General Obligation Bonds ■ General Funds ■ Federal Funds □ Nonbudgeted Funds

Source: Department of Legislative Services; Department of Budget and Management

Recommended Actions

1. Concur with Governor's allowance.