

**Department of Legislative Services**  
Maryland General Assembly  
2019 Session

**FISCAL AND POLICY NOTE**  
**Enrolled**

Senate Bill 339

(Senators Kagan and Reilly, *et al.*) (By Request - Comm  
to Advance Next Generation 9-1-1 Across Maryland)

Finance

Health and Government Operations

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**Public Safety - 9-1-1 Emergency Telephone System (Carl Henn's Law)**

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This bill enhances and alters the regulatory framework that governs the State's 9-1-1 system. Among other things, the bill expands the responsibilities of the Emergency Number Systems Board (ENSB), increases the State 9-1-1 fee, authorizes a local government to increase its 9-1-1 fee under specified circumstances, and applies both fees to each separate outbound call voice channel capacity instead of each account. **The bill takes effect July 1, 2019.**

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**Fiscal Summary**

**State Effect:** Special fund revenues for ENSB increase by at least \$53.8 annually beginning in FY 2020; special fund expenditures increase correspondingly. State expenditures (all funds) increase, potentially significantly, beginning in FY 2020 as State agencies pay increased 9-1-1 fees under the bill.

(\$ in millions)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
SF Revenue	\$53.8	\$53.8	\$53.8	\$53.8	\$53.8
SF Expenditure	\$53.8	\$53.8	\$53.8	\$53.8	\$53.8
GF/SF/FF Exp.	-	-	-	-	-
Net Effect	(-)	(-)	(-)	(-)	(-)

*Note: (-) = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease*

**Local Effect:** Local government revenues increase significantly as additional 9-1-1 fee revenues are collected and distributed. Local government expenditures increase correspondingly as the additional funding is used to enhance and maintain local 9-1-1 systems and as local governments pay additional 9-1-1 fees under the bill.

**Small Business Effect:** Minimal.

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## Analysis

**Bill Summary:** The bill enhances and alters the regulatory framework that governs the State's 9-1-1 system in the following ways:

- References to “emergency calls” are clarified to “requests for emergency services.”
- The responsibilities of ENSB are significantly expanded.
- The purpose and authorized uses of the 9-1-1 Trust Fund are expanded and clarified.
- A definition of “9-1-1 specialist” is established.
- Additional responsibilities related to cybersecurity are established for public safety answering points (PSAPs).
- The State 9-1-1 fee is increased from \$0.25 per month to \$0.50 per month.
- A local government is authorized to temporarily increase its local 9-1-1 fee under specified circumstances. Combined with the existing local 9-1-1 fee, the maximum amount a local government may charge is increased from \$0.75 per month to \$1.50 per month.
- The State 9-1-1 fee and local 9-1-1 fee both apply to each separate outbound call voice channel capacity, instead of each account, as specified.
- Emergency services Internet protocol network providers and core service providers of Next Generation 9-1-1 (NG 9-1-1) are granted immunity from liability for transmission failures in a specified manner.
- Beginning in fiscal 2020, the Governor must provide a plan to repay to the 9-1-1 Trust Fund any monies transferred from the fund under budget reconciliation and financing legislation or by other means that would result in the use of monies for a purpose other than the original intended use.

A more extensive discussion of the bill's provisions can be found below.

### *Expansion of Responsibilities for the Emergency Number Systems Board*

The responsibilities of ENSB are expanded to include establishing (1) minimum standards for cybersecurity, oversight, and accountability of service level agreements between counties and core serve providers of NG 9-1-1 services; (2) training standards for PSAP personnel based on national best practices; and (3) establishing minimum standards for records retention, as specified. The standards established for record retention must include procedures related to record security, disposal, and maintenance.

ENSB must establish minimum standards for 9-1-1 systems that ensure improved access for individuals with disabilities and individuals who use assistive technologies. The standards must include mandatory connectivity requirements for core service providers for

NG 9-1-1 services to device-based and cloud-based data repositories. The standards must be regularly updated based on available technology and equipment.

In consultation with the Maryland Cybersecurity Council, ENSB must establish cybersecurity standards for PSAPs based on national industry and 9-1-1 system trade association best practices. At least once each year, on a date determined by ENSB and in advance of submitting a request for or receiving any money from the 9-1-1 Trust Fund, the director of each PSAP must determine whether the cybersecurity defenses employed by the PSAP satisfy these standards and submit a report detailing the results. If the director of a PSAP fails to submit the report, ENSB may not authorize any money for the PSAP from the 9-1-1 Trust Fund. The funding may not be released until the report is submitted.

#### *Expanded Purpose of the 9-1-1 Trust Fund*

The purpose of the 9-1-1 Trust Fund is expanded to include funding for:

- the operation and maintenance of 9-1-1 systems, including specified (1) services, such as interpretation services for a PSAP; (2) equipment, such as voice, data, and call log recorders; (3) software, such as automatic number and location identification programs; and (4) other technologies, such as geographic information and mapping systems;
- PSAP facilities costs, including access control, security systems, and standby power;
- public education materials;
- the training of county personnel working in or directly supporting a PSAP;
- cybersecurity for 9-1-1 systems; and
- the provision of tuition reimbursement for 9-1-1 specialists (as defined by the bill) for educational programs related to the 9-1-1 specialist career field.

Funding allocated for these purposes may not be used to pay the salary of PSAP personnel or county personnel.

#### *State and Local 9-1-1 Fees*

The State 9-1-1 fee is increased from \$0.25 per month to \$0.50 per month. Under the bill, the additional fee authorized for counties to assess remains \$0.75 per month. However, if a county's local 9-1-1 fee revenues do not cover the county's operational costs for its 9-1-1 system in a fiscal year, then the county may impose an additional charge of up to \$0.75 per month for the following fiscal year. When combined with the existing local 9-1-1 fee of \$0.75 per month, the local government may charge a maximum of \$1.50 per month under these circumstances.

Furthermore, the bill applies the State 9-1-1 fee, existing local 9-1-1 fee, and local additional charge to each separate outbound call voice channel capacity, regardless of the technology used for the voice channel (*i.e.*, phone lines, Voice over Internet Protocol (VoIP), etc.). This means that the fees may be applied multiple times each month to a single account holder depending on the voice channel capacity of the account, whereas each account only pays the fees once per month under current law.

The fees may not be applied to a broadband connection that is not used for telephone service. If a telephone service provides shared simultaneous services to multiple locations configured to provide local dial in different states, the fees are only applied to the portion in the state identified by the service supplier's books and records, which must be calculated in a specified manner. Commercial mobile radio service provided to multiple devices that share a mobile telephone number must be treated as a single 9-1-1 accessible service when calculating the 9-1-1 fee that is due.

The bill clarifies that money collected from the State 9-1-1 fee may *only* be used to (1) pay the administrative costs chargeable to the 9-1-1 Trust Fund; (2) pay the costs associated with the expanded purpose of the 9-1-1 Trust Fund; (3) reimburse counties for the cost of enhancing a 9-1-1 system; and (4) pay contractors, as specified.

#### *Liability Immunity for Emergency Services Internet Protocol Network Providers*

Emergency services Internet protocol network providers and core service providers of NG 9-1-1 services have the same immunity from liability for transmission failures as that approved by the Public Service Commission (PSC) for local exchange telephone companies, or for a provider of telecommunications services through evolving technology, that are subject to regulation by PSC.

#### *9-1-1 Specialists*

A “9-1-1 specialist” is an employee of a county PSAP, or an employee working in a county PSAP, whose duties and responsibilities include (1) receiving and processing 9-1-1 requests for emergency services; (2) other support functions directly related to 9-1-1 requests for emergency services; or (3) dispatching law enforcement officers, fire rescue services, emergency medical services, and other public safety services to the scene of an emergency.

**Current Law/Background:** For information on the Commission to Advance NG 9-1-1 Across Maryland, the State’s current 9-1-1 system, and the status of modernizing the 9-1-1 system, please see the **Appendix – 9-1-1 Funding and Modernization**.

## *Maryland Cybersecurity Council*

Chapter 358 of 2015 established the Maryland Cybersecurity Council. The council is required to work with the National Institute of Standards and Technology (NIST), as well as other federal agencies, private-sector businesses, and private cybersecurity experts to address State issues. The council's responsibilities include (1) examining inconsistencies between State and federal cybersecurity laws; (2) assisting private-sector cybersecurity businesses in adopting, adapting, and implementing the NIST cybersecurity framework of standards and practices; and (3) recommending legislative changes to address cybersecurity issues.

## *PSC Liability Immunity for Transmission Failures*

PSC advises that the liability immunity for transmission failures for a telecommunication service generally exists in the tariffs that govern the service's operations in the State. A commercial mobile radio service provider that pays or collects 9-1-1 fees and a provider and seller of prepaid wireless telecommunications service both have the same immunity from liability for transmission failures as that approved by PSC for local exchange telephone companies that PSC regulates.

**State Revenues:** ENSB advises that, under current law, the combined 9-1-1 fee (State and local) generates an average of about \$53.8 million annually; both fees accrue to the 9-1-1 Trust Fund, and the local portion is appropriately distributed to each local government. This amounts to approximately \$13.4 million in revenues from the State fee and \$40.3 million in revenues from the local fee.

Accordingly, increasing the State 9-1-1 fee (from \$0.25 to \$0.50) and authorizing a local government to increase its additional charge (from \$0.75 to \$1.50) at least doubles the total revenue that accrues to the 9-1-1 Trust Fund. Therefore, 9-1-1 Trust Fund special fund revenues increase by at least \$53.8 million annually beginning in fiscal 2020. This estimate makes the following assumptions:

- Based on historical patterns of 9-1-1 system underfunding (which are discussed in the Appendix), no county will have its local 9-1-1 fee revenues meet or exceed its 9-1-1 operational expenditures in fiscal 2019 and, therefore, each county will be authorized to and choose to increase its local charge from \$0.75 to \$1.50 beginning in fiscal 2020.
- Even though the bill takes effect at the beginning of fiscal 2020 (July 1, 2019), each local government is able to increase its fee for the entirety of fiscal 2020. To the extent that the fee increase begins later in that year, the revenue increase is less pronounced.

- As NG 9-1-1 systems are developed and implemented by the counties, and to counteract the existing underfunding issues, each county increases its expenditures beyond its revenues so that it can continue to maintain the local charge of \$1.50 in all future fiscal years. To the extent that some counties do not do so, the revenue increase is less pronounced.

This estimate does not include any revenues from changing the applicability of the fee from each account to each separate outbound call voice channel capacity, although the additional revenue generated from this change is anticipated to be significant. Specifically, the increase in revenues resulting from this change primarily relies on the average number of lines in existing accounts. That information, however, is considered proprietary by telecommunication companies and is, therefore, not ascertainable.

*For illustrative purposes only*, the Commission to Advance Next Generation 9-1-1 Across Maryland estimates that the total revenue collected under the bill's provisions could be as high as \$145 million annually (or an increase of about \$91 million annually over what is currently collected).

### **State Expenditures:**

#### *9-1-1 Trust Fund Total Expenditures*

The State is accelerating its implementation of NG 9-1-1 services and, historically, most or all of the 9-1-1 Trust Fund's revenues are expended each year for this purpose and general operations. As such, this analysis assumes that total special fund expenditures by ENSB increase correspondingly to the special fund revenue increase. Therefore, special fund expenditures from the 9-1-1 Trust Fund increase by at least \$53.8 million annually beginning in fiscal 2020 as the fund is used for NG 9-1-1 implementation and the other purposes authorized under current law and the bill, including the hiring of necessary staff, which is discussed in the following section.

#### *Emergency Number Systems Board Staff*

Many of the responsibilities established for ENSB under the bill are similar or identical to functions that it is currently performing or planning to perform as the State transitions to NG 9-1-1 systems. For example, ENSB advises that it is recruiting an additional staffer to handle some of the project management and technology issues identified by the bill that are related to NG 9-1-1. Even so, ENSB does require one full-time accountant to handle the increased payments that it must make to vendors on behalf of counties due to the bill's expansion of authorized uses of 9-1-1 fee revenues.

Therefore, special fund administrative expenditures increase by \$55,098 in fiscal 2020, which accounts for a 90-day start-up delay. This estimate reflects the cost of hiring one full-time accountant. It includes a salary, fringe benefits, one-time start-up costs, and ongoing operating expenses.

Position	1
Salaries and Fringe Benefits	\$49,739
Operating Expenses	<u>5359</u>
<b>Total FY 2020 Admin. Expenditures</b>	<b>\$55,098</b>

Future year administrative expenditures reflect a full salary with annual increases and employee turnover and ongoing operating expenses.

#### *State Agency Expenditures for Communications*

State expenditures (all funds) for communications increase, potentially significantly, beginning in fiscal 2020 because the bill applies the 9-1-1 fees to each separate outbound call voice channel capacity, regardless of the technology used for the voice channel (*i.e.*, phone lines, VoIP, *etc.*). Many government entities have multiple lines on one account (paying very little under current law) and, under the bill, must pay significantly more for 9-1-1 fees. These additional costs have not been quantified for this analysis.

**Local Fiscal Effect:** As previously discussed, the State 9-1-1 fee generates approximately \$13.4 million annually, and the local charge generates approximately \$40.3 million annually. Moreover, this analysis assumes that each local government increases its additional charge (from \$0.75 to \$1.50) under the bill. Therefore, total local government revenues increase by at least \$40.3 million annually beginning in fiscal 2020, and more so to the extent that some portion of the State 9-1-1 fee revenues are used to support local 9-1-1 functions and upgrades.

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## Additional Information

**Prior Introductions:** None.

**Cross File:** HB 397 (Delegate Krebs, *et al.*) - Health and Government Operations.

**Information Source(s):** Department of Public Safety and Correctional Services; Maryland Association of Counties; Maryland Municipal League; Calvert, Montgomery, and Prince George's counties; City of Takoma Park; Comptroller's Office; Judiciary (Administrative Office of the Courts); Department of Budget and Management; Department of State Police; Public Service Commission; Verizon Maryland, LLC; Department of Legislative Services

**Fiscal Note History:** First Reader - February 23, 2019  
mag/kdm Third Reader - March 18, 2019  
Revised - Amendment(s) - March 18, 2019  
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## Appendix – 9-1-1 Funding and Modernization

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### *Maryland's 9-1-1 System*

Chapter 730 of 1979 established a statewide 9-1-1 system and the Emergency Number Systems Board (ENSB) to oversee the system. The legacy 9-1-1 model, which is based on a landline phone system, consists of local public safety access points (PSAPs) connected to an analog wireline phone network to deliver emergency calls via a circuit-switched architecture. However, 70% of 9-1-1 calls are now made from cell phones, and an increasing number are made via Voice over Internet Protocol networks, presenting a challenge as to how to process and obtain accurate caller location and phone number information.

The 9-1-1 system is funded through the 9-1-1 Trust Fund. The fund is administered by the Department of Public Safety and Correctional Services and includes revenue from the following three funding sources (as well as investment earnings):

- the State 9-1-1 fee, which is set at \$0.25 per subscriber per month;
- the county additional charge, at an amount determined by each county through local ordinances, up to a maximum of \$0.75 per bill per month (All counties and Baltimore City have passed local ordinances establishing the additional charge at the maximum level of \$0.75 per bill per month.); and
- the fee added to the sales of prepaid wireless service (\$0.60 per transaction), collected at the point of sale.

Telephone companies, wireless carriers, and other 9-1-1 accessible service providers collect and remit monthly the State 9-1-1 fee and the county additional charge to the Comptroller for deposit into the fund. The State 9-1-1 fee is distributed to counties at the discretion of ENSB in response to county 9-1-1 system enhancement requests. The county additional charge, the prepaid wireless 9-1-1 fee remittances, and any investment earnings of the fund are all distributed quarterly to each county in prorated amounts according to the level of fees collected in each jurisdiction. The State 9-1-1 fee and 25% of all collected prepaid wireless 9-1-1 fees may be used to reimburse counties for the cost of enhancing the 9-1-1 system. The county additional charge and the remaining 75% of all collected prepaid wireless 9-1-1 fees may be spent on maintenance and operating costs of 9-1-1 systems.

### *Next Generation 9-1-1 Modernization*

As analog landline communication is phased out, state and local governments are preparing for “next generation” technology that will allow 9-1-1 centers to access not only more accurate information about caller location, but also other information that will assist emergency personnel in communicating with callers and responding more efficiently. This Next Generation 9-1-1 (NG 9-1-1) technology will allow PSAPs to receive text, chat, video, location, and various other types of data from a single 9-1-1 call. However, local governments face challenges both in maintaining existing 9-1-1 systems and in transitioning to NG 9-1-1 systems, primarily due to a lack of funding.

### *Funding Challenges*

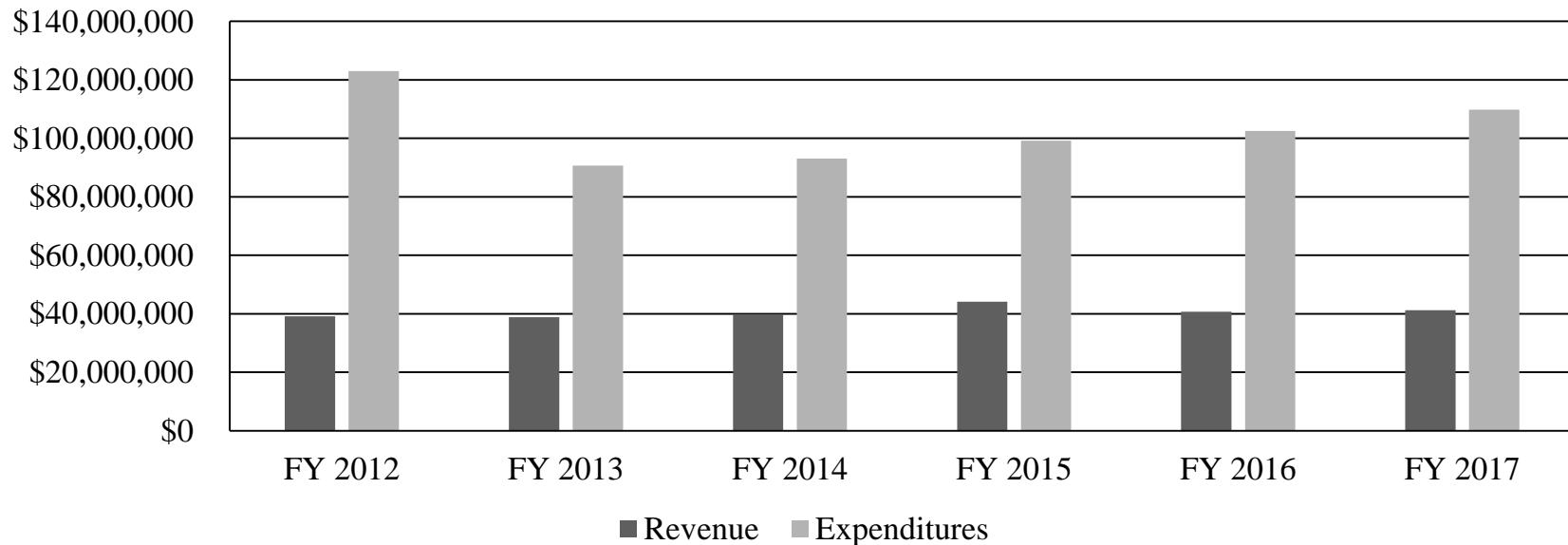
County expenditures for 9-1-1 systems consistently exceed available fee revenues. **Exhibit 1** shows the total 9-1-1 fee revenues collected and total 9-1-1 operating expenditures per fiscal year from fiscal 2012 to 2017 (the most recent publicly available data). Across all counties, in fiscal 2017, fee revenues covered 39.7% of operating costs. However, the percentage of costs offset by revenues varied significantly by county in that year. For example, only 10.5% of Dorchester County’s costs were offset by fee revenues, while in Baltimore County, 66.1% of costs were offset. **Exhibit 2** shows fiscal 2017 fee revenues and operating expenditures by county.

### *Commission to Advance NG 9-1-1 Across Maryland*

Chapters 301 and 302 of 2018 established the Commission to Advance Next Generation 9-1-1 Across Maryland to study and make recommendations regarding next generation 9-1-1 emergency communication services. The commission’s preliminary report, released November 2019, makes 23 recommendations regarding numerous issues including, among other things, technology standards, cybersecurity, NG 9-1-1 implementation, staffing, and fees. Ten of the recommendations in the report, such as those that adjust the State’s 9-1-1 fees, funding levels, and staffing, require legislation to implement. The report emphasizes the importance of adjusting the State’s 9-1-1 fee structure, concluding that, “current 9-1-1 funding is grossly insufficient to support the current 9-1-1 system, let alone the updated NG 9-1-1 technology.” A copy of the commission’s December 2018 report can be found [here](#). A final report is expected by December 1, 2019.

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**Exhibit 1**  
**Total County 9-1-1 Fee Revenue and Operating Expenditures**  
**Fiscal 2012-2017**



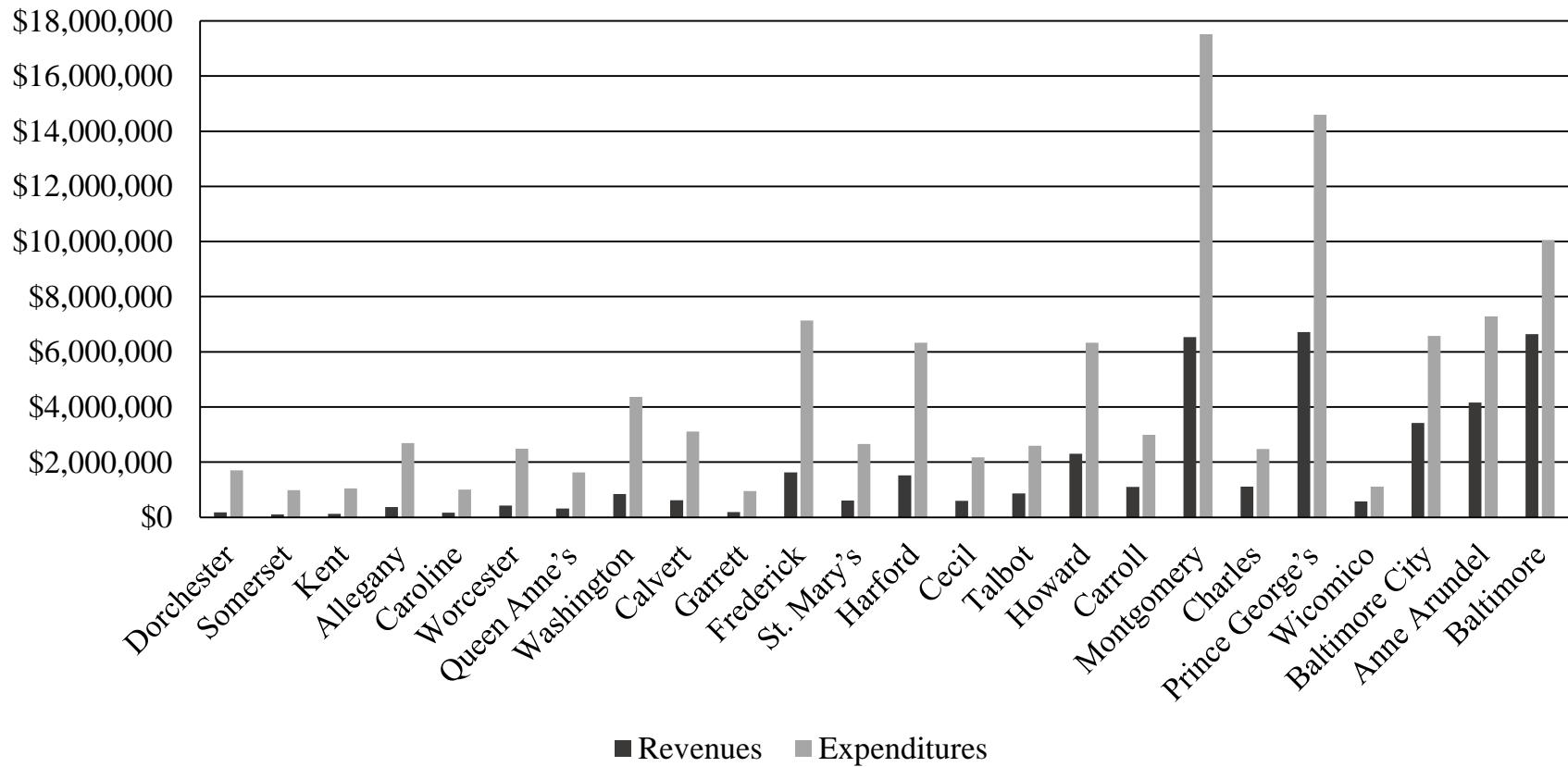
Note: Prepaid wireless 9-1-1 fee revenues were first collected in fiscal 2014. County operating expenditures are costs as reported by county-selected independent auditors and typically include 9-1-1-related personnel salaries and benefits, recurring maintenance and service fees, mapping maintenance and updates, network associated fees, and capital expenditures not covered by the Emergency Number Systems Board.

Source: Emergency Number Systems Board annual reports, Commission to Advance Next Generation 9-1-1 Across Maryland – December 2018 Report

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**Exhibit 2**  
**9-1-1 Fee Revenues and Operating Expenditures by County**  
**Fiscal 2017**



Source: Commission to Advance Next Generation 9-1-1 Across Maryland – December 2018 Report

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