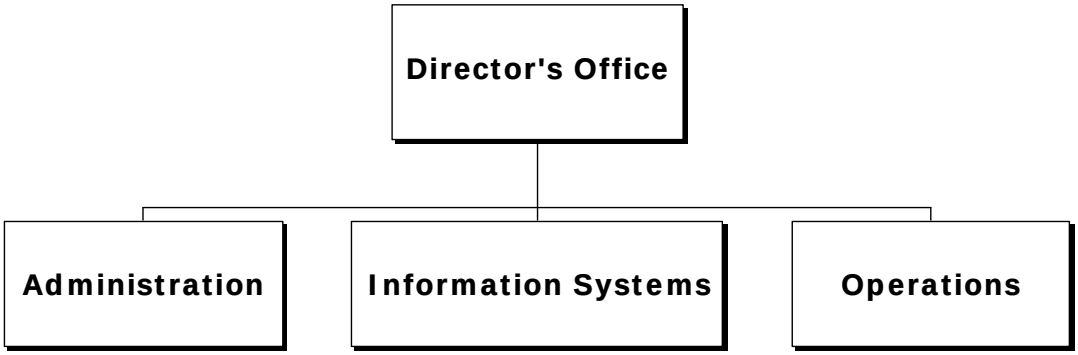
Fund 40090
E-911



Mission

To provide and maintain highly professional and responsive 9-1-1 emergency and non-emergency communication services to the citizens of Fairfax County, City of Fairfax, Town of Herndon, Town of Vienna, Fort Belvoir, citizens that work in and visit Fairfax County on a daily basis and to the Fairfax County Police, Fire & Rescue and Sheriff departments in a collaborative and supportive work environment that utilizes highly trained and qualified staff. To deliver emergency and non-emergency communications utilizing state-of-the-art technology through a variety of systems integrated to provide 9-1-1 telephone, computer aided dispatch, multi-channel trunked radio and wireless data networks in a cost effective, sustainable, reliable and technologically innovative manner; and, to utilize, industry accepted best policies, practices and standards in an efficient and cost effective manner.

AGENCY DASHBOARD			
Key Data	FY 2013	FY 2014	FY 2015
1. Emergency 9-1-1 Calls	564,321	500,871	538,783
2. Total Calls (combined 9-1-1, non-emergency and administrative)	1,049,187	937,369	984,518
3. Calls Requiring Language Line Interpretation	11,688	11,801	12,016
4. Police and Fire-Rescue Events Entered by DPSC Call takers/Dispatchers into CAD	470,243	467,475	490,247
5. Total Radio Transmissions Made to Police and Fire-Rescue Units	1,540,866	1,435,865	1,367,774
6. Number of CPR Calls That Required Lifesaving Instructions by Call Takers	1,486	1,549	1,616

Fund 40090
E-911

Focus

The activities and programs in Fund 40090, E-911, provide support to the operations of the Department of Public Safety Communications (DPSC) and various other public safety information technology projects. DPSC is designated as the primary 9-1-1 Public Safety Answering Point (PSAP) for all 9-1-1 calls originating within Fairfax County as well as the city and towns therein. The agency also provides Emergency Medical Dispatch (EMD)/Pre-Arrival Instruction (PAI), which is an emergency medical service (EMS) intervention program where DPSC call takers provide emergency medical instructions over the telephone until fire-rescue-EMS units arrive on the scene of an emergency incident. Due to the vital, mission-critical, and time sensitive service provided by DPSC personnel, they are, for many reasons, recognized as the "*First of the First Responders.*" Additionally, DPSC receives all commercial and residential security, fire and medical alarm requests for service calls from private alarm service providers. Non-emergency services provided include responding to police non-emergency calls received; reporting of towed vehicles and private vehicle impounds; calls for Animal Control Unit services, a subsidiary of the Fairfax County Police Department (FCPD) resolution and non-emergency calls for service for fire and rescue assistance and information. DPSC also provides National Crime Information Center (NCIC) and Virginia Criminal Information Network (VCIN) teletype operations related to property (e.g., stolen guns and vehicles), people (e.g., protective orders and missing persons), events (e.g., fatal accidents and security matters), and queries (e.g., wanted persons/warrant confirmation). These operations ensure that criminal and investigative information is shared with the appropriate authorities within the County and on a regional, state and federal level. Additionally, DPSC serves as the official custodian of approximately 8,700 hours of audio recordings of all telephone calls and radio traffic pertaining to public safety as required by law and approximately 88,000 hours of Computer Aided Dispatch (CAD) records. DPSC receives and responds to court subpoenas and Freedom of Information Act (FOIA) requests for audio transmissions and data records. Audio and data recordings are also maintained per national standards for investigative, quality assurance and training purposes. The Department of Information Technology (DIT) supports the telephony, radio, CAD, and audio visual infrastructure and maintenance within Fund 40090.

The E-911 agency supports the following County Vision Element:

Maintaining Safe and Caring Communities

IT Projects

In FY 2017, IT Projects funding totals $8.51 million, no change from FY 2016 Adopted Budget Plan level. Funding is provided for four specific projects in FY 2017, as noted below. For detailed descriptions of each project, please see the project detail sheets which follow after the Fund 40090 Fund Statement:

- $3,531,352 supports the fourth of eight payments on a lease purchase to replace the existing fleet of mobile and portable subscriber radios in public safety agencies to meet FCC requirements. Replacement radios were purchased in mid FY 2014 and a funding schedule was developed using existing project balance in FY 2014 as the initial payment, and then splitting the remaining cost of $24.7 million over seven years, starting in FY 2015;

- $1,616,200 is included to support Mobile Computer Terminal (MCT) replacement, a program that has been in effect for over 14 years and is designed to replace one-fifth of the public safety fleet each year;

- $2,180,000 is included to continue a multi-phase effort to transition core 9-1-1 services into a more robust and technologically up-to-date operating environment based on the pending expiration of the current Verizon contracts and limits of tehnology; and

- $1,180,000 supports the third year of a planned five year cycle to refresh and update the hardware/software environment that supports the CAD system which is the primary dispatch records system that is used 24/7/365 by DPSC call-takers to process all calls for service received on 9-1-1 and other emergency and non-emergency lines.

Revenues

There are four main revenue categories in the E-911 Fund: Communications Sales and Use Tax (CSUT), State Wireless E-911 Reimbursement, Interest Income and Other Revenue (which reflects annual revenue from the City of Fairfax for dispatch services, FOIA fees, and reimbursement from Nextel to cover County expenses related to the Nextel 800 MHz re-banding initiative).

The CSUT is a statewide tax first implemented in January 2007, after the 2006 Virginia General Assembly session approved legislation that changed the way in which taxes are levied on communications services. Based on this legislation, local taxes on land line and wireless telephone services were replaced with a 5 percent statewide CSUT. In addition to the communications services previously taxed, the 5 percent CSUT applies to satellite television and radio services, internet calling and long-distance telephone charges. As part of this legislation, local E-911 fees were repealed and replaced with a statewide $0.75 per line fee. These rates were meant to provide revenue neutrality with FY 2006 receipts. All communications taxes are remitted to the state for distribution to localities based on the locality's share of total statewide FY 2006 collections of these taxes. Based on analysis by the Virginia Auditor of Public Accounts, Fairfax County's share was originally set at 18.93 percent. Based on various adjustments, Fairfax County's share is currently 18.89 percent.

Of the total amount of the CSUT, the Cable Franchise Fees are directed to Fund 40030, Cable Communications. As a result of increasing requirements in Fund 40090, E-911, starting in FY 2015 Fairfax County revised the methodology by which it applies the remaining revenues received through the CSUT. As a result, a larger proportion of these revenues are now applied to Fund 40090, with a commensurate decrease reflected in the proportion of CSUT revenues applied directly to the General Fund. This eliminates the need for a General Fund Transfer to Fund 40090 and results in a projected FY 2017 CSUT

revenue total for Fund 40090 of $42.0 million. The prioritization of CSUT fees towards the E-911 fund reflects the increasing costs of this system based on staffing and technology requirements.

The Wireless E-911 Revenue category is derived from a monthly $0.75 surcharge on all wireless/cellular telephones and is distributed to localities as part of the Wireless E-911 State Reimbursement. It should be noted that the Commonwealth has transferred approximately $8 million from the Wireless E-911 fund to support non 9-1-1 matters in other state agencies.

Overall, the FY 2017 revenue estimate for Fund 40090, E-911 is $46.8 million, reflecting an increase of $0.9 million over the FY 2016 Adopted Budget Plan total.

Budget and Staff Resources

Category	FY 2015 Actual	FY 2016 Adopted	FY 2016 Revised	FY 2017 Advertised	FY 2017 Adopted
FUNDING					
Expenditures:					
Personnel Services	$22,060,799	$23,871,204	$23,871,204	$24,871,929	$24,871,929
Operating Expenses	11,547,614	13,445,440	15,476,096	13,445,440	13,445,440
Capital Equipment	47,831	0	7,801	0	0
IT Projects	5,944,097	8,507,552	13,213,177	8,507,552	8,507,552
Total Expenditures	$39,600,341	$45,824,196	$52,568,278	$46,824,921	$46,824,921
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)					
Regular	205 / 205	205 / 205	205 / 205	205 / 205	205 / 205

FY 2017 Funding Adjustments

The following funding adjustments from the FY 2016 Adopted Budget Plan are necessary to support the FY 2017 program. Included are all adjustments recommended by the County Executive that were approved by the Board of Supervisors, as well as any additional Board of Supervisors' actions, as approved in the adoption of the budget on April 26, 2016.

- **Employee Compensation** **$1,000,725**
  An increase of $1,000,725 in Personnel Services includes $300,517 for a 1.33 percent market rate adjustment (MRA) for all employees and $44,387 for performance-based and longevity increases for non-uniformed merit employees, both effective July 2016, as well as $627,234 for FY 2017 merit and longevity increases (including the full-year impact of FY 2016 increases) for uniformed employees awarded on the employees' anniversary dates, and $28,587 to reinstate public safety step increases.

- **IT Projects** **$8,507,552**
  Funding of $8,507,552 has been included for IT Projects. Of this total, $3,531,352 supports the replacement of the existing fleet of mobile and portable subscriber radios in public safety agencies, $1,616,200 is included to support mobile computer terminal (MCT) replacement, a program designed to replace one-fifth of the public safety fleet each year, $2,180,000 is included to continue a multi-phase effort to transition core 9-1-1 services into a more robust and technologically up-to-date operating environment, and $1,180,000 is included to continue an ongoing replacement cycle for all the equipment that supports the computer aided dispatch (CAD) system.

Fund 40090
E-911

Changes to FY 2016 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2016 Revised Budget Plan since passage of the FY 2016 Adopted Budget Plan. Included are all adjustments made as part of the FY 2015 Carryover Review, FY 2016 Third Quarter Review, and all other approved changes through April 30, 2016.

- **Carryover Adjustments** **$6,744,082**
  As part of the *FY 2015 Carryover Review*, the Board of Supervisors approved an increase of $6,744,082, including carryover of Information Technology (IT) projects and IT project encumbrances of $4,911,146 and $1,832,936 in encumbered carryover.

Cost Centers

Department of Public Safety Communications[1]

Category	FY 2015 Actual	FY 2016 Adopted	FY 2016 Revised	FY 2017 Advertised	FY 2017 Adopted
EXPENDITURES					
Total Expenditures	$33,656,244	$37,316,644	$39,355,101	$38,317,369	$38,317,369
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)					
Regular	205 / 205	205 / 205	205 / 205	205 / 205	205 / 205

[1] It should be noted that the Cost Center table does not include IT Projects-related funding. In FY 2017, this totals an amount of $8,507,552.

1	Director	2	Business Analysts IV	1	Human Resources Generalist III
2	Assistant Directors	1	Info. Tech. Program Manager I	1	Human Resources Generalist I
5	PSC Squad Supervisors	1	Management Analyst III	1	Geog. Info. Spatial Analyst III
20	PSC Asst. Squad Supervisors	2	Management Analysts II	1	Geog. Info. Spatial Analyst II
157	PSCs III	1	Financial Specialist III	1	Network/Telecomm Analyst II
1	Programmer Analyst III	1	Financial Specialist II	1	Administrative Assistant V
1	PSTOC General Manager	1	Financial Specialist I	2	Administrative Assistants IV
				1	Administrative Assistant III

TOTAL POSITIONS
205 Positions / 205.0 FTE
182 Uniformed / 23 Civilian

Key Performance Measures

Indicator	Prior Year Actuals FY 2013 Actual	FY 2014 Actual	FY 2015 Estimate/Actual	Current Estimate FY 2016	Future Estimate FY 2017
E-911					
Percent 9-1-1 calls arriving at DPSC answered within 20 seconds	94%	95%	95%/94%	95%	95%
Percent 9-1-1 calls arriving at DPSC answered within 10 seconds	92%	93%	90%/91%	90%	90%

A complete list of performance measures can be viewed at www.fairfaxcounty.gov/dmb/fy2017/adopted/pm/40090.pdf

Performance Measurement Results

In FY 2015, with a 91 percent rate DPSC exceeded the National Emergency Number Association (NENA) standard of 90 percent of 9-1-1 calls answered within 10 seconds. With a 94 percent rate, DPSC did not meet the NENA standard of 95 percent of 9-1-1 calls answered within 20 seconds. While staff vacancies continued to be a challenge in FY 2015, the agency was able to meet minimum operational staffing through the use of overtime expenditures. DPSC anticipates making additional progress in FY 2017 with filling staff vacancies and training new public safety communicators in order to reduce its dependence on overtime and improve the cost efficiency of its operations.

Fund 40090
E-911

FUND STATEMENT

Fund 40090, E-911

	FY 2015 Actual	FY 2016 Adopted Budget Plan	FY 2016 Revised Budget Plan	FY 2017 Advertised Budget Plan	FY 2017 Adopted Budget Plan
Beginning Balance	$2,334,023	$40,098	$7,752,941	$1,064,785	$1,064,785
Revenue:					
Communications Sales and Use Tax[1]	$40,294,990	$41,320,122	$41,320,122	$42,012,354	$42,012,354
State Reimbursement (Wireless E-911)	4,539,261	4,400,000	4,400,000	4,600,000	4,600,000
Other Revenue[2]	182,835	150,000	150,000	150,000	150,000
Interest Income	2,173	10,000	10,000	10,000	10,000
Total Revenue	$45,019,259	$45,880,122	$45,880,122	$46,772,354	$46,772,354
Total Available	$47,353,282	$45,920,220	$53,633,063	$47,837,139	$47,837,139
Expenditures:					
Personnel Services	$22,060,799	$23,871,204	$23,871,204	$24,871,929	$24,871,929
Operating Expenses	11,547,614	13,445,440	15,476,096	13,445,440	13,445,440
Capital Equipment	47,831	0	7,801	0	0
IT Projects	5,944,097	8,507,552	13,213,177	8,507,552	8,507,552
Total Expenditures	$39,600,341	$45,824,196	$52,568,278	$46,824,921	$46,824,921
Total Disbursements	$39,600,341	$45,824,196	$52,568,278	$46,824,921	$46,824,921
Ending Balance[3]	$7,752,941	$96,024	$1,064,785	$1,012,218	$1,012,218

[1] In FY 2015, Fairfax County revised the methodology by which it applies revenues received through the Communication Sales and Use Tax (CSUT). As a result, a larger proportion of these revenues have been applied to Fund 40090, E-911, with a commensurate decrease reflected in the proportion of CSUT revenues applied directly to the General Fund. This change eliminated the need for a General Fund Transfer to Fund 40090, E-911 and results in a projected FY 2017 CSUT revenue total for Fund 40090 of $42.0 million.

[2] This revenue category includes annual revenue from the City of Fairfax for dispatch services, FOIA fees, and reimbursement from Nextel to cover County expenses related to the Nextel 800 MHz rebanding initiative.

[3] IT projects are budgeted based on the total project costs and most projects span multiple years. Therefore, funding for IT projects is carried forward each fiscal year, and ending balances fluctuate, reflecting the carryover of these funds.

Fund 40090
E-911

2G70-056-000 – Public Safety Communications Wireless-Radio	IT Priorities:	• Improved Service and Efficiency • Enhanced County Security

FY 2015 Expenditures	FY 2016 Revised Budget Plan	FY 2017 Advertised Budget	FY 2017 Adopted Budget
$3,684,517	$3,823,611	$3,531,352	$3,531,352

Description and Justification: This project was established in FY 1995 (along with Project 2G70-059-000) to replace and upgrade the County's critical Public Safety Communications Network (PSCN) and its various component systems. The network's component systems are vital for ensuring immediate and systematic response to emergencies, and replacement and enhancement is necessary to maintain performance, availability, reliability, and capacity for growth due to increases in County population and demand for public safety services. The PSCN supports emergency communications for the DPSC, Police, Fire and Rescue, and Sheriff's departments. This includes public safety call taking (E-911, Cellular E-911, non-emergency calls for service), dispatching, and all affiliated communications support for public safety agencies.

This specific project supports the replacement of the existing fleet of mobile and portable subscriber radios in public safety agencies. The FCC mandated that public safety radios had to meet the 700 MHz narrowband requirement by the end of December 2016 (FY 2017). Fairfax County had to comply in order to preserve regional interoperability currently in place as a result of Department of Homeland Security standards since 9-11.

FY 2017 funding of $3.5 million reflects the fourth of eight payments on a lease purchase to replace the existing fleet of mobile and portable subscriber radios in public safety agencies. Replacement radios were purchased in mid FY 2014 and a funding schedule was developed using existing project balance in FY 2014 as the initial payment, and then splitting the remaining cost of $24.7 million over seven years, starting in FY 2015.

Return on Investment (ROI): The return on investment for this project is realized by the performance, productivity, and effectiveness of public safety services in Fairfax County. Replaced and upgraded technology for these systems is critical to the safety of the public and the public safety personnel they support. Upgraded technology preserves the investments in technology that have been made and allow increased functionality, performance, and reliability to be achieved to facilitate responses to, and management of, emergencies. It mitigates the need for extraordinarily large additions of personnel that would be necessary to provide the same level of service and results without this technology. The increased access to important information, improvements to maintenance and reliability, increased capacity for growth, and enhanced functionality for users now and in the future builds upon past investments, responds to critical existing requirements, and sets the stage for the next generation of public safety communications technology.

Fund 40090
E-911

2G70-059-000 – Mobile Computer Terminal Replacement	IT Priorities: • Improved Service and Efficiency • Enhanced County Security

FY 2015 Expenditures	FY 2016 Revised Budget Plan	FY 2017 Advertised Budget	FY 2017 Adopted Budget
$1,449,068	$1,889,559	$1,616,200	$1,616,200

Description and Justification: This project was established in FY 1995 (along with Project 2G70-056-000) to replace and upgrade the County's critical Public Safety Communications Network (PSCN) and its various component systems. The network's component systems are vital for ensuring immediate and systematic response to emergencies, and replacement and enhancement is necessary to maintain performance, availability, reliability, and capacity for growth due to increases in County population and demand for public safety services. The PSCN supports emergency communications for the DPSC, Police, Fire and Rescue, and Sheriff's departments. This includes public safety call taking (E-911, Cellular E-911, non-emergency calls for service), dispatching, and all affiliated communications support for public safety agencies.

This specific project provides funding of $1,616,200 to support Mobile Computer Terminal (MCT) replacement, a program that has been in effect for over 14 years and is designed to replace one-fifth of the public safety fleet each year to keep technology fresh and usable into the foreseeable future. This equipment supports field personnel by granting them access to the CAD system, Virginia Criminal Information Network (VCIN), County Enterprise System, and a host of other remote databases required in the day-to-day performance of their position functions. This mandated functionality supports the DPSC, Police Department, Fire and Rescue Department and the Sheriff's Office. Current equipment will not support existing public safety access to available remote systems due to a lack of connectivity ports and devices in the vehicle. If ports and additional power to connect devices to these units are not provided, a risk of non-compliance to regulation and an inability to access criminal information systems could occur. In recent years, docking stations that support connectivity of MCT units to the CAD and other systems have only been purchased on an as needed basis. Older units are breaking on a regular basis due to age and are rapidly becoming obsolete. This funding level (which includes $16,200 software assurance costs for installed Microsoft products) will move towards accomplishing a complete replacement cycle with the updated technology needed to maintain a rapidly changing mobile fleet environment.

Return on Investment (ROI): The return on investment for this project is realized by the performance, productivity, and effectiveness of public safety services in Fairfax County. Replaced and upgraded technology for these systems is critical to the safety of the public and the public safety personnel they support. Upgraded technology preserves the investments in technology that have been made and allow increased functionality, performance, and reliability to be achieved to facilitate responses to, and management of, emergencies. It mitigates the need for extraordinarily large additions of personnel that would be necessary to provide the same level of service and results without this technology. The increased access to important information, improvements to maintenance and reliability, increased capacity for growth, and enhanced functionality for users now and in the future builds upon past investments, responds to critical existing requirements, and sets the stage for the next generation of public safety communications technology.

Fund 40090
E-911

3G70-078-000 – E-911 Telephony Platform Replacement	IT Priorities:	• Improved Service and Efficiency • Enhanced County Security • Maintaining a Current and Supportable Technology Infrastructure

FY 2015 Expenditures	FY 2016 Revised Budget Plan	FY 2017 Advertised Budget	FY 2017 Adopted Budget
$188,000	**$4,092,000**	**$2,180,000**	**$2,180,000**

Description and Justification: The Fairfax County Public Safety Answering Point (PSAP) 9-1-1 network is operating on an end-of-life technology platform under a contract services arrangement with Verizon that will expire when current maintenance purchase orders terminate on June 30, 2016. The new contract and platform were awarded in January 2016 to a new provider and arrangements have been made to cover the transition period from the current contract to the new contract. As such, Fairfax County has begun a multi-phase effort to transition its core 9-1-1 services into a more robust and technologically up-to-date operating environment. Widespread adoption of rapidly advancing technologies like text, video, Voice over Internet Protocol (VoIP) and the saturation of high-speed broadband access has raised the expectations of 9-1-1 services for the citizens of Fairfax County. Improvements are needed to support new requirements and expectations. Eventually, these upgrades will allow the County to migrate to Next Generation 9-1-1 (NG9-1-1) as that technology matures. NG9-1-1 will provide the ability to accept multimedia data (e.g. text, video and photo) and improve interoperability, call routing, PSAP call overflow, and location accuracy. NG9-1-1 will strengthen system resiliency and reliability, as well as increases opportunities to potentially achieve fiscal and operational efficiency through cost-sharing arrangements.

An overview of 9-1-1 today with NG9-1-1 is shown below:

9-1-1 Today	Full NG9-1-1
Primarily voice calls via telephone handsets	Voice, text, or video information available from many different types of communication devices sent over IP networks
Most information transferred via voice	Advanced data sharing is automatically performed (e.g. telematics)
Callers to 9-1-1 routed through legacy selective routers, limited forwarding / backup ability	Enhanced backup capabilities provided as calls can be routed to different PSAP locations more dynamically (if required)
Routing is based on phone number / Master Street Address Guide (MSAG)	Ability to route "calls" more accurately (routing is based on GIS coordinates)

Funding of $2.18 million is included in FY 2017 to continue this transition process. It is anticipated that this level of funding will be required through at least FY 2020 and then depending on the available NG9-1-1 technology at that future time, additional funds will likely be required.

Return on Investment (ROI): The return on investment for this project is realized by the performance, productivity, and effectiveness of public safety services in Fairfax County. Replaced and upgraded technology for these systems is critical to the safety of the public and the public safety personnel they support. Upgraded technology preserves the investments in technology that have been made and allow increased functionality, performance, and reliability to be achieved to facilitate responses to, and management of, emergencies. It mitigates the need for extraordinarily large additions of personnel that would be necessary to provide the same level of service and results without this technology. The increased access to important information, improvements to maintenance and reliability, increased capacity for growth, and enhanced functionality for users now and in the future builds upon past investments, responds to critical existing requirements, and sets the stage for the next generation of public safety communications technology.

Fund 40090
E-911

3G70-079-000 – Public Safety CAD System Replacement	IT Priorities:	• Improved Service and Efficiency • Enhanced County Security • Maintaining a Current and Supportable Technology Infrastructure

FY 2015 Expenditures	FY 2016 Revised Budget Plan	FY 2017 Advertised Budget	FY 2017 Adopted Budget
$617,160	$1,822,840	$1,180,000	$1,180,000

Description and Justification: Funding of $1,180,000 is included for the third year of a five year plan to refresh and update the hardware/software environment that supports the CAD system. Since most of the equipment was purchased in FY 2009, most of it has met and is now starting to exceed normal life expectancy. The CAD System supports all of Fairfax County Public Safety in their mission to keep Fairfax County and its citizens safe. The CAD System is the primary dispatch records system that is used 24/7/365 by DPSC call-takers to process all calls for service received on 9-1-1 and other emergency and non-emergency lines. With this system, they are able to efficiently process over 5,000 calls for service each day, and document each event with full details of the activities associated with the incident from the time the call is received to dispatch of the call and on through to unit arrival, clearing the call for service and then transfer of the information to the associated records management system where the responding unit(s) can retrieve data to complete an incident report.

Call information is downloaded to the CAD System, added comments are inserted and then the call for service is routed to the appropriate DPSC dispatcher(s) who then use the same CAD system to identify the closest appropriate field units for the event and dispatch and track those units responding to the event and documenting services provided. Through the use of the CAD System interfaces, users of the system have instant access to records from a diverse collection of other systems like Virginia Criminal Information Network (VCIN), National Crime Information Center (NCIC), Geographic Information Systems (GIS), Virginia Hospital & Healthcare Association (VHHA) status tracking system, agency specific Record Management Systems (RMS), Sheriff's Information Management System (SIMS), to name a few. The field units can also use the CADs in their vehicles to provide them directions to any location within and immediately surrounding the County.

Return on Investment (ROI): The return on investment for this project is realized by the performance, productivity, and effectiveness of public safety services in Fairfax County. Replaced and upgraded technology for these systems is critical to the safety of the public and the public safety personnel they support. Upgraded technology preserves the investments in technology that have been made and allow increased functionality, performance, and reliability to be achieved to facilitate responses to, and management of, emergencies. It mitigates the need for extraordinarily large additions of personnel that would be necessary to provide the same level of service and results without this technology. The increased access to important information, improvements to maintenance and reliability, increased capacity for growth, and enhanced functionality for users now and in the future builds upon past investments, responds to critical existing requirements, and sets the stage for the next generation of public safety communications technology.