

# BEXAR METRO 9-1-1 NETWORK

FISCAL YEAR 2021



*PROPOSED*

## FINANCIAL PLAN AND BUDGET

May 21, 2020

## PURPOSE

The purpose of the Fiscal Year 2021 Budget and Financial Plan is to obtain consensus approval of Bexar Metro 9-1-1 Network's (Bexar Metro or District) Fiscal Year 2021 (FY2021) operational and financial plans by the District's board of directors 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 directors, appointed according to criteria in the enabling legislation, establishes policy and provides oversight of the District. The board members and their appointing authority include:

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

To implement board policy and to manage the day-to-day operations, the board of directors appointed Brett M. Schneider as Bexar Metro's Executive Director.



## MISSION STATEMENT

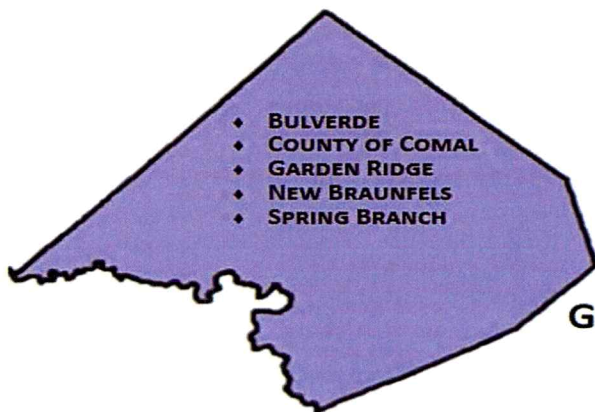
*The District's mission is to deploy and maintain a state-of-the-art 9-1-1 emergency communication system that enables citizens in distress to quickly communicate their request for police, fire, or emergency medical assistance; and to ensure member jurisdictions have the appropriate 9-1-1 tools necessary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

## 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 Communication Centers (ECCs) that may be required to evacuate their local facility in the event of a natural or manmade disaster.

## PARTICIPATING JURISDICTIONS

### COMAL COUNTY



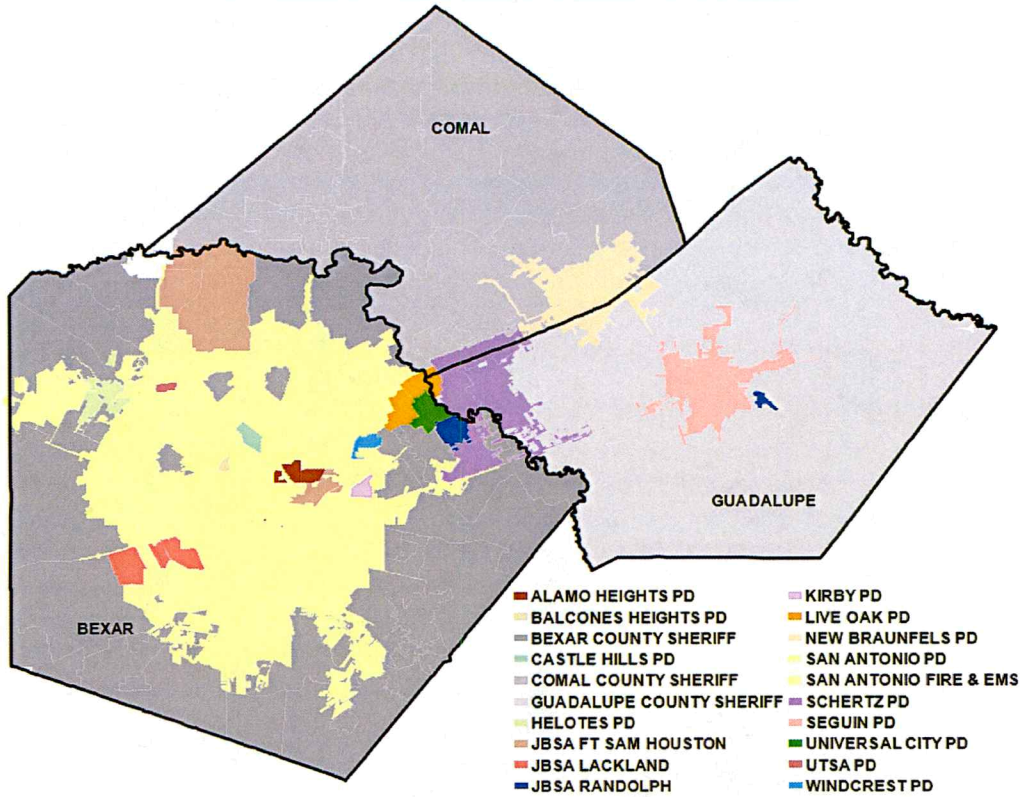
### GUADALUPE COUNTY



### BEXAR COUNTY



**EMERGENCY COMMUNICATION 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.

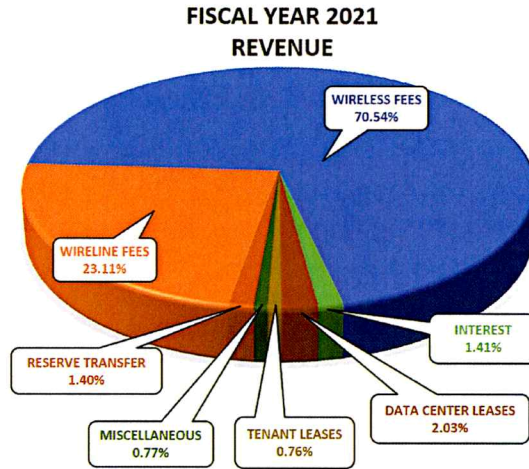
The board of directors initially established the emergency service fee on March 6, 1987, and it remained unchanged until 2018. On July 25, 2018, the board of directors approved the following service fee schedule imposed on each local access line, or equivalent, effective October 1, 2018:

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.

Total anticipated revenues for FY2021 are projected to decrease by 5.78 percent to \$16,083,320 when compared to the previous year. This decrease is further delineated in further budget discussion to follow. Revenue from the wireless service fee accounts for 70.54 percent of total income. Wireline service fee revenue, comprised of traditional incumbent wireline and Voice over Internet Protocol (VOIP) services, accounts for 23.11 percent of total revenue. Additional revenue is generated on income from interest on money market accounts, lease agreements, and miscellaneous sources, such as grant reimbursements.



The following is a summary of the sources and assumptions used to forecast projected revenue for the FY2021 operational period:

### Service Fee Revenue

- Wireless: Revenue from the wireless service fee is expected to generate \$11,343,486 in FY2021. This represents an increase of 1.26 percent, down three quarters of one percent from the growth rate experienced in the previous four fiscal years.
- Wireline: Service fee revenue generated from wireline service continues to decline at an accelerated rate as consumers opt to use wireless as their sole telecommunications source. Wireline revenue is anticipated to decrease by 14.62 percent to \$3,716,496, down \$543,362 when compared to the fiscal year 2020 budget.

### Non-Service Fee Revenue

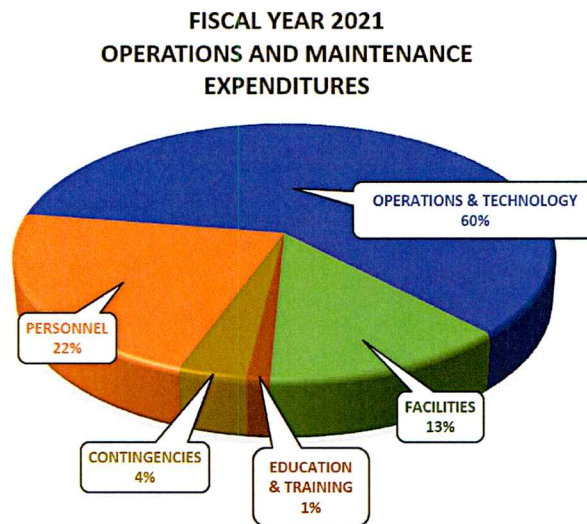
- Interest: Interest revenue on deposit and investment accounts is projected to decrease just over a half of percent to \$227,016 for this budget year due to anticipated lower rates of return resulting from the change in market conditions.
- Intergovernmental Revenue (Lease Agreements): Projected revenue from Data Center and Tenant Lease Agreements at Quarry Run is expected to increase from \$297,600 in FY2020 to \$447,922 in FY2021. This increase is attributed to a new multi-year agreement with the City of Corpus Christi for Data Center space to establish an inland disaster recovery site and a new tenant agreement with the City of San Antonio for office and operational space to support limited permanent staffing of Police and Fire emergency communications personnel to augment their respective 9-1-1 and dispatch operations at Brooks City Base.

- Federal 9-1-1 Grant: Grant distribution of \$123,000, sixty percent of Phase III and Phase IV component costs, for a multiyear Cyber Security audit and “red team” assessment on the 9-1-1 network.
- Transfer from Reserves: The FY2021 budget includes a transfer of \$225,000 from cash reserves to partially fund planned geospatial projects supporting Federal Communications Commission (FCC) mandated wireless Z-Axis (vertical) location requirements.

The current fee structure is adequate to support programmed expenditures in the proposed budget.

## OPERATIONS & MAINTENANCE EXPENDITURES

The Operations and Maintenance (O&M) budget includes expenses for Personnel, Administration, Operations/Technology and Facility Services. Total O&M expenditures for the fiscal year are projected to increase by 4.76 percent to \$13,873,454.



### PERSONNEL

Personnel expenditures include salary, Social Security and Medicare matching contributions, health care, and contributions to employee retirement accounts. 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. The FY2021 budget personnel line item will decrease by 3.92 percent to \$3,040,000 compared to the previous budget year. The FY2021 personnel line item includes a modest allocation for merit and incentives for skills-based certifications directly supporting job responsibilities.

### OPERATIONS AND TECHNOLOGY

Operations and Technology (Operations) expenditures include recurring services directly related to the ongoing operations and maintenance of the 9-1-1 system and other mission critical systems, to include engineering services, contingency measures, management of geospatial and tabular databases used to route 9-1-1 calls, and training programs. Total expenditures for Operations and Technology projected to increase by just over five percent to \$8,383,746 in FY2021.

ESINet/Next Generation Core Services: In 2019, the district selected AT&T to provide Next Generation Core Services (NGCS) via interconnection to a highly available, fault tolerant, geographically diverse nationwide platform. The project, originally scheduled to launch in the

FY2020 budget cycle, was delayed due to changes in the project scope. AT&T and the district were able to finalize the changes earlier this year and a final service agreement was executed in late February. Several months of interconnection design, planning, and resource evaluation are required prior to the first phases of implementation and testing in second quarter FY2021. This transition from the current legacy digital 9-1-1 infrastructure to a feature-rich, IP-based Next Generation 9-1-1 (NG9-1-1) environment will not only eliminate the single point of failure within the current selective routing network, but will also provide enhanced on-demand geospatial routing of 9-1-1 calls utilizing the district's spatially accurate digital map.

Cyber and Network Security: In 2020, staff completed the first phase of a multi-year cyber security and protection project, partially funded by a Federal 9-1-1 Grant administered by the Commission on State Emergency Communications (CSEC). The first phase, in progress with an anticipated June completion, includes the creation of a Network Security Operations Center (NSOC) equipped with the tools necessary to quickly detect and mitigate security threats on both the 9-1-1 and Quarry Run networks. Creation of a cyber security policy and training curriculum for technical staff, end users, and ECC personnel is currently in progress. The second phase, planned for fourth (4<sup>th</sup>) quarter FY2021 post NGCS deployment, leverages the NSOC equipment and lessons learned through policy development to fully evaluate the vulnerability of the entire Next Generation 9-1-1 network, to include ESInet interconnectivity between the NGCS nationwide platform and the district's two Vesta 9-1-1 cores, connectivity to premise equipment located at each ECC, and all network elements supporting critical communications throughout the district.

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, high quality digital base map used by public safety to quickly help identify a caller's location and, in the Next Generation environment, route 9-1-1 calls to the appropriate ECC. This transition from legacy tabular 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 accuracy requirements, will require a new focus on elevations and indoor mapping. The Fifth Report and Order, adopted by the FCC in November 2019, requires wireless service providers to deploy z-axis technologies in the top twenty-five statistical areas by April 3, 2021. The San Antonio statistical area is twenty-fifth on the list of mandated deployments. A multi-faceted approach is required to address the technical, geospatial, and training requirements necessary for the telecommunicator to derive an accurate, dispatchable location based on the vertical data provided by the wireless carriers. The purchase of oblique aerial photography will facilitate identification of multi-story buildings and points of interest over three stories in height, with a focus on high-risk facilities, such as schools and other public venues, is included in the proposed budget.

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. The District's Education and Training Program continues to expand with additional classes on Texas Commission on Law Enforcement (TCOLE) mandated TCIC/NCIC, TLETS and Spanish for Telecommunicators. On average, forty (40) classroom-based 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 also extended to those telecommunicators unable to attend a district sponsored class due to scheduling constraints or a requirement for subject matter not offered in the district's curriculum. Overall, training contact

hours are up 58 percent to 6,187 hours when compared to program expansion in 2017. A budget increase of 6.54 percent is proposed to further increase training opportunities, with a focus on state-mandated cyber security awareness, human trafficking, and well-being seminars to combat the physical, mental, and emotional fatigue often experienced by ECC personnel.

## **FACILITIES**

The Facilities budget includes costs associated with the maintenance of the district's Saddletree Court and Quarry Run facilities, to include utilities, infrastructure, grounds maintenance and other related services. The facility services budget is proposed to increase by 2.71 percent to \$1,778,706 in this budget cycle. The increase is partially attributed to increased custodial expenses resulting from expanded building tenancy at Quarry Run and a new facilities services maintenance contract to provide the district's Facility Services Department with 24x7x365 support in the management, oversight, and maintenance of critical power, water, and HVAC building systems.

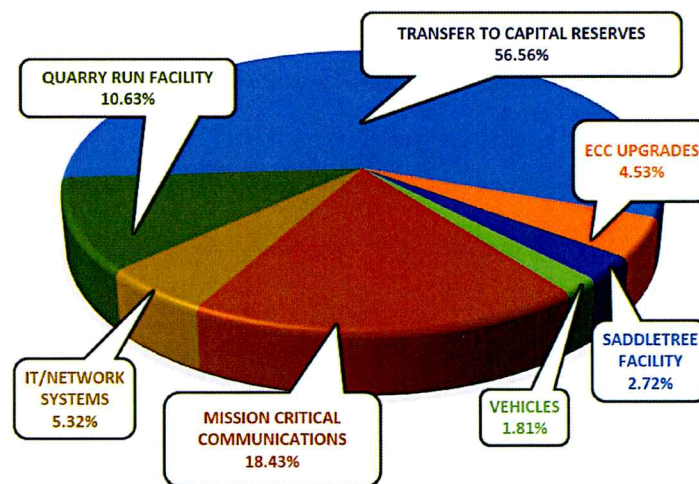
## **CAPITAL EXPENDITURES**

Capital expenditures in the amount of \$2,209,866 will underwrite the following mission critical and facility capital improvement projects in the upcoming fiscal year:

- 9-1-1 Network Core Upgrade: Enhancement to the Vesta 9-1-1 core network architecture and host-to-host umbilical connections between the Vesta 9-1-1 control systems at Quarry Run and Brooks City Base. This initiative, Project Nexus, will not only provide a greater level of redundancy for our current network through the addition of a third, physically and logically diverse network, but also establishes the platform necessary to support the robust host-to-host network core required for the planned 9-1-1 system upgrade in 2025. While important in the near term to provide a third level of redundant connectivity between the two primary and secondary host systems, it also provides a tertiary level of diversity and redundancy supporting simultaneous, same core system 9-1-1 operations at Brooks City Base and Quarry Run for the San Antonio Police Department and the San Antonio Fire Department.
- ECC Upgrades: To combat the explosive growth in their respective jurisdictions, both the Guadalupe County Sheriff's Office and Comal County Sheriff's Office have building expansion projects underway to increase the operational space and capabilities of their ECCs. Funds are allocated for the installation of one additional Vesta 9-1-1 call-handling workstation at each location, plus installation of the power and data infrastructure required for on premise connectivity and interconnection to the district's 9-1-1 core network.
- Catalyst Radio Expansion: The project includes the placement of additional gateways and multiband (VHF, 700Mhz) radios at the respective Sheriff's Departments in Comal and Guadalupe Counties, expansion of current 800Mhz resources at the Hylions Tower Site, and reallocation of radio resources at Quarry Run. Collectively, these radio infrastructure and capacity upgrades will greatly enhance the district's ability to provide critical back-up public safety radio communications for any ECC required to relocate to Quarry Run in response to an emergent event adversely affecting their operations.
- Saddletree Headquarters Remodel (Phase II): Conversion of former training and operational areas at Saddletree Court to multi-use meeting space.
- Quarry Run Regional Facility: The Quarry Run Regional Operations Center will enter its fourth year of operations in June 2020. To ensure operational readiness and support of critical 9-1-1 data center, and building systems, two capital replacements are planned for this budget year. The battery bank on the building A-Side UPS will be replaced. The Facility Management System (FMS) monitoring critical power, HVAC, and other building systems will be upgraded as well.

- Vehicle Replacement: Funds to replace a 2014 general fleet vehicle with a comparable, equivalent-sized sports utility vehicle.
- Capital Reserves: Capital Reserve funds are encumbered for future projects and equipment purchases.
  - The FY2021 budget includes a transfer of \$1,250,000 to the capital reserve accounts.
  - These encumbered accounts are used to fund:
    - 9-1-1 network and call handling equipment upgrades and replacement
    - 9-1-1 network enhancements to improve redundancy and diversity
    - Facility mechanical and infrastructure upgrades
    - Information Technology (IT) equipment replacement
  - 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 refresh, scheduled for FY2025, will require an estimated expenditure of \$14,500,000 from the capital reserve account.

**FISCAL YEAR 2021  
CAPITAL EXPENDITURES**



**SUMMARY**

Legacy technologies have served Bexar Metro well over the past thirty-two years, but continued advancements in communications technologies to meet the public's expectation of summoning emergency assistance regardless of device type or technology requires Bexar Metro to keep abreast of advances in technology and ensure the 9-1-1 system evolves with, and in some cases is protected against, technological changes. This budget provides the resources necessary for Bexar Metro to provide a level of service not only expected – but deserved - by the citizens, participating jurisdictions, and ECCs served by the district.

The Fiscal Year 2021 Financial Plan and Budget, totaling \$16,083,320 is sufficient to fund all projected program expenditures for the fiscal year. The plan includes \$13,873,454 for Operations & Maintenance and \$2,209,866 for Capital Improvements. The figures presented reflect a net decrease of \$651,033, or 3.89 percent, in comparison to the Fiscal Year 2020 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.

## FY2021 PROPOSED BUDGET SUMMARY

	ACTUAL 2019	ADOPTED 2020	PROJECTED 2020	PROPOSED 2021
<b>REVENUE</b>				
WIRELINE FEES	\$ 4,094,389	\$ 4,259,859	\$ 3,843,658	\$ 3,716,496
WIRELESS FEES	\$ 11,111,877	\$ 11,200,000	\$ 11,513,638	\$ 11,343,486
INTEREST	\$ 275,325	\$ 228,516	\$ 274,111	\$ 227,016
DATA CENTER LEASES	\$ 221,600	\$ 297,600	\$ 297,600	\$ 326,400
TENANT LEASES	\$ -	\$ -	\$ -	\$ 121,522
MISCELLANEOUS	\$ 12,006	\$ 14,900	\$ 177,025	\$ 123,400
<b>TOTAL REVENUE</b>	<b>\$ 15,714,996</b>	<b>\$ 16,000,875</b>	<b>\$ 16,106,032</b>	<b>\$ 15,858,320</b>
RESERVE TRANSFER	\$ -	\$ 1,012,645	\$ -	\$ 225,000
<b>TOTAL AVAILABLE FUNDS</b>	<b>\$ 15,714,996</b>	<b>\$ 17,013,520</b>	<b>\$ 16,106,032</b>	<b>\$ 16,083,320</b>
<b>EXPENSE</b>				
PERSONNEL	\$ 2,768,749	\$ 3,164,046	\$ 3,086,828	\$ 3,040,000
OPERATIONS & TECHNOLOGY	\$ 3,247,719	\$ 7,936,782	\$ 4,945,756	\$ 8,383,748
FACILITIES	\$ 1,447,384	\$ 1,731,725	\$ 1,126,842	\$ 1,778,706
EDUCATION & TRAINING	\$ 151,902	\$ 160,500	\$ 138,500	\$ 171,000
CONTINGENCIES	\$ 250,000	\$ 250,000	\$ 250,000	\$ 500,000
<b>TOTAL O&amp;M</b>	<b>\$ 7,865,754</b>	<b>\$ 13,243,053</b>	<b>\$ 9,547,926</b>	<b>\$ 13,873,454</b>
<b>CAPITAL</b>				
ECC UPGRADES	\$ (2,457,865)	\$ 20,000	\$ 20,000	\$ 100,000
SADDLETREE FACILITY	\$ 204,108	\$ 115,000	\$ 122,000	\$ 60,100
VEHICLES	\$ -	\$ -	\$ -	\$ 40,000
MISSION CRITICAL COMMUNICATIONS	\$ 109,968	\$ 535,000	\$ 358,027	\$ 407,266
IT/NETWORK SYSTEMS	\$ 231,369	\$ 878,800	\$ 728,800	\$ 117,500
QUARRY RUN FACILITY	\$ 1,425,581	\$ 7,500	\$ -	\$ 235,000
TRANSFER TO CAPITAL RESERVES	\$ 2,335,000	\$ 1,935,000	\$ 1,935,000	\$ 1,250,000
INCREASE (DECREASE IN RESERVE)	\$ -	\$ -	\$ -	\$ -
<b>TOTAL CAPITAL EXPENSE</b>	<b>\$ 1,848,161</b>	<b>\$ 3,491,300</b>	<b>\$ 3,163,827</b>	<b>\$ 2,209,866</b>
<b>TOTAL EXPENSE</b>	<b>\$ 9,713,914</b>	<b>\$ 16,734,353</b>	<b>\$ 12,711,753</b>	<b>\$ 16,083,320</b>

**Bexar Metro 9-1-1 Network  
Proposed Fiscal Year 2021 Budget**

Revenue

Wireline Service Fees	\$ 3,716,496
Wireless Service Fees	\$ 11,343,486
Interest Earned	\$ 227,016
Data Center Revenue	\$ 326,400
Tenant Revenue	\$ 121,522
Miscellaneous Revenue	\$ 123,400
Transfer from Reserves	<u>\$ 225,000</u>
 Total Available Funds	 \$ 16,083,320

**Proposed Fiscal Year 2021 Operations & Maintenance**

Expense

Personnel	\$ 3,040,000
Operations & Technology	\$ 8,383,748
Facilities	\$ 1,778,706
Education & Training	\$ 171,000
Contingencies	<u>\$ 500,000</u>
 Total O&M Expense	 \$ 13,873,454

**Proposed Fiscal Year 2021 Capital Budget**

ECC Upgrades	\$ 100,000
Saddletree Facility	\$ 60,100
Vehicles	\$ 40,000
Mission Critical Communications	\$ 407,266
IT/Network Systems	\$ 117,500
Quarry Run Facility	\$ 235,000
Transfer to Capital Reserves	<u>\$ 1,250,000</u>
 Total Capital Expense	 \$ 2,209,866

Total Fiscal Year 2021 Budget \$ 16,083,320

**BEXAR METRO 9-1-1 NETWORK**

*Approved by the Bexar Metro board of directors this Twenty-First Day of May 2020.*

By:   
Name: James C. Hasslocher  
Title: Chairman