

# BEXAR METRO 9-1-1 NETWORK



**PROPOSED**

## FISCAL YEAR 2022 FINANCIAL PLAN AND BUDGET

*MAY 18, 2021*





## **MISSION STATEMENT**

***The District’s mission is to deploy and maintain a state-of-the-art 9-1-1 emergency communication system that enables citizens in distress to quickly communicate their request for police, fire, or emergency medical assistance; and to ensure member jurisdictions have the appropriate 9-1-1 tools necessary to efficiently and accurately receive and process those requests.***

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## **PURPOSE**

The purpose of the Fiscal Year 2022 Budget and Financial Plan is to obtain consensus approval of Bexar Metro 9-1-1 Network’s (Bexar Metro or District) Fiscal Year 2022 (FY2022) operational and financial plans by the District’s board of managers and the governing bodies of its forty (40) participating jurisdictions; and provide the continuing operational and fiscal authority necessary for the staff to aggressively establish and maintain all elements necessary to provide quality emergency call delivery via a highly survivable and resilient 9-1-1 system.

## **AUTHORITY**

The authority for Bexar Metro is the Texas Health and Safety Code, Chapter 772, Subchapter D, Section 772.301—formerly Vernon’s Annotated Civil Statutes Article 1432e, as approved by the Texas 69<sup>th</sup> Regular Legislative Session in Senate Bill 750 on May 21, 1985; and subsequently approved by a local election on January 17, 1987. This legislation’s purpose is to enable the provision of affordable, high quality, countywide Enhanced 9-1-1 service through the establishment of emergency communication districts.

## **MANAGEMENT**

A governing board of managers, appointed according to criteria in the enabling legislation, establishes policy and provides oversight of the District. The board members and their appointing authority include:

<b><u>Member</u></b>	<b><u>Authority</u></b>
James C. Hasslocher (Chair)	Bexar County
Stephen R. Schneider	Bexar County
Judge Sherman Krause	Comal County
Dudley Wait	Guadalupe County
Heberto Gutierrez	City of San Antonio
Chief Bill McManus	City of San Antonio
Mayor Rusty Brockman	City of New Braunfels
Mayor Suzanne de Leon	Member at Large
Principal Service Provider (Non-Voting)	Vacant

Brett M. Schneider, Executive Director

Eddie L. Taylor, Deputy Executive Director

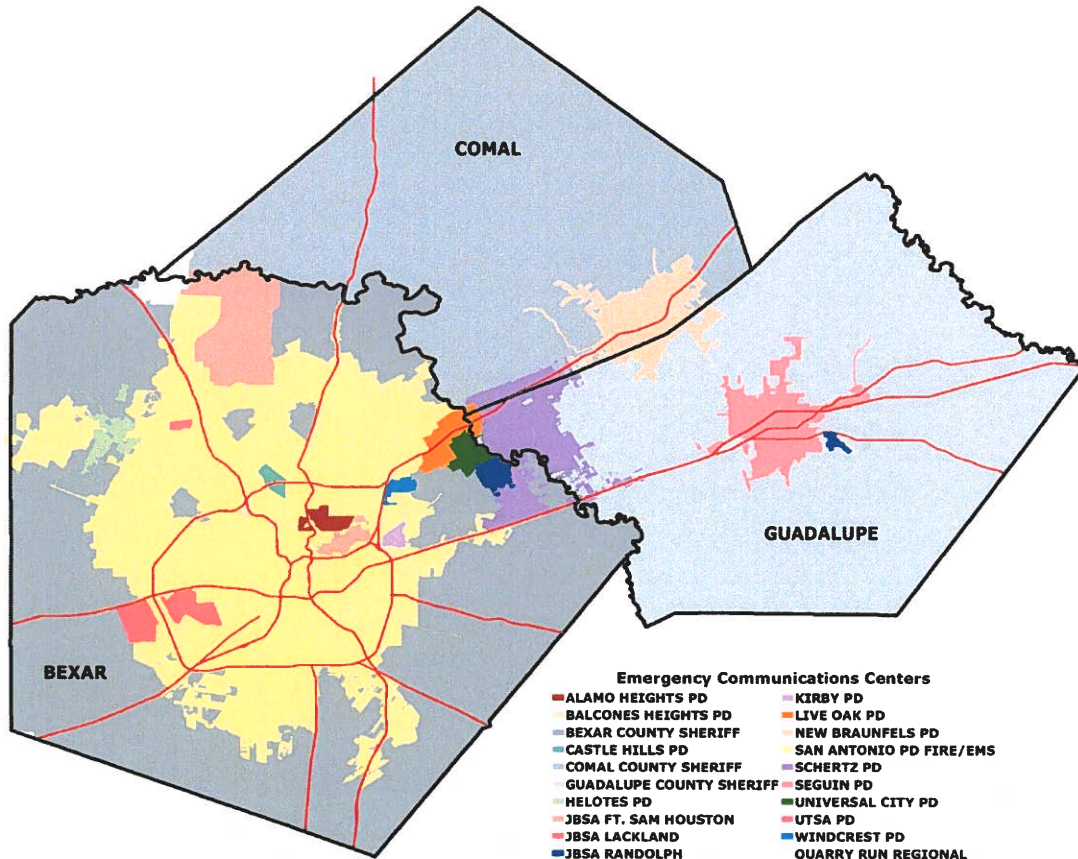
## RESPONSIBILITY

To successfully accomplish the mission, Bexar Metro must deploy and manage a technology neutral network that routes all 9-1-1 requests to the appropriate answering and responding jurisdiction; create and maintain a time-sensitive, highly accurate database that displays the location, callback number, and owner's name of the specific instrument used to call 9-1-1; procure, install, and maintain the specialized 9-1-1 equipment utilized by each authorized answering and responding jurisdiction; coordinate with municipal and jurisdictional addressing authorities to ensure the database contains accurate, standardized, and logical location information to ensure each citizen is easily and quickly locatable during times of critical emergencies; and construct, deploy, and maintain a spatially accurate geographic digital map to support location determination technologies and enhance computer aided dispatch systems. Bexar Metro is also responsible for providing effective network and facility backup solutions for nineteen (19) primary and two (2) secondary Emergency Communications Centers (ECCs) that may be required to evacuate their local facility in the event of a natural or manmade disaster.

## PARTICIPATING JURISDICTIONS

<i>Alamo Heights</i>	<i>Converse</i>	<i>Hollywood Park</i>	<i>Olmos Park</i>	<i>Somerset</i>
<i>Balcones Heights</i>	<i>Elmendorf</i>	<i>Kingsbury</i>	<i>San Antonio</i>	<i>Spring Branch</i>
<i>Bexar County</i>	<i>Fair Oaks Ranch</i>	<i>Kirby</i>	<i>Sandy Oaks</i>	<i>St Hedwig</i>
<i>Bulverde</i>	<i>Garden Ridge</i>	<i>Leon Valley</i>	<i>Santa Clara</i>	<i>Staples</i>
<i>Castle Hills</i>	<i>Grey Forest</i>	<i>Live Oak</i>	<i>Schertz</i>	<i>Terrell Hills</i>
<i>China Grove</i>	<i>Guadalupe County</i>	<i>Marion</i>	<i>Seguin</i>	<i>Universal City</i>
<i>Cibolo</i>	<i>Helotes</i>	<i>New Braunfels</i>	<i>Selma</i>	<i>Von Ormy</i>
<i>Comal County</i>	<i>Hill County Village</i>	<i>New Berlin</i>	<i>Shavano Park</i>	<i>Windcrest</i>

## EMERGENCY COMMUNICATIONS CENTERS



## REVENUE

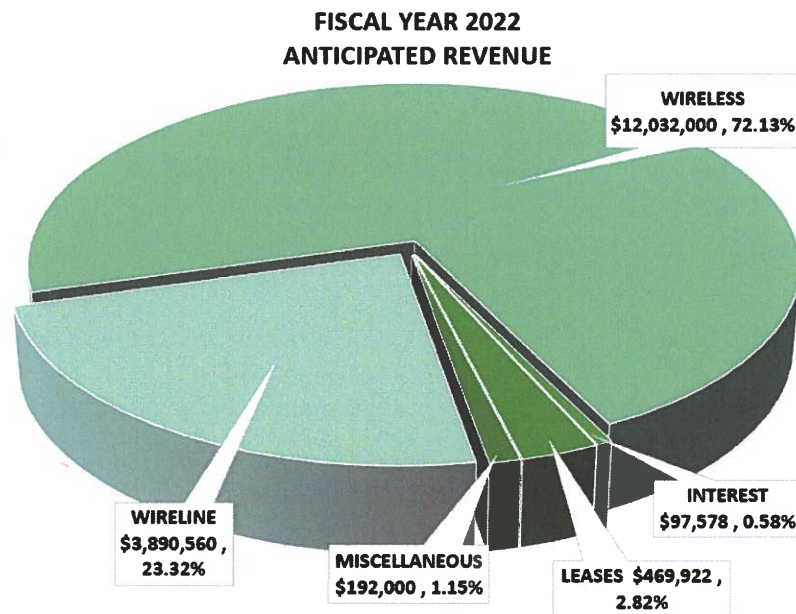
The District's source of revenue is the 9-1-1 emergency service fee applied to specified telephone access lines located in Bexar, Comal, and Guadalupe Counties. The Texas Health and Safety Code, Chapter 772, Section 772.314, authorizes the board to impose a 9-1-1 emergency service fee not exceeding six percent of the monthly base rate charged by the principal service supplier. The fee applies to all residential lines and up to the first one hundred business lines at one location. The fee does not apply to state and federal lines. Each year the board calculates the amount of the fee in conjunction with development and approval of the annual budget. By law, the fee has uniform application in each participating jurisdiction and must generate revenue sufficient to match current and projected operational expenses directly related to the District's mission and responsibilities, as well as providing reasonable reserves for contingencies and equipment replacement.

The board of managers initially established the emergency service fee on March 6, 1987, and it remained unchanged until 2018. On July 25, 2018, the board of managers approved the following service fee schedule imposed on each local access line, or equivalent, effective October 1, 2018:

Residential Lines: \$ 0.50

Business Lines: \$ 1.00

In addition to fees assessed on wireline telephones, Bexar Metro also receives an emergency service fee from each wireless access line within its jurisdiction. This monthly fee, set by Texas law at \$0.50 per line, recognizes that the wireless telephone is a link to 9-1-1 service and a wireless telephone user should therefore share a portion of the financial burden for provisioning the network. It also is in recognition of the cost recovery mechanism required to defray a fair and reasonable portion of the network infrastructure expense the wireless providers incur in meeting the federal mandate for wireless Enhanced 9-1-1.



Wireless service fee revenue accounts for approximately 72.13% of total income. Wireline service fee revenue, comprised of traditional incumbent wireline and Voice over Internet Protocol (VOIP) services, accounts for 23.32% of total revenue. Additional revenue, totaling 4.55%, is generated on income from lease agreements, interest, and miscellaneous sources, such as special jurisdiction fees and grant disbursements.

Total revenues for fiscal year 2022 are projected to increase by \$598,739 to \$16,682,060. This reflects a 3.59% increase over the previous fiscal year.

The following assumptions were used to forecast anticipated revenues for fiscal year 2022:

### Service Fee Revenue

Wireless - Wireless service fee revenue will increase by \$688,515 (5.72%) to \$12,032,000.

Wireline - Revenue from wireline and VoIP sources is anticipated to improve by \$174,062 (4.47%) to \$3,890,560.

The better than anticipated growth rates in the wireless and wireline service fee revenue for this budget year is an anomaly, driven by slight increases in the number of wireless subscribers and, more importantly, a product of prior year budget projections. The mystery surrounding COVID-19, length of the pandemic, and unknown impact on the telecommunications sector guided staff to apply extremely conservative revenue estimates and limit expenditures while preparing the prior year fiscal year 2021 budget.

Historically, wireless subscriber base and corresponding revenue, increase, on average, 1.8% - 2.5% year to year. This trend is expected to continue for the foreseeable future. Wireline subscriber base is expected to continue its decade-long decline at an accelerated rate of 11% - 16% through fiscal year 2025. Sporadic increases in the number of wireline and VOIP business subscribers at the \$1.00 business rate will continue to help defray some of the decline in wireline revenue and limit annual losses to 5% on average.

### Non-Service Fee Revenue

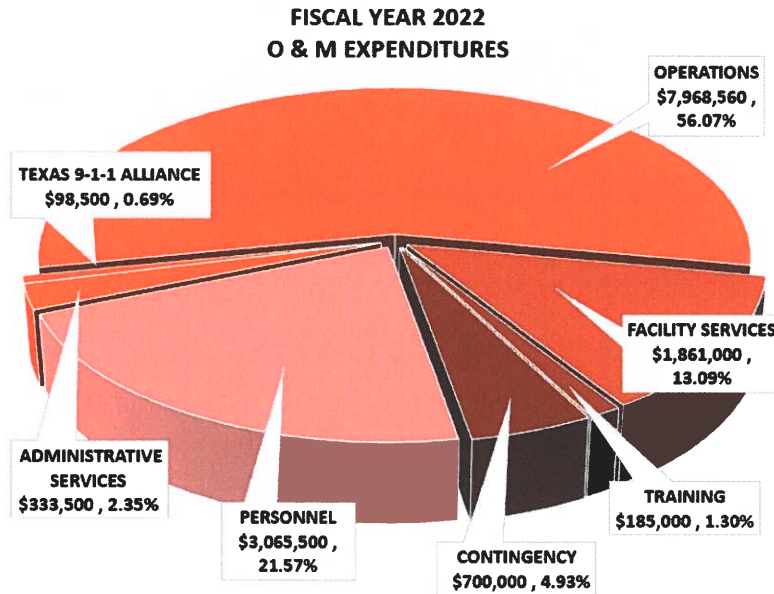
- Interest: Interest income on deposit and investment accounts is projected to decrease to \$97,578 for this budget year due to anticipated lower rates of return resulting from the change in market conditions. This reflects a 133.79% decrease when compared to the projected fiscal year 2021 investment income.
- Intergovernmental Revenue (Lease Agreements): Projected revenue from Data Center and Tenant Lease Agreements at Quarry Run is anticipated to increase to \$469,922 due to a new data center lease agreement with the Alamo Area Council of Governments (AACOG) to house equipment supporting their 9-1-1 Program.
- Miscellaneous: Anticipated Federal 9-1-1 Grant distribution of \$123,000, sixty percent of Phase III and Phase IV grant component costs, for a multiyear Cyber Security audit and “red team” assessment on the 9-1-1 network and Next Generation Core Services (NGCS) infrastructure. \$170,730 in Phase I and II grant component costs were approved for distribution and received by the district in April.
- Transfer from Reserves: No reserve transfers are required for this budget.

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## EXPENSES

### OPERATIONS AND MAINTENANCE

The Operations and Maintenance (O&M) budget includes expenses for Personnel, Administrative Services, Operations/Technology and Facility Services. Total O&M expenditures proposed for fiscal year 2022 are \$14,212,060, an increase of 2.38%, or \$338,606, over fiscal year 2021.



#### Personnel

The District's strategy is to attract and retain qualified individuals with the skill sets required to design, manage, and maintain Bexar Metro's specialized public safety critical networks and equipment. Personnel expenditures, accounting for 21.57% of the O&M budget and 18.38% of the total district budget, includes direct compensation, Social Security and Medicare matching contributions, health care, and contributions to employee retirement accounts. Total personnel expenditures for fiscal year 2022 will increase by \$25,500 to \$3,065,500 when compared to the adopted fiscal year 2021 budget. An anticipated increase in health and dental premiums, plus the addition of a Vision plan to the employee benefits package led to the slight increase. Reclassification of a staff position resulted in a decrease of \$8,358 in the direct compensation line item. This change provided funds to cover the \$5,140 annual cost of the Vision benefit and defray some of the anticipated increase in health and dental costs. Furthermore, employee participation in a provider sponsored wellness program is expected to save the District an additional \$11,500 in annual premiums. While a cost-of-living adjustment (COLA) is not planned for the new fiscal year, funds are allocated to compensate staff for the completion of skills-based certifications and one-time merit incentives based on performance.

#### Administrative Services

Administrative Services include the following expenses supporting personnel, business and financial operations:

- Finance / Human Resources (HR)
- Professional development and memberships
- Office equipment and supplies
- Insurance (general liability, workers compensation, auto)

Overall, the cost of this business operations is projected to increase by 4.00% to \$333,500 in this budget.

## **Texas 9-1-1 Alliance**

The Texas 9-1-1 Alliance is an entity organized under the Texas Interlocal Cooperation Act composed of the twenty-seven (27) Emergency Communication Districts (ECD) created pursuant to the Texas Health and Safety Code Chapter 772. Participation allows the District to maintain continuous interaction with ECD counterparts throughout the state on technical, legislative, and regulatory matters affecting 9-1-1 service on a national, state, and regional level. Expenses are cost-shared across the membership using population to determine agency cost allocations. District membership remains relatively unchanged at \$98,500 for the budget year.

## **Operations and Technology**

Expenditures for Operations and Technology (Operations) are associated with ongoing operations and maintenance of the 9-1-1 and other mission critical systems, to include engineering services, contingency operations, cybersecurity, and the management of geospatial and tabular 9-1-1 routing databases. Operations expenses, which account for 56.07% of the O&M budget, are projected to increase slightly from \$7,964,333 to \$7,968,560. Operations and Technology initiatives for this budget year include:

- **Next Generation 9-1-1 (NG9-1-1):** The ECC rehome from the current legacy digital 9-1-1 infrastructure to a feature-rich, IP-based NG9-1-1 environment will be completed by end of year 2021. Staff is currently working with the ECCs to confirm site configurations, establish routing policies, and finalize network transition plans. Cutover and testing on an ECC-by-ECC basis is projected to begin in November 2021. The next phase of the project, transitioning the 169 Operating Service Providers (OSPs) from the current AT&T legacy selective router to the new NGCS platform will commence in mid-2022. The ECC rehome and subsequent OSP transition will require new 9-1-1 network and interconnection circuits between the NGCS points of interconnect, OSP networks and Bexar Metro Vesta 9-1-1 Host systems. Ultimately, this new “network of networks” will replace the current single 9-1-1 selective router with a high availability, redundant, multi-node selective routing network, thus removing a potential single point of failure in the current call routing architecture.
- **Cybersecurity:** The security and protection of the 9-1-1 infrastructure and public safety systems supporting Quarry Run operations are paramount. In addition to our annual cybersecurity assessment conducted in conjunction with the University of Texas – San Antonio Center for Infrastructure Assurance and Security (CIAS), the proposed budget includes funds to conduct a full-scale cybersecurity review and “red-team” analysis on the core Vesta 9-1-1 system, ESINet, and ECC premise equipment. Continued engagement with the United States Department of Homeland Security, Cybersecurity and Infrastructure Security Agency (CISA), to safeguard the District’s critical 9-1-1 and facilities infrastructure through focused assessments, vulnerability scans, cyber exercises, and network penetration testing.
- **Network Diversity and Resiliency:** Additional diversification and resiliency studies, to include applications under review by the United States Department of Homeland Security to participate in a critical infrastructure assessment under the Regional Resiliency Assessment Program (RRAP), are planned to augment the annual network configuration and management audits performed by staff.
- **Data Integrity/Geospatial Operations:** Data Integrity/Geospatial Operations is tasked with ensuring the accuracy, reliability, and consistency of the tabular Master Street Address Guide (MSAG) and Geographic Information Systems (GIS) data. This includes the maintenance and technology-driven enhancements to our spatially accurate, digital base map used by public safety to quickly help identify a caller’s location and, in the NG9-11 environment, route 9-1-1 calls to the appropriate ECC. Several agencies recognize the District’s commitment to accuracy

and integrity in digital data and have opted to use our base map to fulfill their Computer Aided Dispatch (CAD) geospatial requirements. The ongoing transition from legacy tabular to geo-based routing requires additional feature sets and changes in processes to ensure data integrity is maintained throughout the transition life cycle. Moreover, continued evolution in technology and wireless accuracy mandates, such as recent changes in wireless vertical (z-axis) requirements mandated by the Federal Communications Commission (FCC), require a continued focus on wireless location determination resources and processes.

- **Information Technology**: Expenditures for administrative computer equipment, licensing, and support will decrease by \$77,000, to \$208,500. The decrease is directly attributed to expanded staff management and oversight of administrative and public safety networks at both Bexar Metro facilities, thus alleviating the requirement to continue managed service agreements with third party service vendors.
- **Regional Emergency Alert Network (REAN)**: Continue to provide management, training, and operational oversight of the Regional Emergency Alert Network to ensure our public safety partners, in cooperation with the ECCs, have access to an emergency notification resource to immediately alert their constituents via phone call, text, and email of an emergent incident, severe weather event, or security threat.
- **Network and Security Operations**: Monitoring and immediate alarm notification on ECC end-point equipment and 9-1-1 network core infrastructure to ensure optimum operational performance, timely identification of potential cybersecurity concerns, and proactive response to technical issues before they impact critical services.

## **Education and Training**

The 9-1-1 telecommunicator is the first person on the scene of an emergency. Our goal is to ensure these first responders have the skills and tools required to expedite a quality response. On average, forty (40) plus classroom-based or online training opportunities are offered annually at no cost to ECC personnel. Educational content includes instruction in Homeland Security, Emergency Medical Dispatch (EMD), Law Enforcement Communications, Fire Communications, School Violence, Family Violence, and Suicide Intervention. Instruction on Vesta 9-1-1 equipment and Regional Emergency Alert Network (REAN) operations are also offered. Scholarships are extended to those telecommunicators unable to attend District sponsored classes due to scheduling constraints or to meet certification requirements for subject matter not offered in our curriculum. An increase to \$185,000 (8.00%) is proposed for this budget year. This \$14,000 increase in the program budget will allow the District to offer additional training hours to help jurisdictions compensate for training hours lost in the previous two fiscal years due to the pandemic and its unfavorable impact on our ability to conduct in-person training. Further, a percentage of these funds will be allocated to expand our public engagement and 9-1-1 awareness initiatives through distribution of additional educational materials to schools, public safety agencies, and civic organizations.

## **Facility Services**

The Facilities budget includes expenditures associated with the maintenance of the District's facilities, to include utilities, grounds maintenance, and most importantly, critical infrastructure supporting public safety and data center operations at Quarry Run. The Facility Services budget is projected to increase by 4.42%, to \$1,861,000 in this year's budget. Attributes leading to this change include an anticipated 3.00% average increase in vendor service contracts set to expire during the year and the expansion of a third-party facilities service agreement executed last year. The revised agreement will provide an additional eight (8) hours of onsite technical assistance to further support staff in their efforts to maintain building management systems and facility operations at Quarry Run.

## **Contingency**

Historically, the District maintains a contingency budget line item to cover unforeseen costs and expedite procurement of 9-1-1, facility, or network equipment in the event the equipment is damaged due to mechanical failure or a natural disaster. An increase from \$500,000 to \$700,000 is proposed for this budget year to guarantee adequate funds are available to facilitate the emergency repair or replacement of critical equipment.

## **CAPITAL EXPENDITURES**

### **Capital Improvements**

This year's budget allocates \$820,000 to fund capital improvement projects supporting the enhancement or replacement of mission critical / 9-1-1 system equipment, network infrastructure, and maintenance of district facilities. Improvements for fiscal year 2022 include:

#### **Mission Critical Systems:**

- **New Braunfels Police Department:** Buildout of 9-1-1 network, demarcation, and dedicated 9-1-1 system power infrastructure at the new City of New Braunfels Police Headquarters. Procurement of an additional Vesta 9-1-1 console is included in the project scope.
- **Infrastructure Resiliency and Protection:** Continued efforts to further explore network diversify and protect interconnection of 9-1-1 infrastructure through deployment of alternative transport technologies, to include over-the-air and carrier diverse solutions, with a focus on diverse connectivity between key NGCS points of interconnection and District 9-1-1 service nodes.
- **Quarry Run Operations:** Design and implementation of an Azure cloud-based network architecture at Quarry Run to better accommodate ECC remote access to Computer Aided Dispatch (CAD) and other agency resources during ECC contingent events.

#### ● **Facility Services:**

- **Quarry Run**
  - Replace Uninterruptible Power Supply (UPS) Battery Bank on B-Side Utility
  - HVAC Expansion and Duct Realignment in Administrative Area
  - Operations Floor Video Wall Power and Processor Upgrade
  - Repair and Reseal Utility Wall Exterior
  - Enhance Security and Gate Entry Control Protective Measures
- **Saddletree**
  - Exterior Security Camera Expansion
  - Miscellaneous Interior Wall Covering Repair and Paint

- **Vehicles:** Purchase of one (1) sport utility vehicle (SUV) to replace 2014 GMC Acadia

### **Capital Reserves**

The fiscal year 2022 budget includes a transfer of \$1,650,000, 67% of the capital budget, to dedicated reserve accounts earmarked to fund future 9-1-1 network upgrades and facilities projects without incurring debt. The transfer of funds to reserve accounts in this year's budget reflects an increase of \$400,000 when compared to the prior year budget. Due to the rapid evolution in public safety technologies and projected five (5) year life cycle of critical equipment, a major 9-1-1 equipment and ECC power systems refresh, programmed for fiscal year 2024, followed by a Cisco network core upgrade at Quarry Run three years later, will require projected expenditures of \$15,500,000 and \$3,500,000, respectively.

## **BUDGET SUMMARY**

The Fiscal Year 2022 Financial Plan and Budget, totaling \$16,682,060 is sufficient to fund all projected program expenditures for the fiscal year. The plan includes \$14,212,060 for Operations & Maintenance and \$2,470,000 for Capital Improvements. The figures presented reflect a net increase of \$596,740, or 3.58%, when compared to the Fiscal Year 2021 Adopted Budget.

This budget matches projected revenue and expense as required by Texas law. To ensure responsiveness and operational flexibility, the Executive Director may authorize the transfer of funds among budget line items if the overall annual budget amount remains unchanged.

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# Bexar Metro 9-1-1 Network Proposed Fiscal Year 2022 Budget

## Anticipated Fiscal Year 2022 Revenue

Wireline Service Fees	\$3,890,560
Wireless Service Fees	\$12,032,000
Interest Earned	\$97,578
Lease Agreements	\$469,922
Miscellaneous Revenue	\$192,000
Transfer from Reserves	\$0

Total Available Funds \$16,682,060

## Proposed Fiscal Year 2022 Operations & Maintenance Expense

Personnel	\$3,065,500
Operations & Technology	\$7,968,560
Facility Services	\$1,861,000
Administrative Services	\$333,500
Texas 9-1-1 Alliance	\$98,500
Education & Training	\$185,000
Contingencies	\$700,000

Total O & M Expense \$14,212,060

## Proposed Fiscal Year 2022 Capital Improvement Expense

ECC Upgrades	\$100,000
Saddletree Facility	\$40,000
Vehicles	\$45,000
Mission Critical Equipment	\$355,000
Information Technology	\$40,000
Quarry Run Facility	\$240,000
Transfer to Capital Reserves	\$1,650,000

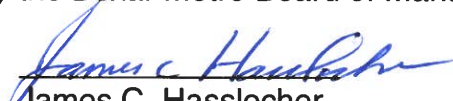
Total Capital Expense \$2,470,000

**Total Fiscal Year 2022 Budget** \$16,682,060

## BEXAR METRO 9-1-1 NETWORK

*Approved by the Bexar Metro Board of Managers this Eighteenth Day of May 2021.*

By:  
Name:  
Title:

  
James C. Hasslocher  
Chairman