



Department of Information Technology Fiscal Year 2018 Capital Budget

TESTIMONY OF

Luis M. Estrada, Deputy Secretary

Senate Budget and Taxation Committee

Capital Budget Subcommittee

The Honorable James E. DeGrange, Sr., Chair

February 21, 2017

House Appropriations Committee

Capital Budget Subcommittee

The Honorable Adrienne A. Jones, Chair

February 22, 2017



Good afternoon, Mr. Chairman and members of the committee. I am Luis Estrada, Deputy Secretary of the Maryland Department of Information Technology. I am joined by Albert Bullock, Assistant Secretary and James Appel, Executive Financial Officer. Thank you for giving us the opportunity to provide this testimony, and thank you Patrick for all the hard work you put into creating this analysis.

Maryland FiRST, the state-wide 700 MHz Public Safety Communication System, is one of the projects in the State's Major IT Development portfolio. This Land Mobile Radio system is designed to enhance mission critical voice communications for first responders and public safety agencies by enabling interoperability and improving radio coverage throughout the State. Maryland FiRST replaces outdated and incompatible technologies with a modern digital radio system based on the Association of Public – Safety Communications Officials' (APCO) Project 25 (P25) standard. The purpose of the P 25 standard is to facilitate interoperable communications between State Agencies, local governments, Federal Public Safety officials, and out-of-state first responders.

In addition to providing day-to-day radio connectivity for Maryland's first responders at an availability rate higher than 99.99%, Maryland First has proven its interoperability value during events such as the Baltimore City unrest in April 2015, Fleet Week in October 2016 and the Chesapeake Bay Bridge 10K race in November 2016. In addition, during a multiday outage of the Upper Maryland Eastern Shore radio system, due to a lightning strike, Maryland FiRST was able to immediately support Queen Anne's, Talbot and Caroline counties by having their public safety entities move on to the Maryland FiRST system during the outage. Between October 2016 and January 2017 those three counties have now permanently transitioned to the Maryland FiRST system. Finally, Maryland FiRST was awarded the Mission Critical Communications magazine 2016 Industry Award for the Most Innovative Communications Network for Public Safety LMR.

Phases 1 and 2 were completed in 2013, covering the MdTA, the I-95 corridor, including Baltimore City, and Maryland's Eastern Shore. In 2015, Baltimore, Carroll, Cecil, Frederick, and Harford Counties became operational. Anne Arundel and Howard Counties went operational in the summer of 2016, completing Phase 3. The build out of Phase 4 (Western Maryland) is underway. Washington County is expected to be operational in the first quarter of FY 2018, while Allegany and Garrett Counties are expected to be operational in the fourth quarter of FY 2018. Phase 5 is the nation's capital area and Southern Maryland and is expected to be operational in late FY 2019. Currently, there are 12,801 primary users of Maryland FiRST with another 20,637 users that have access for interoperability operations.

The department should be prepared to brief the committees on the effect of reducing fiscal 2017 authorizations on the project cost and schedule. This should include to what extent, if any, the reduced funding contributed to delays in Central and Western Maryland. DoIT should be prepared to describe how the project was managed with reduced funding in fiscal 2017.

The delays related to Howard County and Arundel County go-live from FY16 to FY17 were directly related to contractual negotiations with the vendor to replace equipment that was performing subpar. Once the equipment replacements were complete, the counties were able to become operational. The installation work for those counties was completed in FY16. These equipment replacements were done at no additional cost to the project.

In an effort to support the FY17 budget reduction, payment milestones and go live dates for Phase 4 (Western Maryland counties) were moved into FY18. The delays impacted the overall project schedule, including Southern Maryland and extended the project budget into FY20; increasing the overall project cost by 4 million dollars.

DoIT should be prepared to discuss maintenance and replacement costs associated with the new Maryland FiRST system.

As the buildout of the Maryland FiRST project is completed and as the system components come out of their two-year warranty period, the annual operations and maintenance (O&M) cost will increase significantly between now and FY 2021. The “backbone” of this system, when completed, will consist of 140 tower sites, 3 Master Core sites and 3 backup Core sites, 166 State supported dispatcher consoles, and the fiber optic and microwave networks that connect the system. This adds up to over 11,500 individual pieces of equipment valued at \$500 or higher, totaling about \$170 million that will require monitoring, upkeep, repair and maintenance, and eventually lifecycle replacement. The annual O&M cost for the backend is \$7.7 million in FY 2018 and will grow to \$15.4 million in FY 2022. Afterwards, we only expect inflationary cost increases.

The “front end” of this system is the subscriber units – the mobile (vehicle mounted) and portable (handheld) radios. When completed, 12,510 subscriber units will have been purchased by the State for about \$70 million. These radios will require periodic software updates and State agencies will have to budget for replacement of lost, stolen and broken radios and for accessories such as holsters, mics, surveillance kits, replacement antennas, etc. At some point these radios will require lifecycle replacement. The first radios were purchased in 2014; our preliminary plan for lifecycle replacement is, starting in FY 2021 or FY 2022, to replace 10% of the radios each year at an annual cost estimate of about \$7 million.

In addition to O&M costs and lifecycle replacement costs, we expect there will be future budget requests to upgrade the system including enabling GPS location capabilities and providing a Talkgroup Text Messaging capability or adding additional tower sites should we discover areas that need improve coverage. Many of these potential upgrades are in the form of procuring supporting licenses. At this point, it is too early to provide any cost estimates.