



**NORTH CENTRAL TEXAS EMERGENCY COMMUNICATIONS DISTRICT
9-1-1 BOARD OF MANAGERS MEETING**

Minutes – June 8, 2022
9-1-1 Training Center Room A
600 Six Flags Drive
Arlington, Texas

President, Hal Richards called the meeting of the NCT9-1-1 Board of Managers to order at 12:31 PM on June 8, 2022.

Members of the Board Present:

1. Hal Richards – President, County Judge, Kaufman County
2. Jennifer Berthiaume – Vice-President, Councilmember, City of Murphy
3. N. Lane Akin – Secretary, Sheriff, Wise County
4. Kerry Crews – Judge (JOP), Hunt County
5. Roger Deeds – Sheriff, Hood County
6. Dr. Gere' Feltus – Councilmember, City of McKinney
7. Terry Garrett – Sheriff, Rockwall County
8. Darrell Hale – Commissioner, Collin County
9. Jeff Hodges – Councilmember, City of Prosper
10. Chris Schulmeister – Councilmember, City of Allen
11. Randy Stinson – Commissioner, Ellis County
12. Mike White – Commissioner, Johnson County

Members of the Board Absent:

1. Danny Chambers – County Judge, Somervell County
2. Matt Coates – Sheriff, Erath County
3. Shane Long – County Judge, Palo Pinto County
4. Eddie Perry – Commissioner, Navarro County

Members of the Staff Present:

1. Mike Eastland – NCTCOG Executive Director
2. Christy Williams – Director of NCT9-1-1
3. Kasey Cox – 9-1-1 GIS Data Administrator
4. Clay Dilday – 9-1-1 Technology Manager
5. Kari Gamez – 9-1-1 Sr. Administrative Assistant
6. Steven Gorena – 9-1-1 Field Support Supervisor
7. Ken Kirkpatrick – Counsel for NCT9-1-1
8. Aaron Lackey – 9-1-1 Technology Specialist II
9. Norman Marquart – NCTCOG Fiscal Manager
10. Monte Mercer – NCTCOG Deputy Executive Director
11. James Powell – Deputy Counsel for NCT9-1-1
12. Molly Rendon – NCTCOG Director of Administration
13. Randy Richardson – NCTCOG Assistant Director of Finance
14. LeAnna Russell – 9-1-1 Database Manager
15. Jessie Shadowens-James – 9-1-1 Strategic Services Manager

REGULAR SESSION

Action:

Item 1 Approval of March 9, 2022, Minutes

President Hal Richards stated that the minutes to be approved were from the March 9, 2022, Board meeting.

Attachment A

Upon a motion by Councilmember Jeff Hodges (seconded by Councilmember Jennifer Berthiaume) and by unanimous vote of all members present, the Board approved the minutes of the March 9, 2022, Board of Managers meeting.

Item 2 Resolution Authorizing Contracts with Synergem Technologies, Inc. and Onvoy, Inc. (d.b.a. Inteliquent) for Next Generation Core Services and NG9-1-1 Call Aggregation Services

The North Central Texas Emergency Communications District (NCT9-1-1) requested authorization to contract with Synergem Technologies, Inc. for Next Generation Core Services and either Onvoy, Inc. (d.b.a Inteliquent) or Synergem Technologies, Inc. for NG9-1-1 Call Aggregation Services.

Next Generation Core Services (NGCS) provides the functions and interfaces necessary to accurately route and deliver 9-1-1 calls (voice, text, images, sensors, and video) and caller data to the correct Emergency Communications Center (ECCs) supporting the geographic location of the caller; and the acquisition by the ECC, or responders, of additional data and information related to a call, a caller, or the incident being reported.

NG9-1-1 call aggregation (aggregation) provides an ingress network for originating service providers and legacy selective routers to interconnect on NCT9-1-1's Next Generation Core Services via Synergem's solution. It also acts as the network-to-network interface that allows ESInets to connect to one another and will work with the NGCS to identify how to treat a call. In addition, this service will allow the ability to bridge with neighboring 9-1-1 authorities that have not yet made the transition to NG9-1-1.

The North Central Texas Council of Governments (NCTCOG), in its capacity as the administrative entity for NCT9-1-1, issued a Request for Proposals for this service (RFP #2021-082). The RFP allowed proposers to submit for NGCS, aggregation, or both. Four (4) proposals were received, three of which proposed a solution for both NGCS and aggregation. The other proposal, submitted by Inteliquent, only proposed an aggregation solution. Following evaluation, the Selection Committee has recommended Synergem Technologies, Inc. as the successful proposal for NGCS. Synergem also provides a NG9-1-1 call aggregation solution; however, it is recommended that Inteliquent provide those services. This would allow for diversity in the system and provide additional flexibility in provision of the NGCS. However, if negotiations are not successful with Inteliquent, the evaluation committee recommended Synergem also provide the aggregation services.

The initial contract period for the contract(s) will be five (5) years with the option to renew for up to three additional two-year periods. The total not to exceed amount for NGCS services is \$13,000,000, and the total not to exceed amount for aggregation services is \$9,000,000.

A draft resolution authorizing a contract with Synergem for NGCS in an amount not to exceed \$13,000,000, and either Onvoy, Inc. (d.b.a. Inteliquent) or Synergem for NG9-1-1 call aggregation in an amount not to exceed \$9,000,000, was attached for Board consideration.

Upon a motion by Sheriff Rodger Deeds (seconded by Councilmember Jeff Hodges) and by unanimous vote of all members present, the Board approved the resolution as presented.

Item 3 Resolution Amending Contract Authorization with AT&T for Emergency Communications Centers (ECC) Terrestrial Network Circuits

The North Central Texas Emergency Communications District (NCT9-1-1) requested authorization to increase the current contract with AT&T for the existing Emergency Communications Centers (ECCs) terrestrial network connections that carry 9-1-1 call traffic and augments our microwave and wireless connections.

In January 2017, 9-1-1 took to the NCTCOG Board a request to enter into an agreement with Masergy Cloud Communications, Inc. for ECC circuits for a not to exceed amount of \$4,750,000. In May 2017, 9-1-1 took a subsequent Board item to the NCTCOG Board a request to enter into agreements with AT&T and CenturyLink (now Lumen) to provide microwave backhaul circuits. Both agreements were for a maximum term of nine (9) years and for not to exceed amounts of \$500,000, and \$700,000, respectively. During the contract period, it became clear that Masergy could not fulfill the requirements of its contract. As a result, the ECC circuits were redistributed between AT&T and Lumen.

For that reason, NCT9-1-1 has expended the original Board contract authorization amount well before the nine-year term expires. Staff recommended a \$125,000 (25%) increase in contract authorization to continue services and to provide time to reprocur these network connections.

A draft resolution amending contract authorization with AT&T, increasing it by \$125,000, for a revised total not to exceed amount of \$625,000, was attached for Board consideration.

Upon a motion by Commissioner Randy Stinson (seconded by Councilmember Jennifer Berthiaume) and by unanimous vote of all members present, the Board approved the resolution as presented.

INFORMATIONAL ITEMS

Item 4 Quarterly Financial Report

Norman Marquart presented the Quarterly Financial Report.

Attachment B

Item 5 Critical Load Designation Discussion

LeAnna Russell briefed the Board on the critical load designation initiative. NCT9-1-1 previously worked with its ECCs to attain designation from the energy provider companies as critical infrastructure. This designation would allow the ECC to be one of the last to lose power in the event of interruptions in power. The legislature recently encouraged 9-1-1 authorities to take responsibility for ensuring its ECCs are designated. NCT9-1-1 staff requested the support and assistance from the Board in this initiative.

Item 6 NCT9-1-1 Emergency Communications Centers (ECC) Management Policy-Administrative Revisions

LeAnna Russell briefed the Board on an administrative update to the ECC Management policy. An explanatory call volume chart was attached to the policy to clarify the numbers referenced within the policy.

Item 7 Director's Report

The 2022 NCT9-1-1 Award Winners were recognized.

Attachment D

Culture Champion – Aaron Lackey was chosen as the Culture Champion for the second quarter of 2022. Aaron exhibited the NCT9-1-1 values of heart, attitude, and initiative.

Attachment E

Jason Smith, NCT9-1-1 Operations Manager, coordinated a volunteer program for the Uvalde incident with CSEC on a state level, to get the Uvalde ECC staff relief.

The NCT9-1-1 fiscal year 2023 draft budget will be sent out to the Board of Managers via email in late-July. Members of the Board may request a call or a budget workshop in August. The budget will be presented to the Board in September for approval.

Bruno Blanco, 9-1-1 GIS Specialist III, was recognized for being awarded Texas NENA Technical Professional of the Year.

Accomplishments and Achievements – NCT9-1-1 accomplishments were reviewed for the period March 2022 – May 2022.

Attachment F

Quarterly Reporting – Quarterly reporting for the previous quarter was included for review.

Attachment G

Attendance – Attendance from the previous Board meetings was included for review.

Attachment H

OTHER BUSINESS

Upon a motion by Councilmember Jennifer Berthiaume (seconded by Judge Kerry Crews) and by unanimous vote of all members present, the meeting was adjourned at 1:12 PM.



North Central Texas Emergency Communications District

Item # 2022-09-02

Meeting Date: September 14, 2022

Submitted By: Christy Williams
Director of 9-1-1

Item Title: Resolution Approving the Fiscal Year 2023 Strategic Plan

The North Central Texas Emergency Communications District (NCT9-1-1) develops a strategic plan annually to outline the proposed projects for the upcoming fiscal year, as well as forecast what projects are anticipated in the proceeding four (4) fiscal years. The strategic plan provides high-level direction for the funding of projects and reflects each of the District's six teams' areas of focus for the five-year period. The District's annual budget is crafted based on the projects supplied in the plan. In accordance with the District's bylaws, the Board of Managers is required to approve an annual strategic plan.

NCT9-1-1 staff has prepared the FY 2023 Strategic Plan, provided in Attachment B, and recommends its approval.

A draft resolution approving the FY 2023 North Central Texas Emergency Communications District Strategic Plan is attached for Board consideration.

I will be available to answer any questions at the Board meeting.



Item # 2022-09-02

RESOLUTION APPROVING THE FISCAL YEAR 2022 STRATEGIC PLAN

WHEREAS, the North Central Texas Emergency Communications District (NCT9-1-1) was created pursuant to Chapter 772, Subchapter H, of the Texas Health and Safety Code as amended by the 84th Legislature, through the passage of resolutions by County Commissioners Courts and City Councils within the NCT9-1-1 service area; and,

WHEREAS, the NCT9-1-1 service area consists of Collin, Ellis, Erath, Hood, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwall, Somervell, and Wise counties, as well as the Dallas County cities of Balch Springs, Cockrell Hill, Sachse, Seagoville, and Wilmer; and,

WHEREAS, NCT9-1-1 is a political subdivision of the State and carries out essential governmental functions related to the provisioning of emergency communications services; and,

WHEREAS, NCT9-1-1 is engaged in the planning, implementation, and maintenance of an emergency 9-1-1 system for more than 40 Public Safety Answering Points within its 9-1-1 service area; and,

WHEREAS, NCT9-1-1 creates an annual strategic plan outlining the program’s primary projects for the upcoming fiscal year; and

WHEREAS, staff has prepared the Fiscal Year 2023 NCT9-1-1 Strategic Plan and recommends its approval.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1. The NCT9-1-1 Board of Managers approves the Fiscal Year 2023 North Central Texas Emergency Communications District Strategic Plan.

Section 2. This resolution shall be in effect immediately upon its adoption.

Hal Richards
North Central Texas Emergency Communications District
Judge, Kaufman County

I hereby certify that this Resolution was adopted by the Board of Managers of the North Central Texas Emergency Communications District on September 14, 2022.

N. Lane Akin
North Central Texas Emergency Communications District
Sheriff, Wise County



**NORTH CENTRAL TEXAS
EMERGENCY COMMUNICATIONS DISTRICT
STRATEGIC PLAN
Fiscal Year 2023**

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1. Introduction

Executive Summary

The North Central Texas Emergency Communications District (NCT9-1-1) is a 9-1-1 district with the responsibility to research, plan, implement, maintain, and coordinate a regional 9-1-1 system that is an integral part of public safety emergency communications. The District covers 14 counties surrounding the Dallas/Fort Worth metroplex and has over 40 Public Safety Answering Points (ECCs) serving over 1.7 million people.

NCT9-1-1 has conducted formal strategic planning for many years. Strategic planning builds trust with stakeholders by showing thoughtful direction. It creates focus on the strategic direction of the organization. The method for developing the Strategic Plan (Plan) generates a critical thought process and healthy debate based on varied areas of expertise and perspective. The end-product brings clarity and alignment that will move the District forward.

NCT9-1-1 worked with the entire staff to collect ideas and feedback for this Plan. Vision workshops were scheduled with staff and project discussions continued with the leadership. The Plan is dependent upon the availability of funding and the projects listed in Fiscal Year 2023 (FY2023) fit within the budget for the fiscal year. This year, the total budget includes not only the operational budget, but also grant funding. NCT9-1-1 was awarded grant funding to assist with the state-wide full implementation of NG9-1-1. FY2023 projects are identified with some detail which will allow the staff to say "no" to distractions masquerading as opportunities. Decisions to implement new products and services are based on our mission and vision. NCT9-1-1 makes a conscience effort to solve problems, not chase technology.

The Plan contains elements included in previous plans, as well as new elements. As with previous plans, this document includes future fiscal years (2024-2027), making it a five-year plan. These outlying years have projects identified with less detail. The five-year forecast provides a snapshot of the NCT9-1-1 roadmap and our planning priorities as we know them today. It identifies issues being considered and researched for the upcoming years. A strategic plan must be flexible and allow for dynamic changes. Projects from this section may be escalated based on numerous factors or they may be eliminated due to external factors and internal needs as the information becomes more mature. Some of the projects in the outlying years are slated there because they were not currently commercially available or there is not the budget to support them in FY2023.

2. Mission Statement and Values

NCT9-1-1 exists to save lives and make a difference by providing a vital connection between the community and emergency responders we serve. We lead the advancement of 9-1-1 through planning, implementation, and maintenance of emergency communications systems and advocate for exceptional ECCs and 9-1-1 telecommunicators.

Mission

SAVING LIVES AND MAKING A DIFFERENCE!



COURAGE
Innovation
Public Service
Initiative



ATTITUDE
Servant Leadership
Integrity
Perseverance



HEART
Commitment
Collaboration
Advocacy

3. NCT9-1-1 Program Contacts

- | | |
|-------------------------------------|---|
| a. NCT9-1-1 Executive Director | Mike Eastland, MEastland@NCTCOG.org |
| b. NCTCOG Deputy Executive Director | Monte Mercer, MMercer@NCTCOG.org |
| c. NCT9-1-1 Director | Christy Williams, CWilliams@NCT911.org |
| d. NCTCOG Fiscal Manager | Norman Marquart, 911Finance@NCTCOG.org |
| e. NCT9-1-1 Location Address | 600 Six Flags Drive, Arlington, Texas 76011 |
| f. NCT9-1-1 Mailing Address | PO Box 5888, Arlington, Texas 76005-5888 |
| g. NCT9-1-1 Telephone Number | 817-695-9200 |

4. FY2022 Major Accomplishments

A glossary of terms and acronyms can be found in Section 13 of this document.

NCT9-1-1/Cross Team

- Staff attended the Texas Public Safety Conference in Galveston. Brittney Burross (Operations) served as the chair for the gifts committee; and Rodger Mann and Christy Williams presented sessions.
- Staff and other 9-1-1 entities met with Amazon Web Services to discuss how AWS may be able to support public safety.
- Staff met with the Tri-COGs to discuss implementation of NGCS to talk through their issues and be better prepared for our full transition.
- Bret Batchelor and Brittney Burross (Operations) presented with Christy Williams at the RapidSOS User Conference about mental health.
- Staff migrated to a new version of a departmental calendar to better track staff availability and important projects.
- Staff implemented a new interviewing strategy where a designated culture team conducts virtual interviews to help evaluate cultural fit.
- The GeoData, GIS Administration, and Operations Teams completed the RapidDeploy Eclipse cutover.
- Staff won several NCTCOG P.R.I.D.E. awards:
 - Individual: Bret Batchelor (Regionalism), Kasey Cox (Innovation), and Employees (Jessie Shadowens-James)
 - Team: 9-1-1 Field Support Team (Service)
- Staff worked to collect all ECC ILAs for the 2021-2023 fiscal years.
- Staff helped coordinate and host the virtual Early Adopter Summit with over 130 attendees.
- Staff worked with Rockwall County to execute an Emergency Notification System (ENS) agreement.

- Christy Williams presented at a national Public Safety Roundtable: *Mitigating Risk Through Interoperability*.
- Christy Williams presented four sessions at IWCE including a plenary *Women in Technology* panel.
- National Crime Prevention Council appointed Christy Williams to a steering committee for revitalizing McGruff the Crime Dog.
- Members of staff attended the 2022 Strategic Government Resources annual conference (virtual).
- Staff completed strategic analysis of cloud solutions and the impact to our ECCs.
- Christy Williams presented three sessions at IWCE.
- Christy Williams was interviewed for a feature article in this month's edition of the 9-1-1 national magazine, *The Call*.
- The final service provider agreement was executed. This project began as part of the District transition.
- The UAS Group worked with the Operations Team created a Z-axis white paper that can serve as a "how-to" for other UAS programs.
- Members of the Leadership Team attended a half day educational session hosted by MCP related to data integration and cyber security.
- Staff recognized ECCs for National Public Safety Telecommunicator Week by delivering appreciation gifts and staff created a video for social media containing special messages.
- Staff grant application was approved and contract signed for HB2911 funding which created a NG9-1-1 Fund.

Geodata and GIS Engineering Teams

- Worked with Wise County GIS to change a new medic boundary.
- Trained the City Secretary at New Fairview on addressing subdivision.
- Bruno Blanco (Data) was awarded the Texas NENA Technical Professional of the Year award.
- Coordinated Maxar satellite updates which updated regional imagery service with data from the November, December, and January flights. The entire district has new imagery.
- Refined a process to speed up data delivery and transformation for the following cities: Allen, McKinney, Frisco, and Weatherford.
- Presented at the Texas GIS Forum on using FME to improve accuracy of 9-1-1 GIS data.
- Completed the annual Intrado VoIP/wireless ECC verification.
- Completed UAT testing for the data analytics product.
- Submitted the annual PUC report.
- Renewed certification of critical load public safety designation with Oncor.
- Coordinated with Teach-Me-GIS to negotiate a discount with them for courses in exchange for our help developing training.
- Presented at the Alliance meeting about imagery for dispatch mapping.
- Completed RadiusPlus v4 cutover which included mapping updates
- Completed their participation in the NENA 3D Z-Axis workgroup which resulted in the NENA Requirements for 3D GIS for E9-1-1 and NG9-1-1 document.

Operations Team

- Completed a 14-day TERT deployment in Lafourche Parish Sheriff's Office in Thibodaux, LA.
- Presented at the September Texas NENA ENP study group on ECC, hiring, selection, and placing.
- Participated in a mental health first aid course. This certification recognizes him as a subject matter expert in mental health and to be a resource for first responders.

- Hosted a three-day Communications Training Office class. Fourteen TC's from 11 ECCs participated.
- Hosted TERT training. Five TC's from four ECCs participated.
- Organized and hosted the first ever NCT9-1-1 Gala. ECCs and 9-1-1 TCs were acknowledged and honored in various award categories.
- Hosted the spring ECC Supervisors' Meeting. Representatives from 31 ECCs were in attendance.
- Completed Regional Training Academy 12 and graduated 18 licensed 9-1-1 telecommunicators.
- Hosted the Texas APCO course on "Bullying and Negativity in the ECC".
- Participated in a CISM debriefing which focused on providing peer-to-peer support to first responders, including TC's from Parker Co SO, following an incident in Brock.
- Hosted/participated in a three-day Critical Incident Stress Management Course.
- Hosted a booth the Deaf Nation Expo and distributed material about RTT.
- Bret Batchelor has been accepted as a member of NENA's Mental Health and Wellness Committee.
- Worked with Midlothian to identify CISM counselors for Cleburne PD. The ECC handled a major incident that affected TC and patrol members on the same shift. A CISM team was able to provide peer-to-peer support for Cleburne.
- Hosted Dr. Lilly's "9-1-1 Recovers" course. The course focused on resiliency, stress management, and PTSD. Fifteen 9-1-1 telecommunicators from eight ECCs participated.
- Hosted an in-person ECC Supervisors meeting. Fifty-eight representatives from 33 ECCs attended.
- Launched the "Recharge with Bret" video training series.
- Participated in the TDEM Communications Coordinator Group (CCG) meeting on behalf of TX TERT. The purpose of this meeting was to reintroduce the vision, purpose, and future of the CCG.
- Bret Batchelor (Operations) was elected to serve as the second vice president of the TCOLE Consortium which is a three-year commitment. He will serve as the 9-1-1 TC representative.
- Worked with Allen PD to complete the APCO P33 certification and is eligible for Phase II. The ECC has submitted all required paperwork to begin the accreditation process.

Support Team

- Coordinated the "Adopt-an-ECC" for those affected by Hurricane Ida which successfully matched (24) affected ECCs with adopting ECCs in four states. Care packages were provided to those affected ECCs including gift cards, snacks, activity books, etc.

Strategic Services Team

- Worked with Kaufman County and Erath County to gather ISD floorplan data.
- Met with Cleburne regarding the 2D and 3D school program and Cleburne signed the authorization to fly the buildings.

Technology Team

- Completed enhancements to the network management tool for advanced alerting.
- Began utilizing more global loadbalancers which will give them the flexibility to force users onto one data center while maintenance is performed on the other.
- Systematically upgraded network equipment.
- Completed the transition that allows for VPN connectivity. This gives the team the ability to isolate external users to a specific data center in an event where the other needs to be isolated for maintenance or troubleshooting.

- Completed a mock network lab to test staff candidates including his/her ability to troubleshoot and work through stressful situations.
- Added additional mitigation efforts because of the recent AT&T interruption.
- Oversaw completion of Bridgeport microwave tower.
- Coordinated the maintenance (tree trimming) around Keene PD’s microwave tower which has been completed.
- Completed ECC upgrades to SD WAN Talari replacement, monitors, and Stream Deck keypads. The monitors and keypads will be replaced for 1/3 of the positions in the region this year.

Unmanned Aircraft Systems (UAS) Group

- Participated in Tarrant County College GIS Advisory Board Committee. The GIS Advisory Board Committee meets annually to discuss and suggest program needs.
- Attended the Drone Energy Summit where they had a booth.
- Provided oversight support for the Cleburne Police Department during the Christmas parade.

5. NCT9-1-1 Program Area Demographics

The following Geodata reflects the demographics of the NCT9-1-1 program area as of July 23, 2022.

a. Number of Counties (not including Dallas County)	<u>13</u>
b. Number of Incorporated Cities	<u>157¹</u>
c. Population in Region	<u>1,803,315</u>
d. Area of Region (in square miles)	<u>10,080</u>
e. Governing Body of Program	<u>Board of Managers</u>
f. Number of ECCs	<u>41²</u>

6. FISCAL YEAR 2023 Strategic Plan Key Initiatives

A glossary of terms and acronyms can be found in Section 13 of this document.

GEODATA TEAM

6.1 2D Floor Plans – Phase II

Problem Statement

As 9-1-1 location technology improves, 9-1-1 telecommunicators are able to receive more precise locations for their callers. However, a gap currently exists as 9-1-1 telecommunicators do not have access to 2D floorplans in their mapping application. While 9-1-1 is getting increasingly more accurate, the locations need to be paired with floorplan information to provide the most complete situational awareness possible to a field responder.

For these floorplans to be useable, they must be ingested into the system using a standard conversion method. The floorplans as originally received in Phase I are not immediately useable by the 9-1-1 telecommunicator.

¹ Poetry, Texas was added as an incorporated city

² Includes 38 primaries, 2 secondaries, and the 9-1-1 Technology Center; does not include the lab.

Initiative Description/Business Case

Currently, when a 9-1-1 call is made from within a building, the 9-1-1 telecommunicator receives the approximate location of the caller. However, there is no frame of reference to understand what room a call is being made from, what other areas surround the caller, etc. For example, the 9-1-1 telecommunicator does not know if a call is being made from a bathroom or an auditorium. This situational awareness would benefit field responders. As part of Phase I, 2D floorplans were gathered from ISDs within our region. At least one floorplan was obtained from each county. This collection and tracking process will continue. In Phase II, the Strategic Services Team will work with the GIS Engineering and Geodata Teams to create Methods of Procedure (MOPs) that will address how to ingest collected floorplans into the dispatch mapping system.

Initiative Goals

The primary goals of this initiative are to:

- Analyze floorplan file format types collected from ISDs in Phase I.
- Create a file type conversion process for each file type to obtain GIS compatibility for implementations into the NCT9-1-1 GIS database.
- Capture the conversion workflow for each file type into a MOP document.
- Complete a pilot which includes ingesting at least one floorplan into the dispatch mapping system.

6.2 Geographic Information Systems (GIS) Data Preparation for Next Generation Core Services (NGCS)

Problem Statement

As GIS data becomes a more vital element in the transition to NG9-1-1, preparing this data becomes key. NCT9-1-1's current schema follows the latest Texas version of the NENA standards. Today there are many fields within the database that are not currently utilized and are needed for the transition to the new next generation core services.

Initiative Description/Business Case

NCT9-1-1's GIS data will need to be updated in preparation for when GIS becomes a more substantial part of 9-1-1 call routing. Current GIS data only partially adheres to the standards put forth in NENA's i3 infrastructure mainly because of NCT9-1-1's hybrid approach which still accommodates some legacy elements. Current NGCS procurements necessitate a change in this approach, however, and GIS data will need to be added before this process is completed. This is anticipated to be an entirely internal process.

Initiative Goals

The primary goals of this initiative are to:

- Identify missing data.
- Formulate timeline, milestones, and responsibilities.
- Add missing data elements that are required for a successful NGCS transition.

6.3 Texas 3D Users Group

Problem Statement

The future of NG9-1-1 and its relationship with the realm of Z-axis data and 3D imagery is an inevitable movement for the 9-1-1 industry. There is a need to be able to clarify, quantify, and establish new methods on a roadmap to accommodate the rapid and massive shift from a 2D to a 3D world.

Initiative Description/Business Case

This project will establish a 3D users group including a diverse collection of industry professionals to collaborate in a virtual workgroup setting. This “think tank” style format will allow for numerous perspectives from industries including (but not limited to): addressing authorities, ECC staff, fire, law, EMS service members, vendors, and other organizations with a passion for moving 9-1-1 forward. The plan is to meet virtually every quarter and could include presentations, current testing, knowledge share, and open discussion. Depending on progress, post meeting “sub-groups” may be formed to further test and collaborate. Examples of this could include test calling, imagery insight, data uncertainty, etc.

This is intended to be an informal collaboration effort from several different perspectives, yet all moving collectively towards the same goal. The direction of the group will be largely driven by the information gathered during the meetings. Participation, discussion of current work or testing, and the ability to attend or be removed from the group is completely voluntary.

Initiative Goals

The primary goals of this initiative are to:

- Identify what aspects of 3D that will ultimately benefit telecommunicators.
- Discuss and knowledge share what current methods, concepts, and testing the group is involved with regarding 3D and / or Z-axis as it relates to 9-1-1 processes.
- Gain insight on what the roadmap looks like for relevant 3D data and its application in dispatch mapping products.
- Form a fully functioning group of 3D stakeholders that meet periodically to discuss the current state of 3D and work with vendors to utilize 3D data as presented from local authorities.

GIS ENGINEERING TEAM

6.4 Imagery Services Refresh

Problem Statement

The current contract for NCT9-1-1 2D imagery services will expire at the end of September 2023. The imagery is utilized in the ECC mapping solution, by the 9-1-1 addressing coordinators, and by NCT9-1-1 staff.

Initiative Description/Business Case

Updated/current imagery is essential for public safety. The 2D imagery is used by telecommunicators in the ECC dispatch mapping application to locate callers in emergencies and to guide field responders to the callers. Additionally, the imagery is used for 9-1-1 addressing purposes by the county addressing authorities and NCT9-1-1 staff. It is important to contract services with an imagery provider that is able to provide regular updates, whether it be via ortho flights or using satellite technology. Research is being undertaken to identify 2D services, and possibly combining 3D and 2D bundles. A new solution will need to be procured during fiscal year 2023 to prepare for the end of the current contract.

Initiative Goals

The primary goals of this initiative are to:

- Design a thorough timeline and associated phases.
- Determine a procurement strategy and execute a contract by September 2023.
- Identify all services and stakeholders affected by the refresh and identify risks.

OPERATIONS TEAM

6.5 Regional Telecommunicator Academy (RTA) – Program Analysis and Recruitment Development

Problem Statement

Upon completion of an academy, students return back to their ECCs to complete on-the-job training. Though a questionnaire is provided to students 30 days following graduation, NCT9-1-1 staff members do not obtain updates on how students are progressing with their training or advancements they have made (i.e. becoming a CTO, shift supervisor, etc.). In addition, there is also no current recruitment mechanism for the RTA.

Initiative Description/Business Case

In July 2023, NCT9-1-1 will host the 15th class of the RTA. This is considered a milestone in the academy's history and to gather the information listed above, the Operations Team will host an alumni event/focus

group meeting. At this event, recruits from previous academies will discuss their progression in the profession since graduation. In addition, video interviews will be conducted from alumni to use for promoting the RTA and assisting with ECC recruitment.

Initiative Goals

The primary goals of this initiative are to:

- Research RTA alumni that are still active 9-1-1 telecommunicators and create a graduate database.
- Schedule and host an alumni focus group meeting.
- Conduct interviews to include how the RTA prepared them for their career, progression in their position, and benefits of the RTA.
- Create videos for ECC recruitment and promoting the RTA.

6.6 Quality Assurance Resource Model – Phase III

Problem Statement

ECCs are not consistently following national operations or procedures, which results in an unequal level of 9-1-1 service. In FY2019, NCT9-1-1 staff completed a Quality Assurance Resource document which defined applicable national standards, recommendations, and reference documents that apply to 9-1-1 services. During the development of the document, staff identified deficiencies in the quality assurance programs at the ECCs. Phase III focuses on quality assurance and quality control of call handling procedures and improvement to training programs.

Initiative Description/Business Case

Phase I of the Quality Assurance Resource Model identified a formal mechanism for public safety agencies to certify their training programs met American National Standards Institute (ANSI) standards. Phase II provided public safety agencies with a process to systemically review and internally assess its operations and procedures to ensure compliance with national standards. Phase III introduces the APCO and NENA Quality Assurance/Quality Improvement (QA/QI) program, which provides a matrix for ECCs to evaluate, build, and implement a successful 9-1-1 call handling quality assurance and quality improvement program. NCT9-1-1 will provide training on this program so it can be implemented on an optional basis throughout the region.

Initiative Goals

The primary goals of this initiative are to:

- Provide a matrix for ECCs to evaluate, build, and implement a successful administrative program.
- Educate ECCs on the APCO/NENA QA/QI program and assist them with adding the information into their current call handling procedures and training programs.

STRATEGIC SERVICES TEAM

6.7 9-1-1 Awareness for Public Officials and Associations

Problem Statement

While there is a strong understanding of Next Generation 9-1-1 and other 9-1-1 related issues in the 9-1-1 industry, the same awareness does not exist in other public safety-related fields or with many local government officials. As the decision-makers in our region, it is a detriment that these officials are not aware or providing the support that is required to improve, or even maintain, the current level of 9-1-1 service.

Initiative Description/Business Case

NCT9-1-1 staff will work with the early adopters around the country to develop presentations for conferences. Staff will present at various public-safety or government conferences about current 9-1-1 issues to increase awareness. When free or offered at a low rate, booths will be hosted at these conferences.

Meetings will also be coordinated with local public officials. At these meetings, NCT9-1-1 staff will work to increase education and awareness about the importance of NG9-1-1 and any other pressing 9-1-1 issues. These meetings will help develop relationships and will also allow the opportunity to answer any questions the official may have.

Initiative Goals

The primary goals of this initiative are to:

- Research organizations to target, including conferences and points of contact.
- Develop marketing materials to include items such as leave behind materials, webpages, newsletters, and presentation material.
- Develop a schedule for the upcoming year and coordinate the resources to cover those events. This includes both conferences and meetings with public officials.
- Present at least four (4) public meetings and/or conferences and meeting at least ten (10) public officials within FY2023.

6.8 NCT9-1-1 Wellness Initiative – Phase I

Problem Statement

During the previous two years, it has become increasingly apparent that NCT9-1-1 staff have faced increased stress. While NCT9-1-1 has long put an emphasis on culture and creating a positive workplace, it is important to create a more formalized program that focuses on NCT9-1-1 staff's mental and physical wellness.

Initiative Description/Business Case

NCT9-1-1 understands the importance of a positive work environment for its staff. This not only creates a direct benefit for those involved, but also has the subsequent benefit of improving culture and staff retention. NCT9-1-1 desires to develop a program to recognize, appreciate, and provide opportunities for its staff. NCT9-1-1 would like to be able to replicate this program within our ECCs in subsequent years.

Initiative Goals

The primary goals of this initiative are to:

- Solicit ideas from NCT9-1-1 staff.
- Create framework for a wellness program including any branding.
- Coordinate the creation and rollout of at least one wellness initiative each quarter.

6.9 Partnerships with Academia – Phase I

Problem Statement

Like many other private and public agencies, NCT9-1-1 is currently experiencing a lack of resources. This comes in the form of staffing vacancies, budget limitations, and time constraints. NCT9-1-1 believes that partnering with academia can provide a mutually beneficial outcome for all parties.

Initiative Description/Business Case

NCT9-1-1 has encountered multiple areas where the program could benefit from partnerships with academia. NCT9-1-1 desires to develop relationships with professors and university staff primarily focused on the following areas:

Recruitment- NCT9-1-1 believes that developing relationships with universities will assist with recruitment in the following areas: technology, GIS, communications/marketing/public relations, emergency management, public administration, and digital technology. This includes developing internship opportunities in these areas as NCT9-1-1 has been successful in the past transitioning interns to full time employees. In addition, the program desires to develop a pipeline of qualified candidates from these universities by creating awareness around our program.

Class Projects- NCT9-1-1 has previously conducted class projects with local universities. These projects were centered around specific areas of interest for NCT9-1-1: programmatic business review and marketing/public relations. NCT9-1-1 foresees future opportunities in these areas including in GIS, UAS, communications, and new technology. Universities also have an awareness of new and upcoming technology. Partnering with them may present the opportunity to learn about and test new technology that is typically out of reach for NCT9-1-1. These relationships may also lead to grant opportunities.

Initiative Goals

The primary goals of this initiative are to:

- Create outreach material which will provide an overview of our program and what areas of expertise NCT9-1-1 has in-house.
- Contact and coordinate discussions with local professors and/or university staff to discuss partnership opportunities.
- Develop framework for a defined internship program.
- Develop a database for maintaining contacts and tracking important information.
- Solicit feedback from NCT9-1-1 teams for potential class project opportunities.

SUPPORT SERVICES TEAM

6.10 Emergency Communications Center (ECC) Summits

Problem Statement

NCT9-1-1 understands that the success of the technology and services it provides is dependent on adoption by the telecommunicators. Currently, there is a slow adoption rate for new functions and features available. In addition, NCT9-1-1 currently does not have a mechanism to collect feedback from telecommunicators for the challenges he/she faces that NCT9-1-1's technology or services could potentially address.

Initiative Description/Business Case

The transition to Next Generation 9-1-1 introduces new solutions and technology for call handling and dispatching. These solutions can offer additional caller information and new functionality that have not been available in past call handling equipment. NCT9-1-1 will offer ECCs the opportunity to learn more about existing resources and what is to come. NCT9-1-1 will host in-person, geographically based summits in the region to promote higher ECC attendance. These summits will also offer the opportunity for telecommunicators to provide feedback which will assist NCT9-1-1 in developing its roadmap. These summits will include general overviews of current equipment functionality, upcoming changes/releases, ECC feedback, and enhancement/new feature requests.

Initiative Goals

The primary goals of this initiative are to:

- Identify locations and dates to host four in-person summits.
- Create an agenda highlighting topics to be discussed.
- Host in-person summits and collect ECC feedback.
- Provide ECC feedback for enhancement/new feature requests.
- Establish a repeatable process for continuation of the summits.

TECHNOLOGY TEAM

6.11 Emergency Communications Center (ECC) Power Management Assistance

Problem Statement

Currently, some ECC sites lack the proper method to test for power outages. The sites that are set up with NCT9-1-1's Uninterruptable Power Supply (UPS) devices are dependent on the ECC's generator and NCT9-1-1 has experienced loss of service due to generator failures. There is not currently a documented process for ensuring ECCs perform adequate testing.

Initiative Description/Business Case

Generators and UPS systems are designed to provide power redundancy during a power outage. When engineered to work together, the combination can allow systems to work for days without interruption. The best proactive method to test these systems is to schedule a controlled outage and remove commercial power on a main breaker to the site. NCT9-1-1 will develop a proper test plan with affected stakeholders in order to avoid failures.

Initiative Goals

The primary goals of this initiative are to:

- Request and review existing testing plans.
- Create a best practice testing method for those who have no current plan.
- Coordinate with ECCs to perform an actual power outage test to find how the redundancy devices will respond.
- Provide NCT9-1-1 staff resources to assist with testing.

6.12 Lab-to-Lab Initiative

Problem Statement

Currently NCT9-1-1 does not have the ability to do hands-on validation of a vendor solution before implementation into production. Lab-to-lab functionality will allow NCT9-1-1 to work with other 9-1-1 authorities outside of vendor influences and will provide the roadmap to implement into production.

Initiative Description/Business Case

An ESInet is a managed IP network that is used for emergency services communications and can be shared by all public safety agencies. ESInets enable the sharing of emergency data between various ECCs, expanding the possibilities of collaborative emergency response across the nation. This project will help us validate voice calls, data transfers, and real-time texts (RTT) to and from our lab using the call handling solution with different partners through the ESInet network connection. This will give staff

the ability to pre-test and pre-validate new implementations before pushing them into the production network.

Initiative Goals

The primary goals of this initiative are to:

- Partner with another 9-1-1 entity to extend ESInet to NCT9-1-1.
- Provide access to the network between authorities and allow specific routes to the partners.
- Complete successful voice, data transfers, and RTT calls with our CHE.

6.13 Next Generation Core Services (NGCS) Replacement – Implementation

Problem Statement

As the current solution platform ages, NCT9-1-1 must look to newer platforms to meet the needs of the public. Wireless calls are currently not routing through the Emergency Call Routing Function (ECRF) due to industry standards and required developments to the infrastructure. Functionality to adapt to new technologies requires NCT9-1-1 to make this transition. Also, the current contract for NGCS services will expire in 2023.

Initiative Description/Business Case

NCT9-1-1 staff worked with consultants to create a gap analysis and draft functional standards and interface requirements that were used to create a Request for Proposals (RFP). This RFP included two components: NGCS and call aggregation services. Vendors were allowed to submit for one or both of these components. Staff evaluated several different solutions and models including Software as a Service (SaaS), an independent in-house solution, or a hybrid of both SaaS and in-house technology and resources. In addition, NCT9-1-1 utilized consultants to help coordinate demonstrations and to serve as the point of contact for the vendors. In June 2022, NCT9-1-1 staff received approval from its governing body, the Board of Managers, to contract for these services. This project will include a coordinated effort between all NCT9-1-1 teams, the NGCS and NG9-1-1 call aggregation vendors, and operational consultants to migrate existing services and functionality to the new contracted platform.

Initiative Goals

The primary goals of this initiative are to:

- Test\validate NGCS provider solution with all existing processes.
- Dual provision CHE to have both existing and new NGCS provider.
- Test\validate aggregation provider with NGCS.
- Migrate OSPs to aggregation provider.
- Test\Validate with CHE functionality.
- Validate MSRP and RTT through NGCS.
- Migrate traffic off of traditional E9-1-1 technology to NG9-1-1 geospatial routing.

6.14 Security Framework Documentation

Problem Statement

It is challenging to keep up with ever-evolving public safety technology without significant emphasis on security. Previously, funding and processes focused on maintaining system availability and security best practices to ensure uptime. However, continuous improvement of security is required to address any gaps and allow NCT9-1-1 to react and support the services it provides.

Initiative Description/Business Case

The Technology Team currently follows industry best practices; however, this is often done without the aid of written processes and documented security framework. This project will allow technical staff to work with consultants and other resources to document a plan that supports business needs and aligns with security standards.

Initiative Goals

The primary goals of this initiative are to:

- Identify security gaps.
- Document security framework and processes.
- Develop schedule for reviewing and updating documentation.

FUTURE PROJECTS FISCAL YEARS 2024-2027

7. FISCAL YEAR 2024

7.1 CAD-to-CAD Interoperability

Problem Statement

Each ECC in the NCT9-1-1 region is responsible for its own Computer Aided Dispatch (CAD). Therefore, there are numerous CAD solutions throughout the region. In the current environment, Computer Aided Dispatch (CAD) is unable to share data between systems, sometimes even when the systems are the same software provider.

Initiative Description/Business Case

This project would include researching, planning, and implementing a CAD-to-CAD interoperability solution where CADs can share data across any platform.

7.2 Call Handling Equipment (CHE) Anywhere (CHE in a Box/Mobile ECC)

Problem Statement

During a disaster or planned event when the ECC is not available, the only options for an ECC are to 1) reroute its call traffic to an alternate ECC or 2) relocate its 9-1-1 telecommunicators to an alternate ECC to take calls. It benefits ECCs to have the option to access CHE anywhere.

Initiative Description/Business Case

The ability for ECCs to have CHE anywhere will allow decreased downtime and the ECC can return to normal operations more quickly. CHE anywhere allows ECCs to take calls up to the same capacity currently available in the normal state of the ECC. The current CHE solution is capable of operating from a laptop with a headset and the network can now be accessed via the cloud. The CHE anywhere project could include several possible options including: "CHE in a box," and/or a mobile ECC. This project would only include call handling. Other ECC functionality, such as CAD and radio, would not be included and would be the responsibility of the agency. This project would require new services from a Call Handling Equipment vendor and would be a licensing and budget item.

7.3 Call Handling Equipment (CHE) Integration Session Recording Protocol (SIPREC)

Problem Statement

With an increasing number of vendors moving their platforms to virtual machines it is becoming more important for NCT9-1-1 to move away from analog connections. CAD vendors and recording vendors are now asking for an IP handoff to deliver data.

Initiative Description/Business Case

The Technology Team will harden and segment its network that would make it possible to deliver data to third-party vendors as requested. This would allow NCT9-1-1 to move away from the current analog connections that exist in the backroom and deliver an IP connection to those that request it.

7.4 Critical Floorplan Information

Problem Statement

Wireless location is now largely accurate and reliable, allowing additional opportunities for locating callers inside of buildings. However, the emphasis for GIS data capture has been on civic addresses, emergency services, and jurisdictional boundaries (points and polygons) and not detailed data such as floor plans.

Initiative Description/Business Case

Building floorplans are considered as supplemental information for aiding the first responders in locating an emergency caller. The GIS Engineering Team will work with appropriate stakeholders to identify critical infrastructure in the NCT9-1-1 region. The Team intends on publishing the floor plan data in the dispatch mapping environment, making it available to the telecommunicators.

7.5 Data Analytics – Phase III

Problem Statement

As additional data becomes available to ECCs through IoT, FirstNet, and other sources, there is no mechanism in place to monitor, record, analyze, and act on data. This includes the current limitations on 9-1-1 analytics which cannot be used to predict future activity.

Initiative Description/Business Case

It is anticipated that rich additional data will be available in the near future for many of the following: video (receive and send - CPR and training), wearables and devices such as smartwatches, devices for the elderly such as medic alerts, connected car (ex. Uber), smart home (security alarms and sensors), smart buildings and businesses, non-person-initiated requests for emergency response.

This information will need to be actionable and solutions should include two-way sharing. NCT9-1-1 will need to engage the ECCs to determine how to package and display the information on its 9-1-1 equipment. All data is not appropriate for all calls and 9-1-1 telecommunicators may not be in the right positions to open and process all the data. Phase II identified the kinds of data ECCs wanted on the dashboard and how the information should be displayed. This project will aggregate the data and allow for analytics to assist in understanding trends and making life-saving decisions in the future. In addition, predictive analytics will use data, statistical algorithms, and machine learning techniques to identify the likelihood of future outcomes based on historical data. The goal is to go beyond knowing what has happened to provide a best assessment of what will happen in the future.

7.6 Data Sharing Integration Services

Problem Statement

Data is currently coming from several different sources and it is not realistic for telecommunicators to search several sources during calls.

Initiative Description/Business Case

This project has two main components:

Conveyance: Transport of disparate data sets from multiple sources such as: crash notifications, telematics, IoT sensor data, alarms, biometrics, etc.

Display: The creation of a portal that will centralize the view for telecommunicators so that they do not have to go to multiple locations for information.

7.7 Focus on Public/Private Partnerships

Problem Statement

The 9-1-1 industry has fallen behind in the technology that is offered for public safety. In a world where technology is rapidly changing and private companies offer technology that is available at our fingertips, 9-1-1 has not been able to keep up with the expectations of the public.

Initiative Description/Business Case

Without the funding to implement all the technology that could potentially solve problems in our industry, NCT9-1-1 must remain creative. Staff will begin to identify potential private partners to collaborate with and share technology. In addition, staff will develop relationships, identify problems and potential solutions, and demonstrate the return on investment or benefits to the private company for partnering with 9-1-1. NCT9-1-1 will volunteer for pilots and trials and determine funding options such as cost sharing, donations, services in kind and grant opportunities. When working on grants, NCT9-1-1 will expand the partnerships to include other public partners as well as academia in order to strengthen a grant proposal and set us up for long range success.

7.8 Implementation of 3D Data in the ECCs – Phase I

Problem Statement

9-1-1 location information does not currently address the vertical plane, thus, there is no floor (ex. 100 Main St., third floor) information on the telecommunicator's screen when a 9-1-1 call is made. Following a 3D/Z-axis pilot, NCT9-1-1 requires the dispatch mapping vendor to build a process to receive and implement 3D data into the ECCs.

Initiative Description/Business Case

The GIS Engineering Team will analyze the outcomes of the drone 3D/Z-axis pilot and determine a course of action for implementing 3-dimensional GIS data in the NCT9-1-1 ECCs regionwide. Additional research and development utilizing other data sources such as "LiDAR", imagery services, and AI-driven 3D buildings will be factored in for building regional geodata sets. Furthermore, existing Digital Elevation Models (DEMs) will be utilized. The GIS Engineering Team will work in close partnership with the mapping vendors, the Technology and Operations Teams, as well as all affected regional stakeholders. Training will be provided by the GIS Engineering and Operations Teams for all telecommunicators in the NCT9-1-1 region.

7.9 NCT9-1-1 Wellness Initiative – Phase II

Problem Statement

During the previous years, it has become increasingly apparent that 9-1-1 telecommunicators have faced increased stress and high turnover rates. In an industry focused on technology, it is important to put an emphasis on the wellbeing of our people. ECCs need formal wellness programs that focus on mental and physical wellness.

Initiative Description/Business Case

NCT9-1-1 understands the importance of a positive work environment for its telecommunicators. This not only creates a direct benefit for those involved, but also has the subsequent benefit of improving culture and staff retention. NCT9-1-1 implemented a staff wellness program and want to expand that to our telecommunicators in the ECCs. Staff will incorporate the most successful wellness initiatives in the ECCs and work to develop a blueprint and training for those ECCs that want to implement their own wellness program.

7.10 Next Generation Core Services (NGCS) Backup

Problem Statement

The transition to NGCS allows telecommunicators and field first responders to receive critical additional functionality/ information during a call for service. However, with the increase in technology, there is also the increased likelihood of a technology failure that could leave the NGCS nonfunctional.

Initiative Description/Business Case

To mitigate the risks associated with the transition to NGCS, there must be properly planned solutions that include the rerouting of emergency calls to a backup. This could be another available NGCS provider or 9-1-1 authority. Staff plan to identify viable partners with a NGCS and create agreements to allow for mutual aid in routing emergency calls. The validation process will explore capacity planning by all parties to confirm functionality at the time of an event.

7.11 Preparation for Artificial Intelligence Projects – Phase I

Problem Statement

There is a staffing crisis in the ECCs throughout the country. It is difficult to hire and retain telecommunicators and there is a need to become more efficient in the centers and augment the human actions with Artificial Intelligence (AI). As more data is available for the ECCs from multiple sources, the data collected is not always in the same format. With different databases and information in the current 9-1-1 environment, using machine learning will be difficult. Not all data will be relevant and valuable.

Initiative Description/Business Case

Research will be contacted by staff on the potential projects for AI to improve efficiency in the ECC. The Geodata Team will explore identified data sources to determine the format discrepancies and work to resolve them by partnering with a third-party (vendor or academia) to develop a tool to standardize formatting.

7.12 Research Call Handling Equipment (CHE) in the Cloud

Problem Statement

As the existing CHE contract nears its end, an evaluation of the current system versus the 9-1-1 environment of the time is needed in order to determine whether to upgrade the existing system or contract for a new solution. The costs are rising for NG9-1-1 and that must be a factor in deciding for a change.

As the existing CHE contract nears its end, an evaluation of the current system versus the 9-1-1 environment of the time is needed in order to determine whether to upgrade the existing system or contract for a new solution. The costs are rising for NG9-1-1 and that must be a factor in making a change.

Initiative Description/Business Case

NCT9-1-1 will conduct ongoing research to help identify alternate solutions for future 9-1-1 CHE. This could include a cloud solution, which is becoming increasingly more popular with many service providers.

7.13 UAS LiDAR Capture

Problem Statement

Obtaining 3D data sets from third-party providers is a costly endeavor and updating the data sets adds to the expense. New and affordable drone camera technology is available and the potential for capturing LiDAR data in controlled areas is more realistic.

Initiative Description/Business Case

NCT9-1-1 staff will continue to explore the best pricing on 3D imagery and descriptions. In addition, if funding allows, the NCT9-1-1 UAS Team could purchase a LiDAR camera for one of the drones and capture 3D data. Derived LiDAR data is used for building 3D meshes and models. The 3D datasets will be utilized in the public safety GIS datasets in the ECCs to assist telecommunicators in locating callers. Additionally, since LiDAR data is detailed and accurate, it can be utilized for plotting wireless data with Z-axis information.

8 FISCAL YEAR 2025

8.1 Commission on Accreditation for Law Enforcement Agencies (CALEA) Training Academy Accreditation

Problem Statement

The NCT9-1-1 training program has a creditable reputation for providing quality training and services while maintaining Texas Commission on Law Enforcement (TCOLE) training standards. Though the training program is compliant with state training standards, having CALEA accreditation would allow us to address a combination of national and state standards, would improve the quality of the program, and would increase the credibility of the program.

Initiative Description/Business Case

NCT9-1-1 will apply for and complete the CALEA training academy accreditation. This accreditation will recognize our training program as one that meets national standards in training.

8.2 Developing ECC Training and Career Track for NG9-1-1

Problem Statement

Today there are limited types of positions in a 9-1-1 ECC: telecommunicators or dispatchers, trainers, supervisors, and managers. With all the new technology that will be introduced in the next several years, current training and SOPs will become obsolete. In addition, the new technology will present the opportunity for new roles such as data and video analysts, social media experts, and more administration data handlers. These positions have not been defined, nor are there job descriptions in existence today.

Initiative Description/Business Case

Partnering with local, state, and national 9-1-1 organizations/associations, NCT9-1-1 will identify and develop future NG9-1-1 positions and job descriptions (for example job descriptions related to: training, volunteers, administrative 9-1-1 telecommunicators, data analytics, artificial intelligence, etc.). This will be achieved by hosting focus groups including ECCs and private industry experts. NCT9-1-1 will partner with other early adopters throughout the country on this effort and provide work to associations for sharing.

8.3 FirstNet integration

Problem Statement

There is currently an unmet expectation that all content received during a 9-1-1 call will be sent to first responders in the field. In order to effectively get additional data to Police/Fire/EMS, 9-1-1 will need to integrate with FirstNet network. Doing so will allow for better situational awareness and complete data access for incident management.

Initiative Description/Business Case

Staff will explore what FirstNet has to offer for such integration including what Functional Elements (FEs) are required in the NG9-1-1 environment. Staff will work with vendors on gateway solutions to meet any integration needs.

8.4 FirstNet Routers/Long Term Evolution (LTE) Service

Problem Statement

The network is integral in the overall architecture of the solutions that deliver NG9-1-1. Currently, the NCT9-1-1 network does not have priority and preemption services in the event of heavy traffic caused by natural or man-made disasters and/or special events.

Initiative Description/Business Case

FirstNet was started to provide public safety broadband with priority and preemption services on a national level. NCT9-1-1 can leverage such solutions on current networks to integrate the use of FirstNet offerings to augment and diversify ESInets.

NCT9-1-1 will procure replacement or supplement FirstNet routers to deploy this equipment and service at 50 percent of ECCs, which would provide two independent solutions in the event that one of the providers experiences service impairments. NCT9-1-1 will design a solution to utilize the benefits of an out-of-band architecture which is independent of current core infrastructure.

8.5 Full Feature Manipulation Engine (FME) Deployment

Problem Statement

The NCT9-1-1 GIS Engineering Team utilizes Feature Manipulation Engine (FME) via Esri's data interoperability extension for the Extract-Transform-Load (ETL) project. While this is sufficient for current needs, the full version of FME will be needed to future-proof and expand the capabilities of the ETL and related tools.

Initiative Description/Business Case

Esri's version of FME includes the majority, but not all, of the tools included in FME Desktop, which is the base version of the FME suite. Given the impact that NCT9-1-1's ETL tools have on data accuracy in the region, future proofing said tools is key. FME Desktop includes more compatibility options and logic that would allow for this. Furthermore, FME Server (another part of the FME suite) can automate large parts of the extensive internal workflows that come with the ETL. It would also allow for easier interactions with partner agencies and make format-agnostic data sharing easier (both for critical and non-critical data). Acquiring both FME Desktop and FME Server would be a great boost to NCT9-1-1's

data sharing capabilities and, more importantly, for NCT9-1-1's ETL project. Training on the new software will also need to be considered for GIS staff.

8.6 Next Generation Contact Center – Research

Problem Statement

Not all ECCs have the resources or desire to handle all of the additional data and processing that NG9-1-1 and FirstNet will be offering in the future.

Initiative Description/Business Case

NCT9-1-1 will research the feasibility of providing operational communications for coordinated incident response and management in a regional NG9-1-1 smart center or virtually. The center would process emergency calls and multimedia messages, additional data, and provide data and video analytics. The center would partner with information providers such as the regional fusion center, poison control and 2-1-1. The center would deliver calls, messages, and data to the appropriate ECCs and other emergency entities.

8.7 Personal/Virtual ECC Assistant – Research

Problem Statement

ECCs utilize multiple operating systems to perform their duties. At times, trying to locate particular information can slow down the response time of an emergency call. Voice command services are becoming more common in personal and professional settings as they can offer virtual assistance. ECCs could utilize similar functionality for processing 9-1-1 calls, assisting the general public, and accessing necessary resources without being distracted from an emergency call.

Initiative Description/Business Case

NCT9-1-1 will work with a vendor to develop this technology, but it will be up to NCT9-1-1 to work with the ECCs to determine if such a service is needed and what it should include. NCT9-1-1 will establish a focus group to research the capabilities and benefits of having a virtual assistant in an ECC. A virtual assistant is meant to augment a telecommunicator's role, not replace it. Artificial intelligence can provide assistance that will free up the TC's time for more important tasks. One focus will include promoting the functionality to groups that are concerned with the app "listening" even when not in use. Getting ECC input and feedback will ensure a service that will be useful for telecommunicators.

8.8 Text Translation Services Integration

Problem Statement

Although text to 9-1-1 was implemented in the NCT9-1-1 region in 2013, it was an interim solution with limitations. Some have been resolved, but there is still a deficiency in non-English text translation.

Initiative Description/Business Case

The current mapping product in the ECCs provides text translation for text from 9-1-1 calls. NCT9-1-1 staff will work with vendors to implement a text translation application that works for text to 9-1-1 in conjunction with the current Text to 9-1-1 and RTT applications throughout the region.

9 FISCAL YEAR 2026

9.1 GIS Data Provider Education Program

Problem Statement

The counties in NCT9-1-1's service area must provide a resource to assign addresses and maintain the GIS map of their county. Unfortunately, many of those hired to provide these services often have little to no GIS training or experience. Today there are very few training programs or courses for new or novice GIS data providers where 9-1-1 is concerned.

Initiative Description/Business Case

NCT9-1-1 staff will create an educational program for new or novice GIS data providers within the District footprint. For the convenience of the county addressing staff, and to accommodate different learning styles, the program will likely include both written and electronic training with both live and taped format options.

9.2 Implementation of 3D Data in the ECC – Phase II

Problem Statement

Following the conclusion of the drone 3D/Z-axis pilot, NCT9-1-1 will need to take the data received and implement 3D data in the ECCs.

Initiative Description/Business Case

The GIS Engineering Team will analyze the outcomes of the drone 3D/Z-axis pilot and determine a course of action for implementing 3D GIS data in the NCT9-1-1 ECCs regionwide. Additional research and development utilizing other data sources such as "LiDAR" will be factored in for building regional datasets. Furthermore, existing Digital Elevation Models (DEMs) will be utilized and possibly require updates. The GIS Engineering Team will work in close partnership with the mapping vendors, the Technology and Operations Teams, as well as all affected regional stakeholders. Training will be provided by the GIS Engineering and Operations Teams for all 9-1-1 telecommunicators in the NCT9-1-1 region.

9.3 Machine Learning (ML) Automation in ESInet

Problem Statement

When there is a network event within an ESInet, it can take valuable time to triage and identify the cause of a service interruption. Having well thought-out models for the network's ability to deploy automation through Machine Learning (ML) can close the gap on the mean time to repair.

Initiative Description/Business Case

This project would include building into the ESInet functionality to create models for ML and having the network learn how to repair itself. Safeguards will be put in place to bypass any unintended changes made by this intelligent automation of the ESInet.

9.4 NCT9-1-1 Smart Hub

Problem Statement

NCT9-1-1 relies on strategic partnerships in the private sector for the delivery of "smart" data via applications used by the District. However, there is no guarantee that these partnerships will remain in place, or that NCT9-1-1 will continue to use the existing vendors that share data from third party IoT providers.

Initiative Description/Business Case

A "Smart Hub" or data clearinghouse owned and operated by NCT9-1-1, with partnerships and agreements with third party IoT providers, will enable NCT9-1-1 to manage data and disseminate the data across multiple platforms. Many of the APIs required to share and distribute the data exist, and NCT9-1-1 would "authorize" the APIs for data streaming.

9.5 Smart Initiative – SmartNCT

Problem Statement

There is a lack of rural broadband in some areas in our region. This is a hinderance for public access, student access, counties, and municipalities. The COVID-19 pandemic has also amplified the need for remote access to work, attend school, and telemedicine. "Smart" projects are becoming very popular around the country with very positive results. However, in the NCTCOG region, there is not the infrastructure to attempt this type of Smart projects. There is a need to increase bandwidth and support the diversity of the physical network infrastructure. However, current funding would not adequately cover the costs. This project is dependent on alternative funding including grants.

Initiative Description/Business Case

In FY2021, NCT9-1-1 worked with Texas A&M to identify and apply for potential fiber grants, identify community network participants, and collect existing fiber network maps. This project expands the

fiber project to working with county judges and mayors on the implementation of Smart projects in their local governments. These stakeholders are currently being identified as part of the fiber project. The costs involved in these projects would be the responsibility of the local government, but the infrastructure will provide them with significant time and money savings.

Working with a university and a strategic consultant, grants will be submitted in order to build out a fiber network in the region. The work will be done in phases based on grant funding and partner participation. The fiber network will be a community collaboration and a public/private partnership that will primarily provide fiber for a regional 9-1-1 network but will also have the bandwidth to work with local governments on providing infrastructure for Smart Initiatives. In addition, NCT9-1-1 would like to hire a consultant to work with staff and the new Texas Broadband Development Office to develop a long-term fiber plan for the regional 9-1-1 network.

9.6 Sunset ArcMap EOL 2026

Problem Statement

Esri (the makers of our GIS software ArcMap) has stated that the plan is to officially sunset the ArcMap software in 2026. ArcMap is currently in the process of being replaced by Esri with the new, modern ArcGIS Pro software.

Initiative Description/Business Case

As of 2022, much of the GIS Engineering Team's internal workflows still rely on ArcMap. In addition, there is a reliance on third-party vendor tools that are not yet compatible with ArcGIS Pro. Furthermore, the vast majority of our addressing coordinators still utilize ArcMap as their primary GIS software for sharing data with NCT9-1-1. The GIS Engineering Team will need to ensure that NCT9-1-1 (and the NCT9-1-1 region's addressing coordinators) transition to ArcGIS Pro by Esri's deadline to avoid ArcMap support issues, compatibility problems, and/or security concerns.

9.7 Unmanned Aerial System (UAS) Legislation

Problem Statement

Current legislation, which requires obtaining the permission of each landowner to conduct UAS flights, prohibits us from conducting business in an efficient and effective manner. In October 2019, the Federal Communications Commission (FCC) issued the Fifth Report and Order (FRO) and Fifth Further Notice of Proposed Rulemaking (FNPRM) – PS Docket No. 07-114 proposing that Commercial Mobile Radio Services (CMRS) must provide a Z-axis accuracy metric of +/- 3 meters for 80% of the wireless Enhanced 9-1-1 (E9-1-1) calls from Z-axis capable cell phones. This proposal will also require that wireless carriers meet this metric in the top 25 markets by April 3, 2021, and the top 50 markets by April 3, 2023. Further, this measure is supported by the NENA as stated in their response to The FRO and FNPRM, titled “NENA: The 9-1-1 Association PS 07-114 | Fifth FNPRM | Initial Comments Feb. 21, 2020.”

Initiative Description/Business Case

NCT9-1-1 desires that legislation be changed to allow for UAS flights without permission of each landowner for the purpose of 9-1-1 addressing and mapping. NCT9-1-1's UAS Team is working in partnership with the Texas 9-1-1 Alliance, local legislators, and the FCC to track legislative progress. Additionally, the NCT9-1-1 UAS Team will be testing technologies in alignment with the proposed legislative changes to ensure continuity and future proofing the NCT9-1-1 technologies.

9.8 Unmanned Aerial System (UAS) Regional Partnership

Problem Statement

The Unmanned Aerial System (UAS) program is utilized for capturing 3D data for critical infrastructure, such as public schools, hospitals, shopping malls, libraries, etc. Our current flight team membership consists of four certified pilots and struggles to meet regional demands. To better meet the needs of the region, it is necessary to partner with other regional entities with UAS programs.

Initiative Description/Business Case

NCT9-1-1 staff will develop relationships with regional UAS programs to assist in collecting imagery of critical infrastructure to place in the ECC mapping systems. These programs will include, but are not limited to, Independent School Districts (ISDs), colleges and universities, emergency management agencies, city and county law enforcement agencies, and city and county fire departments.

10 FISCAL YEAR 2027

10.1 Digital Transformation Training

Problem Statement

NCT9-1-1 was on the forefront of developing call taker training over 25 years ago and many courses have been shared throughout the country. Although much of the content is still relevant, the form of delivery is not. The newer generations have grown up with technology and use it regularly in their daily lives. The format of 9-1-1 training has not kept up with the engagement and technological delivery that is expected among new 9-1-1 telecommunicators entering the workforce.

Initiative Description/Business Case

The Operations Team will work to digitally transform current training classes. These changes will be tested and refined before curriculum changes become permanent. NCT9-1-1 will solicit engagement from the ECCs to ensure feedback is incorporated. A committee comprised of NCT9-1-1 staff and ECCs will include as many generations as possible to create new ways to interact with students from all generations.

10.2 Early Adopter Summit (EAS) eZine

Problem Statement

NCT9-1-1 currently hosts an annual summit to bring together 9-1-1 innovators. However, there is no established publication specifically for 9-1-1 innovation or advanced strategies. This prevents continuous updates and communications that are vital for the future of the industry.

Initiative Description/Business Case

NCT9-1-1 will establish a continuous digital publication highlighting innovative projects. This will be distributed to current and future early adopters through online resources (i.e. LinkedIn, Amazon eBook, email, etc.). The publication will focus on article topics including implementation, case and opinion studies, features, and lesson learned.

10.3 ECC Consolidation Research and Collaboration

Problem Statement

There is a staffing crisis in the ECCs throughout the country. ECCs are also experiencing funding shortages and a need for transitioning to advanced technology. The pandemic demonstrated that illness can cripple the staffing in a center. All of these problems could be reduced by the consideration for ECC consolidation.

Initiative Description/Business Case

NCT9-1-1 staff will research successful ECC consolidations and study what has worked and what has not. Co-locations and technology consolidation will be researched as options as well. NCT9-1-1 will collaborate with Tarrant County 9-1-1 (TC911) on their successful consolidations, as well as those that are in the plans for the future and the results of a formal study they are conducting. NCT9-1-1 staff will develop presentations that could be offered at conferences around the state that address our public safety leaders in the region.

10.4 Educating ECCs on Technology Requests for Proposals (RFPs)

Problem Statement

Agencies going through the purchasing process for department technology may not be looking towards or adding requirements to meet the standards of an NG9-1-1 compliant ECC.

Initiative Description/Business Case

NCT9-1-1 staff will work with ECCs to provide technical background so they know what to ask in their procurements. NCT9-1-1 can be part of the pre-consulting process of the purchasing process and help review requirements to align to purchase with the end goal of an NG9-1-1 ECC.

10.5 Full Administration Line Integration

Problem Statement

The Technology Team is currently working with plain old telephone system (POTS) lines from the telcos which could soon be obsolete. As NCT9-1-1 transitions from analog to digital trunks, this project would give NCT9-1-1 more control over the lines at a dedicated data center. It would allow NCT9-1-1 additional control of the admin lines for each of our sites who use these lines to follow up on abandoned calls.

Initiative Description/Business Case

The Technology Team would purchase digital trunks either PRI or SIP trunks that would give a number of channels or trunks that could be programmed to allow the ECCs to make outbound calls. Discontinuing analog trunks at sites could recover the cost of the digital trunks at the data center. Each ECC would have access to these trunks for outbound calls. Those that are admin-integrated with their PBX would utilize their own trunks would have access to the pool of channels/trunks as a backup option.

10.6 ECC Regional Leadership Conferences

Problem Statement

There are multiple conferences ECCs can attend that enhance their work experience and help introduce new practices into existing policies and procedures. However, there are limited opportunities that focus on servant leadership topics presented by public safety personnel.

Initiative Description/Business Case

NCT9-1-1 will research and host a regional leadership conference that brings public safety personnel together to educate on how applying servant leadership concepts has improved their organization. Other topics can include developing/enhancing culture, employee engagement, new on-boarding techniques, and leadership development. The overall purpose of the conference is to have public safety personnel influence others on how to adopt innovative ideas into their department.

10.7 Record/Store all TC Screen Activity for Troubleshooting

Problem Statement

The GIS Engineering Team is often unable to accurately diagnose/solve certain problems that occur at the ECCs. These scenarios could be map plotting issues, ALI display issues, or general instability within the software products that NCT9-1-1 provides to them. Additionally, staff are often unable to reproduce the behavior that the ECCs report due to lack of details or missing steps involved.

Initiative Description/Business Case

By storing the TC's 9-1-1 screen activity, staff could review various recordings and "follow along" with the TC regarding any issues that are reported. By a) seeing the behavior as they experience it, and b)

seeing the exact order of operations they used with mouse clicks or key presses, staff could better assist with isolating software problems, mapping issues, training deficiencies, etc. This can be accomplished by the use of screen recording software and data captured will be securely stored in the NCT9-1-1 data centers.

10.8 TC Application Development

Problem Statement

There are limited opportunities for communicating with each of the approximately 600 TCs in our region. Currently, most outreach is directly with the center manager or supervisor and the messages are trickled down with various degrees of success.

Initiative Description/Business Case

NCT9-1-1 would like to work with students or a vendor to create a TC application that will improve communications directly to the end users of the 9-1-1 system. The application will be designed for alerts about service issues and announcements regarding events, training, and new technology. The app could have job postings and a story collector for success stories. It would allow for recognition through shout outs and award notifications. It would be a place to share articles and post problems for group feedback. It would be a source to collect TC feedback and announce wellness initiatives and competitions.

11 FY2022 Strategic Initiatives Attainment

11.1. Network Operations Center (NOC)/ Security Operations Center (SOC)/ Helpdesk 24x7X365 – Planning

NCT9-1-1 staff completed research and gathered information on implementing a NOC/SOC/Helpdesk in partnership with other entities.

11.2. Real-time Text (RTT) Deployment

As of August 23, 2022, NCT9-1-1 staff coordinated with T-Mobile to test and implement the first RTT-to-RTT service for 9-1-1 in the country.

11.3. Internet of Things (IoT) Internet of Things

Based on staff research, it was determined that each of the smart speakers on the market today are not designed to reach 9-1-1 directly. Each provider has a subscription that will notify emergency contacts, but neither will contact 9-1-1 directly.

11.4. Regional GIS Data Quality Control (RGDQC) Tool Replacement

As of June 16, 2022, the contract was executed for the RGDQC tool replacement. The project implementation is in progress and expected to be completed prior to the end of the fiscal year.

11.5. Z-axis Call Plotting – Planning

Staff identified a vendor that has 3D data for purchase at a reasonable price. The UAS Group built a process for planning flights and collecting data in the region. The team continues to work on a plan to convert the file types received from outside sources that can be utilized in the GIS data. At this time the dispatch mapping vendor has not released a date for 3D rendering in their product.

11.6. Emergency Communications Center (ECC) Mental Health Training Track Development

The Operations Team successfully hosted two mental health related courses for 9-1-1 telecommunicators that focused on stress management, burn-out, PTSD, and peer to peer support consoling.

11.7. Emergency Communications Center (ECC) Documentary Series

The Operations Team interviewed 9-1-1 telecommunicators from two Emergency Communications Centers (ECCs) and utilized the stock footage to create a video that details their duties, responsibilities, and passion for the profession.

11.8. Regional Critical Incident Stress Management (CISM) Program – Research

The Operations Team successfully established a region peer-to-peer support system for Emergency Communication Centers. The launch was communicated via newsletter and social media posts.

11.9. Project Management – Documentation and Rollout

Staff researched best practices and various software tools available for project management. The decision was made to utilize Jira for NCT9-1-1 project management. The Strategic Services Team has created a rollout plan for Jira to the other teams and is currently onboarding each to Jira. In addition, a new staff member has been recruited to focus specifically on project management of large scale and/or cross team projects.

11.10. 2D Floorplan – Phase I

The 9-1-1 Location Accuracy Program was established to educate ISDs about the use of floorplans to increase situational awareness for first responders. Outreach materials were created and sent to ISDs within the NCT9-1-1 district; a mechanism to track outreach, response, and progress was established; at least one ISD was identified per county within the NCT9-1-1 region to contact and serve as a pilot; and at least one floorplan was collected from each ISD.

11.11. Next Generation 9-1-1 (NG9-1-1) Grant Funding

NCT9-1-1 staff monitored the LIFT and HB2911 legislation and grant requirements. Staff completed various grant-related training including 2CFR200. Staff submitted a successful application for HB2911 funding and executed a subrecipient contract with the Commission on State Emergency Communication (CSEC).

11.12. Staff Training and Development

A plan has been developed for the upcoming fiscal year that includes different types of training, resources, and tracking for NCT9-1-1 staff.

11.13. Aggregation of Service Internet Protocol Selective Router (IPSR) Transition – Planning

The requirements were identified which were incorporated into the NGCS RFP and resulting Statement of Work. A strategy was developed to maximize adoption with neighboring 9-1-1 authorities. This open dialog and education of other 9-1-1 authorities will be key to successfully migrating the originating service providers off the legacy selective routers and onto IPSRs.

11.14. Emergency Services IP Network to Emergency Services IP Network (ESInet to ESInet) – Planning

With the geolocated point of interconnects established by TEXPOInt, NCT9-1-1 was able to leverage them with our current database provider to interconnect with others using the same services. HOTCOG is one of the first 9-1-1 authorities able to test and validate live 9-1-1 calls to NCT9-1-1 over and ESInet to ESInet interconnection. The first OSP was able to be tested and validated on TEXPOInt to confirm RTT to an entire county.

11.14 Hosted Siptrunks – Research

An audit of current legacy phone lines per ECC was completed. In addition, staff researched potential vendors and associated costs.

11.16. Next Generation Core Services (NGCS) Replacement – Procurement

NCT9-1-1 staff completed the Request for Proposals process and entered into a contract with to provide next generation core services and call aggregation services.

12. CAPITAL REPLACEMENT FISCAL YEARS 2023-2027

Type	QTY	Grant	Year Purchased	Estimated Life	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Network	4	Y	2014	7	\$ 127,280.00				
Network	4	Y	2014	7	\$ 109,200.00				
Network	2	Y	2016	7	\$ 48,400.00				
Network	3		2017	7				\$ 60,000.00	
Network	4	Y	2018	7		\$ 54,600.00			
Network	4	Y	2013			\$ 54,600.00			
Network		Y		7	\$ 448,120.00	\$ 640,800.00			
Network	19		2017	7				\$ 750,000.00	
Network	1	Y	2023	7	\$ 17,000.00				
Network	2		2018	7				\$ 50,000.00	
Network	50		2018	7					
Network	2		2018	7					

Network	43		2021	7					
Network	4		2022	7					
Network	2		2018	7					
Network	6		2019	7					
Network	2		2019	7					
Network	10		2019	7					
Network	25		2019	7					
Network	55	Y	2015	7		\$ 407,000.00			
Network	4	Y	2015	7		\$ 80,800.00			
Network	6	Y	2018	7		\$ 96,000.00			
Network	93	Y	2013	7		\$ 604,500.00			
Network	1		2018	7				\$ 2,050.00	
CHE	180	Y		5	\$ 1,162,850.00	\$ 1,162,850.00			
Microwave	122	Y	2015	7	\$ 250,000.00	\$ 671,000.00	\$ 421,000.00		
Printer	1								
Drone		Y		7	\$ 45,000.00	\$ 45,000.00			
Drone	2		2017	7		\$ 16,000.00			
Drone	1		2017	7			\$ 8,000.00		
Drone	2		2017	7			\$ 6,000.00		
Drone	2		2017	7			\$ 12,000.00		
Mapping	1					\$ 16,000.00			
AV	3			3	\$ 70,000.00				
AV	3			3	\$ 4,000.00				
AV	3			3	\$ 9,000.00				
Power	33			10				\$ 871,200.00	
Power	2			10				\$ 74,000.00	
Power	20			10				\$ 50,000.00	
Vehicle	1		2010			\$ 30,000.00			
Vehicle	1		2012						
Vehicle	1		2013						
Vehicle	1		2016			\$ 50,000.00			
Vehicle	1		2016				\$ 50,000.00		
Vehicle	1		2016					\$ 50,000.00	
Vehicle	1		2016				\$ 30,000.00		
Vehicle	1							\$ 30,000.00	
Vehicle	1								\$ 30,000.00
					\$ 2,290,850.00	\$ 3,929,150.00	\$ 529,050.00	\$ 940,000.00	\$ 1,075,200.00

13. Glossary of Terms

- **Additional Data Repository (ADR).** A data storage facility for additional data.
- **Application Programming Interface (API).** A set of functions and procedures allowing the creation of applications that access the features or data of an operating system, application, or other service.
- **Area of Interest.** Represents the geographic extent of your job, helps confine the unit of work to a geographic area.
- **Automatic Location Identification (ALI).** The automatic display at the PSAP of the caller's telephone number, the address/location of the telephone and supplementary emergency services information of the location from which a call originates.
- **Automatic Number Identification (ANI).** Telephone number associated with the call origination, originally associated with the access line of the caller.
- **Board of Managers (BOM).** The governing body of the NCT9-1-1 program.
- **Border Control Function (BCF).** Provides a secure entry in to the ESInet for emergency calls presented to the network; incorporates firewall, admission control, and may include anchoring of session and media as well as other security mechanisms to prevent deliberate or malicious attacks on PSAPs or other entities connected to the ESInet.
- **Computer Aided Dispatch (CAD).** A computer-based system, which aids PSAP 9-1-1 telecommunicators by automating selected dispatching and record keeping activities.
- **Call Detail Record (CDR).** A record stored in a database recording the details of a received or transmitted call.
- **Call Handling Equipment (CHE).** The equipment used to process 9-1-1 calls.
- **Certified Telecommunications Utility (CTU).** A telecommunications utility that has certificate of convenience and necessity, certificate of operating authority, or service provider certificate of operating authority by the state public utilities commission to offer local exchange telephone service.
- **Commission on State Emergency Communications (CSEC).** A State of Texas agency and the state's authority on emergency communications.
- **Continuity of Operations Plan (COOP).** A COOP plan provides guidance on the system restoration for emergencies, disasters, mobilization, and for maintaining a state of readiness to provide the necessary level of information-processing support commensurate with the mission requirements/priorities identified by the respective functional proponent. The federal government and its supporting agencies traditionally use this term to describe activities otherwise known as Disaster Recovery, Business Continuity, Business Resumption, or Contingency Planning.
- **Critical Incident Stress Management (CISM).** A peer-to-peer support program that allows trained 9-1-1 telecommunicators to meet with those that have been affected by a serious type of event.
- **Customer Premises Equipment (CPE).** Communications or terminal equipment located in the customer's facilities, terminal equipment at a PSAP.
- **Department of Homeland Security (DHS).** U.S. federal executive department responsible for public security.
- **Department of Public Safety (DPS).** A department of the state of Texas that is responsible for statewide law enforcement and vehicle regulation.
- **Developer Portal (dev-portal).** An interface between a set of APIs and their various stakeholders.
- **Device-based Hybrid (DBH).** Location that combines multiple sensors to find a more exact location than the traditional method.
- **Digital Elevation Models (DEMs).** A 3D computer graphics representation of elevation data to represent terrain.
- **Emergency Call Routing Function (ECRF).** A functional element in the NGCS (Next Generation 9-1-1 Core Services) which is a LoST protocol server where location information (either civic address or geo-coordinates) and a Service URN serve as input to a mapping function that returns a URI used to route an emergency call toward the appropriate PSAP for the caller's location or towards a responder agency.
- **Emergency Communications Advisory Committee (ECAC).** Committee established to assist CSEC in coordinating the development, implementation, interoperability, and internetworking of interconnected emergency services Internet Protocol networks (ESInets). Interconnected, interoperable ESInets providing Next Generation Core Services covering all of Texas constitute the State-level ESInet.
- **Emergency Communications Center (ECC).** An entity responsible for receiving 9-1-1 calls and processing those calls according to a specific operational policy.
- **Emergency Number Professional (ENP).** NENA certification program for individuals involved in emergency number program management.
- **Emergency Operations Center (EOC).** The physical and/or virtual location from which strategic decisions are made and all activities of an incident are directed, coordinated, and monitored.

- **Enhanced 9-1-1 (E9-1-1).** A telephone system which includes network switching, database, and Emergency Communications Center premise elements capable of providing automatic location identification data, selective routing, selective transfer, fixed transfer, and a call back number.
- **ESInet.** A managed IP network that is used for emergency services communications, and which can be shared by all public safety agencies.
- **Extract-Transform-Load (ETL).** A data integration process that combines data from multiple data sources into a single, consistent data store that is loaded into a data warehouse or other target system.
- **Federal Emergency Management Agency (FEMA).** Agency of the U.S. Department of Homeland Security which coordinates the response to disaster.
- **Forest-Guide (FG).** A core functional element to allow for transfer of calls between ESInets.
- **Full Feature Engine (FME).** A data integration process that combines data from multiple data sources into a single, consistent data store that is loaded into a data warehouse or other target system.
- **Functional Elements (FE).** A set of software features that may be combined with hardware interfaces and operations on those interfaces to accomplish a defined task. Some Functional Elements may contain other Functional Elements. FE can be part of PSAP or NGCS without regard to physical location.
- **Geographic Information System (GIS).** A system for capturing, storing, displaying, analyzing, and managing data and associated attributes which are spatially referenced.
- **Global Positioning System (GPS).** A global navigation satellite system that provides location, velocity, and time synchronization.
- **Government Emergency Telecommunications Service (GETS).** A program of the Department of Homeland Security, Office of Emergency Communications that prioritizes calls over wireline networks.
- **i3.** The concept of an Emergency Services IP network (ESInet), which is designed as an IP-based inter-network shared by all agencies which may be involved in any emergency.
- **Independent School District (ISD).** A type of school district in some US states for primary and secondary education that operates as an entity independent and separate from any municipality, county, or state.
- **Integrated Public Alert and Warning System (IPAWS).** Architecture that unifies the United States Emergency Alert System, National Warning System, Wireless Emergency Alerts, and NOAA Weather Radio, under a single platform. Designed to modernize these systems by enabling alerts to be aggregated over a network and distributed to the appropriate system for public dissemination.
- **Interlocal Agreement (ILA).** A written contract between local government agencies such as a city, a county, a school board, or a constitutional office. These agreements are often entered into by NCT9-1-1 when working with other public agencies.
- **Internet of Things (IoT).** System of interrelated computing devices, mechanical and digital machines provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.
- **Internet Protocol (IP).** The method by which data is sent from one computer to another on the internet or other networks.
- **IP Selective Routing (IPSR).** Replaces the function of legacy selective routers by routing 9-1-1 calls via IP to a PSAP. It routes calls using existing mechanisms and converts incoming calls to session initiation protocol signaling.
- **Light Detection and Ranging (LiDAR).** An airborne, spaceborne, or ground-based laser-ranging technique commonly used for acquiring high-resolution topographic data.
- **Master Street Address Guide (MSAG).** A database of street names and house number ranges within their associated communities defining Emergency Service Zones (ESZs) and their and their associated Emergency Service Numbers (ESNs) to enable proper routing of 9-1-1 calls.
- **Multi-Line Telephone System (MLTS).** A system comprised of common control unit(s), telephone sets, control hardware and software and adjunct systems used to support the following capabilities: network and premises-based systems and includes systems owned or leased by governmental agencies and non-profit entities, as well as for profit businesses.
- **Monthly Recurring Charges (MRC).** Regularly recurring charges for provision of services set forth in a contract.
- **National Emergency Number Association (NENA).** A not-for-profit corporation established in 1982 to further the goal of "One Nation-One Number." NENA is a networking source and promotes research, planning, and training. NENA strives to educate, set standards, and provide certification programs, legislative representation, and technical assistance for implementing and managing 9-1-1 systems.
- **National Institute of Standards and Technology (NIST).** A physical sciences laboratory and non-regulatory agency of the United States Department of Commerce.

- **Next Generation 9-1-1 Cores Services (NGCS).** The base set of services needed to process a 9-1-1 call on an ESInet. Includes the ESRP, ECRF, LVF, BCF, Bridge, Policy Store, Logging Services, and typical IP services such as DNS and DHCP. The term NG9-1-1 core services includes the services and not the network on which they operate.
- **Near Real Time (NRT).** Time delay introduced, by automated data processing or network transmission, between the occurrence of the event and use of the processed data, such as for display or feedback for control purposes. Implies that there are no significant delays.
- **Next Generation 9-1-1 (NG9-1-1).** The initiative aimed at updating the 9-1-1 service infrastructure in the United States to improve public emergency communications services in a growing wireless mobile society. In addition to calling 9-1-1 from a phone, it intends to enable the public to transmit text, images, video, and data to the 9-1-1 center (PSAP).
- **Network Operations Center (NOC).** Also known as a "network management center", one or more locations from which network monitoring and control, or network management, is exercised over a computer, telecommunication or satellite network.
- **North Central Texas Council of Governments (NCTCOG).** Voluntary association of, by and for local governments, established to assist in regional planning. NCT9-1-1 is part of the NCTCOG region.
- **North Central Texas Emergency Communications District (NCT9-1-1) (District).** The Emergency Communications District created pursuant of Chapter 772, Subchapter H, of the Texas Health and Safety Code.
- **Private Branch Exchange (PBX).** Telephone switching system within an enterprise.
- **Public Safety Unmanned Response Team (PSURT).** Committee's whose mission is to provide professional UAS assistance to jurisdictions and emergency operations centers in support of their response, relief, and immediate recovery efforts.
- **Public Utility Commission (PUC).** The governing body that regulates and rates and services of a public utility.
- **Real-time Text (RTT).** Text transmission that is character at a time, as in TTY.
- **Security Operations Center (SOC).** A facility that houses an information security team responsible for monitoring and analyzing an organization's security posture on an ongoing basis. The SOC team's goal is to detect, analyze, and respond to cybersecurity incidents using a combination of technology solutions and a strong set of processes.
- **Session Border Controller (SBC).** A commonly available functional element that provides security, NAT traversal, protocol repair and other functions to VoIP signaling such as SIP. A component of a Border Controller Function.
- **Session Initiated Protocol (SIP).** An IETF defined protocol (RFC3261) that defines an application-layer control (signaling) protocol for creating, modifying, and terminating sessions with one or more participants. These sessions include Internet telephone calls, multimedia distribution, and multimedia conferences.[]
- **Short Message Service (SMS).** A text messaging service component of most telephone, Internet, and mobile device systems. It uses standardized communication protocols that let mobile devices exchange short text messages. These messages are done in a store-and-go method where the message must be typed and sent prior to the recipient receiving a message.
- **Software as a Service (SaaS).** Software licensing and delivery model in which software is licenses on as subscription basis and is centrally hosted.
- **Software Defined Wide Area Network (SD-WAN).** Simplifies the management and operation of a WAN by decoupling the network hardware from its control mechanism.
- **Standard Operating Procedure (SOP).** A step-by-step, repeatable process for any routine task.
- **Telecommunicators (TCs).** An emergency response coordination professional trained to receive, assess, and prioritize emergency requests for assistance.
- **Texas Commission on Law Enforcement (TCOLE).** Regulatory agency for all peace officers, jailers, and 9-1-1 telecommunicators in Texas.
- **Texas 9-1-1 telecommunicator Emergency Response Taskforce (Texas TERT).** A comprehensive program that includes assistance to the Public Safety Answering Point (PSAP) and leads to the establishment of predetermined and selected teams of individuals who can be mobilized quickly and deployed to assist communications centers during disasters.
- **Text Telephone (TTY).** A TTY is a special device that lets people who are deaf, hard of hearing, or speech-impaired use the telephone to communicate, by allowing them to type messages back and forth to one another instead of talking and listening. A TTY is required at both ends of the conversation in order to communicate.
- **Unmanned Aircraft Systems (UAS).** Unmanned aircraft and the equipment to control it remotely.
- **Virtual Provide LAN Service (VPLS).** Way to provide ethernet-based multipoint to multipoint communication over IP or MPLS networks.
- **Wireless Priority Service (WPS).** A Federal program that authorizes cellular communications service providers to prioritize calls over wireless networks.

14. Appendices

Trends/ Market Summary

The 9-1-1 industry has evolved since its inception as a one-to-one emergency communication system to a complex emergency environment. The past year has seen a significant shift in more technology development, as well as a shift with industry opinions and attitudes to the implementation of new strategies.

The technology trends developing over previous years include an interest in Artificial Intelligence (AI) Machine Learning (ML), and a movement toward more cloud-based technologies. This movement has opened the door for other innovations such as z-axis, which would allow 9-1-1 telecommunicators to identify vertical location information.

In addition, the forever evolving technology industry requires continuous emphasis on security. The program must provide 9-1-1 services and uptime to this critical infrastructure. Funding and processes have been focused on keeping the system available and security best practices are adopted where applicable to ensure uptime.

The COVID-19 pandemic also brought additional trends into the emergency communications industry. Both ECCs and NCT9-1-1 have faced considerable staffing shortages with longer time to fill positions. Improving hiring and retention rates remains a priority. The pandemic also brought about a new focus on mental health for both 9-1-1 telecommunicators and members of the public.

In response to these current and upcoming trends, NCT9-1-1 has identified strategic plan projects as necessary for the successful future of the district.

Vision Script

Vision gives meaning and focus to our daily tasks, connects the dots of our most important work, and is an opportunity filter. It inspires people to take bold action. Vision helps us avoid strategic missteps and failure. Knowing our direction can help provide clarity and set the expectation and responsibility to do great work. It also provides a standard by which to judge performance.

This vision script is made up of present tense statements including where we would like to be in three-five years. It describes our future reality as if it were today. The vision script helps define who we are and where we are going, as well as who we would like to become. It is comprised both of things that make us who we are today, as well as things that we aspire to be in the future. It allows us to imagine a tomorrow compelling enough to guide our choices today. A clear vision gives an organization the best opportunity to survive and thrive. The vision must be powerful enough to shake off complacency and replace it with the motivation to act. The vision script should and will change as goals are reached and the industry changes.

Team 3-5 Year Vision

Our staff is our most valuable asset and we treat them as such. Our teammates live and breathe our core ideology. They possess heart, courage, and a positive attitude that make them extraordinary both at work and in their personal lives. The NCT9-1-1 culture is based on family first and supports employees being present for their family. The individuals on our team have great character, amazing talent, and

proven success. They are intelligent, committed, and have passion for the industry. We encourage creativity, innovation, and experimentation. We engage in healthy debate based on a diverse set of viewpoints and experiences. NCT9-1-1 supports learning resulting in personal and professional growth. Our teammates are subject matter experts who are enthusiastic about serving others. Team members are given reasonable autonomy with encouragement to plan and execute their own work in order to be results oriented. NCT9-1-1 staff are 9-1-1 people, not just people who work in 9-1-1.

Services 3-5 Year Vision

NCT9-1-1 provides a holistic view of the entire 9-1-1 ecosystem to assist local governments in alleviating challenges related to 9-1-1. Our service offerings provide tools for the ECC to enable them to better protect the field responders and serve the public. We have a comprehensive strategic planning and decision-making process based on asking the question "why" which allows us to act on our mission and say no to distractions masquerading as new opportunities. By focusing on "why", the services NCT9-1-1 provides is revolutionizing the 9-1-1 industry. NCT9-1-1 is forward-thinking and leading a movement to push the 9-1-1 industry to provide solutions to current issues and offer enhanced solutions with greater efficiency. We do not settle for status quo and, therefore, NCT9-1-1 partners with vendors and disruptors to bring products and services previously not imagined in this industry. We have open minds and are willing to consider things that have never been done in public safety.

NCT9-1-1 is monitoring and researching industry activity in the following areas to determine the effectiveness for future implementation:

3D mapping and Z-axis location	Floorplans and sub-addressing
9-1-1 telecommunicators working remotely	Integration of social media
Artificial Intelligence (AI)	Interconnectivity with other 9-1-1 entities and FirstNet
Business model for regional virtual NG center	Internet of Things (IoT)
Centralized data repository with data from multiple sources and ability to share data	Partnerships with transportation agencies
Collaboration with other early adopters	Pilots and trials with private companies/academia
Connectivity for sharing information	Smart technology and collaboration
Data analytics and predictive analysis	Streaming services and multimedia
Data sharing with public safety and private partners	Utilizing UAS for addressing and mapping
Enhancement of training to include virtual reality and online options	

Communications and Engagement 3-5 Year Vision

We recognize that our 9-1-1 telecommunicators are the real heroes and true first responders and we work to get this message out to the over 1.7 million people in our region. We are engaged with our ECCs to obtain and utilize their feedback and suggestions to improve 9-1-1 services and our communications. We have a responsibility to educate the public and make them aware of the services 9-1-1 has to offer, as well as any potential limitations. We have identified champions in our local governments through our

Board of Managers and equip them with the tools to share relevant information and influence others about the benefits of continually enhancing 9-1-1 services in our region. We commit to sharing the advancement of 9-1-1 technology and operational tactics through an accessible digital content strategy and the execution of a thorough Crisis Communications Plan.

Finance 3-5 Year Vision

NCT9-1-1 will have a contingency fund that allows us to financially navigate revenue timing issues and any other potential issues that might arise. We continue to build a capital replacement fund so that replacements and new capital items do not require a large increase in our operating budget. NCT9-1-1 staff will work with the 9-1-1 Alliance, wireless service providers, and the legislature to increase our wireless fees, which improves our revenues and allows us to meet our financial goals in a timely manner. Staff has sought out ways to be more efficient and have implemented cost-saving strategies to keep our expenses down. We have identified grants and will continue to seek new and innovative means of revenue that will help us improve emergency communications in our region and meet our goal of constantly improving 9-1-1 services.

Impact 3-5 Year Vision

As a result of our efforts, we are transforming the 9-1-1 industry and achieving outstanding results. We have achieved these extraordinary results without compromising our values or culture.

3-5 Year Projections

a. Average Support Calls Each Month	<u>120</u>
b. Support Tickets Generated Each Month	<u>350</u>
c. Average Time to Resolve Support Tickets	<u>4 hours</u>
d. Percentage of Support Tickets Requiring Onsite Support	<u>10%</u>
e. GIS Errors Processed Each Year	<u>275,000</u>
f. GIS Road Centerlines Managed Each Year	<u>521,000</u>
g. GIS Address Points Managed Each Year	<u>860,000</u>
h. 9-1-1 Telecommunicators Trained Each Year	<u>550</u>
i. Regional 9-1-1 Telecommunicator Academies Held Each Year	<u>2</u>
j. New 9-1-1 Telecommunicators Graduated Each Year	<u>40</u>
k. Educational Materials Provided to our ECCs Each Year	<u>300,000</u>
l. Industry Articles Published Each Year	<u>Up to 2</u>
m. Social Media Public Awareness Campaigns Each Year	<u>4</u>
n. Increase in website visitors since FY2020	<u>50%</u>
o. Website Referrals Generated by	<u>80% organic search & 15% social media</u>



North Central Texas Emergency Communications District

Item # 2022-09-03

Meeting Date: September 14, 2022

Submitted By: Norman Marquart
NCTCOG Sr. Fiscal Manager

Item Title: Resolution Approving the Fiscal Year 2023 Budget and Setting the 9-1-1 Emergency Service Fee

NCT9-1-1, in accordance with requirements outlined in Chapter 772 of the Texas Health and Safety Code, is responsible for administering 9-1-1 service within its service area. Per the District's bylaws, the Board of Managers is required to approve an annual budget, which includes setting the amount of the 9-1-1 emergency service fee. The statute provides the following related to the fee:

1. The amount of the fee may not exceed fifty (.50) cents per month for each line.
2. The fee must have uniform application throughout the District and be imposed in each participating county or municipality in the District.
3. The fee may be imposed only on the base rate charge or the charge's equivalent, excluding charges for coin-operated telephone equipment.
4. The Board shall set the fee each fiscal year and notify each supplier in the District of any change to the fee by the 91st day after the effective date of the change.

Staff has prepared the FY 2023 budget as contained in Attachment C and recommends the fee amount formerly imposed by CSEC and adopted for FY 2019 - FY 2022 of fifty (.50) cents per local exchange access line remain unchanged to meet forecasted expenditures of the District.

NCT9-1-1 has been awarded a \$9.0 million federal grant from the Commission on State Emergency Communications (CSEC). These funds will be primarily designated to purchase equipment that will enable the District to deploy and operate next generation 9-1-1 services. The grant has a performance period from November 8, 2021, through December 31, 2024.

The FY 2023 proposed budget, as reflected within Attachment C, includes one-half of the projected grant funds. The remainder of the available funds will be budgeted within subsequent fiscal years as determined by the projected timing of the associated expenditures. The timing of the expenditures is currently an estimate which could result in budget amendments once the final plans are determined.

Grant funds will be requested by NCTCOG administrative staff for the reimbursement of the various expenditures incurred related to the grant scope of work. The amount of time required by CSEC to provide the requested funds to the NCTCOG is uncertain. Due to this uncertainty, staff proposes that the capital replacement fund balance, projected to total \$3.8 million at the end of FY 2022, be available to temporarily fund the grant related expenditures. Once the grant funds are received from CSEC, the capital replacement fund balance would be reimbursed. In addition, the capital replacement fund balance may be utilized for expenditures necessary to implement the next generation services but are not eligible for grant reimbursement.

A draft resolution approving the FY 2023 North Central Texas Emergency Communications District operating budget, including setting the 9-1-1 emergency service fee at 50 cents, is attached for Board consideration.

I will be available to answer any questions at the Board meeting.



Item # 2022-09-03

RESOLUTION APPROVING THE FISCAL YEAR 2022 BUDGET AND SETTING THE 9-1-1 EMERGENCY SERVICE FEE

WHEREAS, the North Central Texas Emergency Communications District (NCT9-1-1) was created pursuant to Chapter 772, Subchapter H, of the Texas Health and Safety Code as amended by the 84th Legislature, through the passage of resolutions by County Commissioners Courts and City Councils within the NCT9-1-1 service area; and,

WHEREAS, the NCT9-1-1 service area consists of Collin, Ellis, Erath, Hood, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwall, Somervell, and Wise counties, as well as the Dallas County cities of Balch Springs, Cockrell Hill, Sachse, Seagoville, and Wilmer; and,

WHEREAS, NCT9-1-1 is a political subdivision of the State and carries out essential governmental functions related to the provisioning of emergency communications services; and,

WHEREAS, NCT9-1-1 is engaged in the planning, implementation, and maintenance of an emergency 9-1-1 system for more than 40 Public Safety Answering Points within its 9-1-1 service area; and,

WHEREAS, staff has prepared the FY 2023 NCT9-1-1 Budget and recommends its approval, including setting the 9-1-1 emergency service fee at fifty (.50) cents per local exchange access line, and the inclusion of the CSEC federal grant award.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1. The NCT9-1-1 Board of Managers approves the FY 2023 North Central Texas Emergency Communications District Budget in the amount of \$11,285,410, including setting the 9-1-1 emergency fee at fifty (.50) cents. In addition, the NCT9-1-1 Board of Managers approves the FY 2023 Next Generation 9-1-1 grant budget from CSEC in the amount of \$4,494,850.

Section 2. The Executive Director and designees are authorized to receive federal, state, and local funding for FY 2023.

Section 3. The Executive Director and designees are authorized to utilize the capital replacement fund balance as necessary in the implementation of the Next Generation 9-1-1 project.

Section 4. The Executive Director and designees are authorized to transfer funds between programs and line items as necessary as allowed by applicable state and federal laws, regulations, and grant requirements.

Section 5. The Executive Director and designees are authorized to execute contracts for goods and services up to \$100,000 and to equip and provide facilities as allowed by applicable state and federal laws, regulations, and grant requirements.

Section 6. This resolution shall be in effect as of October 1, 2022.

Hal Richards
North Central Texas Emergency Communications District
Judge, Kaufman County

I hereby certify that this Resolution was adopted by the Board of Managers of the North Central Texas Emergency Communications District on September 14, 2022.

N. Lane Akin
North Central Texas Emergency Communications District
Sheriff, Wise County



**NORTH CENTRAL TEXAS
EMERGENCY COMMUNICATIONS DISTRICT
PROPOSED BUDGET**

Fiscal Year 2023



BUDGET EXECUTIVE SUMMARY
FISCAL YEAR 2023

MISSION AND GOALS STATEMENT

The North Central Texas Emergency Communications District (NCT9-1-1) is a 9-1-1 district with the responsibility to research, plan, implement, maintain, and coordinate a regional 9-1-1 system which serves as an integral part of public safety emergency communications in the region. A priority for the upcoming year is to focus on the implementation of a new Next Generation 9-1-1 (NG9-1-1) system. In addition, staff will take on several other NG9-1-1 related projects such as: updating GIS mapping datasets, refining security policies, and upgrading microwave equipment. With many large-scale projects planned for the upcoming year, NCT9-1-1 will remain committed to our mission of *Saving Lives and Making a Difference!*

9-1-1 SERVICES

The NCT9-1-1 service area includes 14 counties and five municipalities in Dallas County: Balch Springs, Cockrell Hill, Sachse, Seagoville and Wilmer. The District provides 9-1-1 services to over 40 Emergency Communications Centers (ECCs). The Board of Managers, represented by elected officials in each county in the service area, provides policy oversight of the District. In addition, the Strategic Advisory Committee fosters cooperation, collaboration, planning, and engagement regarding regional plans. NCT9-1-1 continues to administer the regional 9-1-1 system by managing and improving existing services and planning for the future of 9-1-1.

FUNDING

NCT9-1-1 receives its funding from a 50-cent charge on all wireless and wireline telephone lines per Health and Safety code 772 Subchapter H. In addition, NCT9-1-1 was awarded a preliminary amount of \$8,989,701, as part of Texas Legislature House Bill 2911 (HB2911) which amended Health and Safety Code Chapter 771 to establish September 1, 2025, as a target date for “all parts of the state [to] be covered by next generation 9-1-1 service.” These funds are administered via the Commission on State Emergency Communications (CSEC) and the grant period is from November 2021-December 2024.

OPERATIONAL BUDGET

NCT9-1-1’s operational budget for FY2023 is \$11,287,000. Primary areas of focus for the upcoming year include:

Network

The District has allocated approximately \$2.9M to network costs in FY2023. The largest portion of this funding includes:

- Network Equipment/Software Support and Maintenance
Approximately \$1.2M for equipment/software support and maintenance. This includes several large software maintenance agreements.
- MPLS & Backhaul Circuit Connections
Approximately \$712k for various routing and circuit connections.
- Network Contract Services
Approximately \$940k for various network-related contract services including the current core services provider.



Equipment/Software Support and Maintenance

Approximately \$925k towards non-network software support and maintenance including dispatch mapping and data agreements.

County Reimbursements

Approximately \$580k for county reimbursements including \$420k for county addressing reimbursement and \$160k for recorder reimbursements. This is the maximum county reimbursements available; however, actuals may be lower based on county addressing accuracy and recorders purchased.

Contract Services

NCT9-1-1 utilizes the expertise of strategic consultants at various times throughout the year. The maximum budget for this item from the operational budget is \$100k; however, expenses are based on hours worked and actual expenses may be less.

GRANT BUDGET

The preliminary grant budget for the grant period is \$8,989,701. Primary areas of focus include:

Network

\$1.5M for the procurement of new capital network gear and \$500k for microwave network tower replacement.

Call Handling Equipment (CHE)

\$2.3M for the replacement of the CHE in the ECCs.

Geographic Information Systems

\$680k for GIS-related NG9-1-1 items. This includes the purchase of updated 2-dimensional GIS imagery and the purchase of a 3-dimensional data set. These data sets help with tactical mapping and 9-1-1 addressing.

Next Generation 9-1-1 Core Services (NGCS)

\$3.2M to focus on implementation of new NGCS including call aggregation. NCT9-1-1 began implementation of NG9-1-1 in 2008 by building an IP infrastructure consisting of 9-1-1 equipment and systems, as well as a network that would act as the backbone for future applications. The network and systems have been implemented and updated in a phased approach. Today the network transport layer and core services serve as the infrastructure of the NCT9-1-1 system. That platform will allow work on some “no cost” applications and services that sit on the infrastructure and can enhance the overall services 9-1-1 can provide to protect our first responders and enhance the response for the public.

Security

\$384k for security and includes a cyber and physical security assessment, as well as penetration testing.

Contract Services

\$400k for operational planning. The assistance of outside consultants is required to complete the size and scale of the projects included in the grant funding, specifically within the limited grant timeline.



Proposed Fiscal Year 2023 Operating Revenue Budget
Budget Period: 10/01/2022-09/30/2023
Schedule A

	Fiscal Year 2021 Actual	Fiscal Year 2022 Budget	Proposed FY 2023	Comparison FY 2022 Budget	
				Amount Change	Percentage Change
Total Resources Available					
Revenue					
Wireless Funding CSEC (1)	9,152,824	9,060,000	9,640,000	580,000	6.40%
Landline Receipts from Providers (2)	1,700,261	1,550,000	1,640,000	90,000	5.81%
Other Revenue	6,210	7,000	7,000	-	0.00%
Subtotal Revenue	\$ 10,859,295	\$ 10,617,000	\$ 11,287,000	\$ 670,000	6.31%
Capital Replacement Fund Balance Drawdown		597,250	-	(597,250)	-100.00%
Total Resources Available	\$ 10,859,295	\$ 11,214,250	\$ 11,287,000	\$ 72,750	0.65%

Wireless revenue includes an increase of projected fiscal year 2022 receipts of 2%. Wireless receipts to the state have increased over 3% in the last 3 years.

Landline revenues are based on fiscal year 2022 projection less 1% for decreasing usage.

Largest Landline Providers:	Avg Monthly Receipts
Southwestern Bell	\$ 35,000
Spectrum Advanced Services	27,000
AT&T Corp	7,910
Frontier	4,800
United Telephone Company of Texas	4,500
Total of largest providers	<u>\$ 79,210</u>
Annualized amount from largest providers	\$ 950,520



Proposed Fiscal Year 2023 Operating Expenses
Budget Period: 10/01/2022-09/30/2023
Schedule B

Budget Category	Fiscal Year	Fiscal Year	Proposed FY 2023	Comparison FY 2022 Budget	
	2021 Actual	2022 Budget		Amount Change	Percentage Change
Non-Capital Expenditures					
NCT9-1-1 Staff Costs					
FTE Authorized	33	33	33	-	0.00%
FTE Funded	30	30	31	1	3.33%
PTE	0	3	3	-	-
Salaries (1)	\$ 2,022,555	\$ 2,338,980	\$ 2,568,430	\$ 229,450	9.81%
Fringe Benefits (2)	956,268	1,141,420	1,253,400	111,980	9.81%
Indirect Costs (3)	464,231	616,030	676,460	60,430	9.81%
Occupancy (4)	405,557	417,000	402,000	(15,000)	-3.60%
NCTCOG IT Costs (5)	196,573	176,000	186,000	10,000	5.68%
Travel (6)	6,489	56,300	77,490	21,190	37.64%
Other Staff Costs (7)	164,541	311,040	275,800	(35,240)	-11.33%
Total NCT9-1-1 Staff Costs	\$ 4,216,214	\$ 5,056,770	\$ 5,439,580	\$ 382,810	7.57%
Cost of Operations					
Network (8)	\$ 2,373,598	\$ 2,661,650	\$ 2,903,380	\$ 241,730	9.08%
Equipment & Software Support & Maintenance	613,125	948,830	925,370	(23,460)	-2.47%
Contract Services (9)	163,643	317,990	196,490	(121,500)	-38.21%
Public Education	52,899	70,000	70,000	-	0.00%
ECC Training (10)	18,499	58,050	38,750	(19,300)	-33.25%
County Reimbursements	511,491	590,000	580,000	(10,000)	-1.69%
Telecom (11)	614,356	583,880	637,610	53,730	9.20%
Total Cost of Operations	\$ 4,347,611	\$ 5,230,400	\$ 5,351,600	\$ 121,200	2.32%
NCTCOG Admin / Legal (Schedule C)	\$ 279,349	\$ 329,830	\$ 411,230	\$ 81,400	24.68%
Total Non-Capital Expenditures	\$ 8,843,174	\$ 10,617,000	\$ 11,202,410	\$ 585,410	5.51%
Capital Expenditures (12)		\$ 597,250	\$ 83,000	\$ (514,250)	-86.10%
Total Expenditures	\$ 8,843,174	\$ 11,214,250	\$ 11,285,410	\$ 71,160	0.63%

Fund Balance Summary	
Estimated Fund Balance @ 9/30/2022	\$ 4,877,723
Estimated Revenue Over Expenses Increase	1,590
Estimated Ending Fund Balance @ 9/30/2023	<u>\$ 4,879,313</u>
<i>Estimated Fund Balance Operating / Capital Replacement</i>	
Operating Fund Balance @ 9/30/2023	\$ 1,128,700
Capital Replacement Fund Balance @9/30/2023	3,750,613
Total Estimated Fund Balance @ 9/30/2023	<u>\$ 4,879,313</u>



Proposed Fiscal Year 2023 Operating Expenses

Budget Period: 10/01/2022-09/30/2023

Schedule B Notes

1. **Salaries-** Addition of one (1) new staff position. This position was authorized but unfunded in previous years. Salaries reflect a 5% merit increase for FY 2023. Salaries reflect promotions for staff members.
2. **Fringe Benefits-** Fringe benefits remain unchanged from FY 2022, totaling 48.8% of salaries.
3. **Indirect Costs-** Indirect costs remain unchanged from FY 2022, totaling 17.7% of salaries plus fringe benefits.
4. **Occupancy-** Rent totals \$21.16 per square foot. NCT9-1-1 currently rents 19,000 square feet. This is a \$0.79 per square foot decrease as compared to FY 2022 budget.
5. **NTCOG IT Costs-** Increased \$10,000 from FY 2022 primarily due to increases in security software, internet, and wide area network (WAN) costs.
6. **Travel-** Increased \$21,000 from FY 2022. Travel decreased in prior years due to COVID restrictions. More travel for training is projected for FY 2023.
7. **Other Staff Costs-** Decreased \$35,000 from FY 2022 primarily due to insurance costs budgeted under Fiscal Agent Support in FY 2023.
8. **Network-** Increased \$240,000 from FY 2022 due to the following changes:
 - Increase in software license - \$109,000
 - Maintenance costs for uninterrupted power devices begin in FY 2023 - \$92,000. Prior years maintenance costs were paid with the equipment via a three (3) year maintenance agreement.
 - Increase in microwave backhaul services - \$46,000
9. **Contract Services-** Decreased \$122,000 from FY 2022 due to the following changes:
 - Decrease in strategic consulting with Mission Critical Partners - \$75,000. Contract with MCP will primarily be grant related in FY 2023.
 - Decrease in GIS Inc consulting - \$30,000. Due to in-house expertise, outside services are not required as much as in the past.
10. **Emergency Communication Center (ECC) Training** – Decreased \$19,000 from FY 2022 due to a reduction in accreditation from The Commission on Accreditation for Law Enforcement Agencies (CALEA).
11. **Telecom-** Increase \$54,000 primarily due to AT&T legacy network connections at the Data Centers.
12. **Capital Costs** – Capital costs for FY 2023 include audio video equipment for the NCT9-1-1 training center. Capital to be funded with operating funds and not utilizing the capital replacement fund balance.



Proposed Fiscal Year 2023 NCTCOG Fiscal Agent Support
Budget Period: 10/01/2022-09/30/2023

Schedule C

Budget Category	Fiscal Year 2022 Budget	Proposed FY 2023 Budget			Comparison FY 2022 Budget	
		Accounting	Legal	Total	Amount Change	Percentage Change
FTE	1.74	1.60	0.14	1.74	-	0.00%
PTE						0.00%
Salaries	\$ 161,440	\$ 162,690	\$ 20,520	\$ 183,210	\$ 21,770	13.48%
Fringe Benefits	78,780	79,390	10,010	89,400	10,620	13.48%
Indirect Costs	42,520	42,850	5,400	48,250	5,730	13.48%
Facilities Allocation	9,570	8,690	980	9,670	100	1.04%
Network Services Allocation	15,730	14,480	1,380	15,860	130	0.83%
Travel	1,600	2,500		2,500	900	56.25%
Audit Services	16,400	17,000		17,000	600	3.66%
Insurance*		40,800		40,800	40,800	100.00%
Staff Support	1,390	1,540		1,540	150	10.79%
Training / Professional Development	2,400	3,000		3,000	600	25.00%
Total NCTCOG ADMIN / LEGAL	\$ 329,830	\$ 372,940	\$ 38,290	\$ 411,230	\$ 81,400	24.68%

*Insurance costs of \$40,800 moved from operations to fiscal agent support in fiscal year 2023



Proposed Fiscal Year 2023 Authorized Staffing Summary
Budget Period: 10/01/2022-09/30/2023

Schedule D

Position Title	2021	2022	2023
9-1-1 Administrative Program Coordinator	1	1	1
9-1-1 Communications Coordinator	1	1	1
9-1-1 Data Manager	1	1	1
9-1-1 Database Analyst II	1	1	1
9-1-1 Field Support Supervisor	1	1	1
9-1-1 GIS Applications Developer (b)			1
9-1-1 GIS Data Administrator	1	1	1
9-1-1 GIS Manager	1	1	1
9-1-1 GIS Project Coordinator (c)	1	1	
9-1-1 GIS Solutions Analyst II (b)	1	1	
9-1-1 GIS Specialist I or II			1
9-1-1 GIS Specialist III	4	4	3
9-1-1 Network Engineer	2	2	2
9-1-1 Operations Manager (a)		1	1
9-1-1 Operations Specialist (f)	1	1	1
9-1-1 Operations Supervisor (a)	1	-	
9-1-1 Program Director	1	1	1
9-1-1 Project Specialist (d)	2	1	
9-1-1 Quality Assurance Coordinator	1	1	1
9-1-1 Solutions Architect	1	1	1
9-1-1 Strategic Services Coordinator		1	2
9-1-1 Strategic Services Specialist (d)			1
9-1-1 Strategic Services Manager	1	1	1
9-1-1 System Administrator I	1	1	1
9-1-1 System Administrator II	1	1	1
9-1-1 Technical Specialist II (e)			1
9-1-1 Technical Specialist III (e)	-	1	
9-1-1 Technical Specialist IV	3	2	2
9-1-1 Technology Manager	1	1	1
9-1-1 Training Coordinator	1	1	1
9-1-1 Visual Media Coordinator	1	1	1
Administrative Assistant II (f)	1	1	1
Sr Administrative Assistant	1	1	1
Totals	33	33	33

Position Title	Temporary / Part Time		
	2021	2022	2023
Intern	3	3	3
Totals	3	3	3



Proposed Fiscal Year 2023 Authorized Staffing Summary

Budget Period: 10/01/2022-09/30/2023

Schedule D Notes

- (a) Change Operations Supervisor to Operations Manager.
- (b) Change GIS Solutions Analyst II to GIS Application Developer.
- (c) Change GIS Project Coordinator to GIS Specialist I or II
- (d) Change Project Specialist to Strategic Services Specialist.
- (e) Change Technical Specialist III to Technical Specialist II
- (f) Authorized but unfunded positions



Proposed Fiscal Year 2023 NG9-1-1 Grant Budget

Budget Period: 10/01/2022-09/30/2023

Schedule E

Budget Category	FY 2023	FY 2024	Total
Network			
NG9-1-1 Core Services	\$ 1,600,000	\$ 1,600,000	\$ 3,200,000
Security Assessments	165,000	165,000	330,000
Penetration Testing	27,000	27,000	54,000
Total Network	\$ 1,792,000	\$ 1,792,000	\$ 3,584,000
Equipment & Software Support & Maintenance			
Dimensional GIS Imagery for Tactical Mapping and 9-1-1 Addressing	\$ 170,000	\$ 170,000	\$ 340,000
Dimensional GIS Data for Tactical Mapping	125,000	125,000	250,000
Total Equipment & Software Support & Maintenance	\$ 295,000	\$ 295,000	\$ 590,000
Contract Services			
Operational Planning	\$ 200,000	\$ 200,000	\$ 400,000
Total Non-Capital Expenditures	\$ 2,287,000	\$ 2,287,000	\$ 4,574,000
Capital Expenditures			
Call Handling Equipment	\$ 1,162,850	\$ 1,162,850	\$ 2,325,700
Capital Network Gear	750,000	750,000	1,500,000
Microwave Network Radio Replacements	250,000	250,000	500,000
Unmanned Aerial System (UAS) Purchase	45,000	45,000	90,000
Total Capital Expenditures	\$ 2,207,850	\$ 2,207,850	\$ 4,415,700
Total Grant Expenditures	\$ 4,494,850	\$ 4,494,850	\$ 8,989,700



Proposed Fiscal Year 2023 NG9-1-1 Grant Budget

Budget Period: 10/01/2022-09/30/2023

Schedule E Notes

1. Administered through Commission on State Emergency Communications (CSEC).
2. Funding to help meet State target date of September 1, 2025, to be covered by NG9-1-1 service.
3. Period of performance is October 8, 2021 – December 31, 2024.
4. Budget splits funding for FY 2023 and FY 2024. Actual costs may vary by fiscal year and carry over into fiscal year 2025.
5. Cost reimbursement grant. NCT9-1-1 will “float” costs utilizing capital replacement fund balance until reimbursed by CSEC.

Proposed Fiscal Year 2023 Budget Summary

Budget Period: 10/01/2022-09/30/2023

Schedule F

Budget Category	Operating	Grant	Total
Revenue			
State Revenue	\$ -	\$ 4,494,850	\$ 4,494,850
Local Revenue	11,287,000	-	11,287,000
Total Revenues	\$ 11,287,000	\$ 4,494,850	\$ 15,781,850
Non-Capital Expenditures			
NCT9-1-1 Staff Costs	\$ 5,439,580	\$ -	\$ 5,439,580
Cost of Operations	5,351,600	2,287,000	7,638,600
NCTCOG Admin / Legal	411,230	-	411,230
Total Non-Capital Expenditures	\$ 11,202,410	\$ 2,287,000	\$ 13,489,410
Capital Expenditures	\$ 83,000	\$ 2,207,850	\$ 2,290,850
Total Expenditures	\$ 11,285,410	\$ 4,494,850	\$ 15,780,260
Fund Balance	\$ 1,590	\$ -	\$ 1,590



North Central Texas Emergency Communications District

Item # 2022-09-04

Meeting Date: September 14, 2022

Submitted By: Jessie Shadowens-James
9-1-1 Strategic Services Manager

Item Title: Resolution Amending Authorization for FY 2022 and Authorizing a Contract for FY 2023 with Mission Critical Partners, LLC, for Public Safety Strategic Consulting

The North Central Texas Emergency Communications District (NCT9-1-1) utilizes public safety consultants to complete a variety of projects for the program. Examples include, but are not limited to: network design, contingency planning, equipment installation, contract negotiation, technical requirement writing, and pre-procurement research. These consultants are utilized to supplement in-house expertise and third-party contractors.

In previous years, these consultants have been procured utilizing cooperative purchasing mechanisms such as the Department of Information Resources contracts.

In coordination with NCT9-1-1 Program staff, the North Central Texas Council of Governments (NCTCOG) SHARE cooperative purchasing program conducted a procurement for public safety strategic consulting services. In August 2019, NCTCOG entered into contract #2019-074 with Mission Critical Partners, LLC, as part of its SHARE cooperative purchasing program. NCT9-1-1 is able to utilize this cooperative contract which satisfies local procurement requirements.

During fiscal year 2022, MCP has played a significant role in the procurement and contract negotiations for next generation core services. Since this negotiation process has taken significantly longer than expected, staff is requesting an increase of \$43,750 (25%) to the current authorization to accommodate the additional assistance.

A draft resolution amending contract authorization for fiscal year 2022, for a revised total not to exceed amount of \$218,750, and authorizing a fiscal year 2023 contract with Mission Critical Partners, LLC, in an amount not to exceed \$100,000, is attached for Board consideration.

I will be available to answer any questions at the Board meeting.



Item # 2022-09-04

RESOLUTION AMENDING AUTHORIZATION FOR FY 2022 AND AUTHORIZING A CONTRACT FOR FY 2023 WITH MISSION CRITICAL PARTNERS, LLC, FOR PUBLIC SAFETY STRATEGIC CONSULTING

WHEREAS, the North Central Texas Emergency Communications District (NCT9-1-1) was created pursuant to Chapter 772, Subchapter H, of the Texas Health and Safety Code as amended by the 84th Legislature, through the passage of resolutions by County Commissioners Courts and City Councils within the NCT9-1-1 service area; and,

WHEREAS, the NCT9-1-1 service area consists of Collin, Ellis, Erath, Hood, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwall, Somervell, and Wise counties, as well as the Dallas County cities of Balch Springs, Cockrell Hill, Sachse, Seagoville, and Wilmer; and,

WHEREAS, NCT9-1-1 is a political subdivision of the State and carries out essential governmental functions related to the provisioning of emergency communications services; and,

WHEREAS, NCT9-1-1 is engaged in the planning, implementation, and maintenance of an emergency 9-1-1 system for more than 40 Public Safety Answering Points within its 9-1-1 service area; and,

WHEREAS, NCT9-1-1 desires to amend its FY2022 contract with Mission Critical Partners, LLC, increasing by 25% to \$218,750, to accommodate the additional assistance provided during the Next Generation Core Services procurement and contract negotiation process; and,

WHEREAS, NCT9-1-1 desires to enter into a contract with Mission Critical Partners, LLC, to provide various public safety related consulting services during FY2023 utilizing NCTCOG SHARE contract #2019-074; and,

WHEREAS, NCT9-1-1 has complied with State regulations regarding contract and procurement proceedings.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1. An amendment to the FY 2022 contract authorization between NCT9-1-1 and Mission Critical Partners, LLC, for public safety strategic consulting, increasing by \$43,750 (25%) for a revised not to exceed amount of \$218,750, be and is hereby approved.

Section 2. A contract between NCT9-1-1 and Mission Critical Partners, LLC, for FY2023 public safety strategic consulting, in an amount not to exceed \$100,000, be and is hereby approved.

Section 3. The Executive Director or designee is authorized execute agreements necessary to carry out this program, in the name of the North Central Texas Emergency Communications District.

Section 4. This resolution shall be in effect immediately upon adoption.

Hal Richards
North Central Texas Emergency Communications District
Judge, Kaufman County

I hereby certify that this Resolution was adopted by the Board of Managers of the North Central Texas Emergency Communications District on September 14, 2022.

N. Lane Akin
North Central Texas Emergency Communications District
Sheriff, Wise County



North Central Texas Emergency Communications District

Item # 2022-09-05

Meeting Date: September 14, 2022

Submitted By: Jessie Shadowens-James
9-1-1 Strategic Services Manager

Item Title: Resolution Authorizing a Contract with Mission Critical Partners, LLC, for Next Generation 9-1-1 (NG9-1-1) Related Consulting Services

In May 2021, the Texas Legislature passed House Bill 2911 (“HB 2911”) amending Health and Safety Code Chapter 771 to establish September 1, 2025, as the target date for “all parts of the state [to] be covered by next generation 9-1-1 service.” HB 2911 includes new Health and Safety Code § 771.0713 creating the Next Generation 9-1-1 Fund (“NG9-1-1 Fund”) and authorizing it to be funded with “Coronavirus State and Local Fiscal Recovery Funds under Section 9901 of the American Rescue Plan Act of 2021 (Pub. L. No. 117-2) or from any other federal governmental source for purposes of this chapter.

The Commission on State Emergency Communications (CSEC) is the administrative agency for these funds and the North Central Texas Emergency Communications District (NCT9-1-1) has been awarded approximately \$9,000,000, in initial funding for projects towards the NG9-1-1 efforts. As part of NCT9-1-1’s CSEC-approved application, \$400,000, has been designated for operational planning. NCT9-1-1 desires to enter into a contract with Mission Critical Partners for services related to the fulfillment of the requirements of the NG9-1-1 Fund. All services under this agreement will be related to the execution of NG9-1-1 projects and may include items such as: network design, security policy documentation, contract negotiation, technical requirement writing, and pre-procurement research. These consultants are utilized to supplement in-house expertise and third-party contractors.

In coordination with NCT9-1-1 staff, the North Central Texas Council of Governments (NCTCOG) SHARE cooperative purchasing program conducted a procurement for public safety strategic consulting services. In August 2019, NCTCOG entered into contract #2019-074 with Mission Critical Partners, LLC, as part of its SHARE cooperative purchasing program. NCT9-1-1 is able to utilize this cooperative contract which satisfies applicable procurement requirements.

A draft resolution authorizing an agreement with Misison Critical Partners, LLC, in an amount not to exceed \$400,000 and for a term expiring December 31, 2024, is attached for Board consideration.

I will be available to answer any questions at the Board meeting.



Item # 2022-09-05

RESOLUTION AUTHORIZING A CONTRACT WITH MISSION CRITICAL PARTNERS, LCC, FOR NEXT GENERATION 9-1-1 (NG9-1-1) RELATED CONSULTING SERVICES

WHEREAS, the North Central Texas Emergency Communications District (NCT9-1-1) was created pursuant to Chapter 772, Subchapter H, of the Texas Health and Safety Code as amended by the 84th Legislature, through the passage of resolutions by County Commissioners Courts and City Councils within the NCT9-1-1 service area; and,

WHEREAS, the NCT9-1-1 service area consists of Collin, Ellis, Erath, Hood, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwall, Somervell, and Wise counties, as well as the Dallas County cities of Balch Springs, Cockrell Hill, Sachse, Seagoville, and Wilmer; and,

WHEREAS, NCT9-1-1 is a political subdivision of the State and carries out essential governmental functions related to the provisioning of emergency communications services; and,

WHEREAS, NCT9-1-1 is engaged in the planning, implementation, and maintenance of an emergency 9-1-1 system for more than 40 Public Safety Answering Points within its 9-1-1 service area; and,

WHEREAS, NCT9-1-1 desires to enter into a contract with Mission Critical Partners, LLC, to provide various Next Generation 9-1-1 related consulting services utilizing NCTCOG SHARE contract #2019-074; and,

WHEREAS, NCT9-1-1 has complied with State regulations regarding contract and procurement proceedings.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1. A contract between NCT9-1-1 and Mission Critical Partners, LLC, for Next Generation 9-1-1 related strategic consulting, in an amount not to exceed \$400,000 and for a term expiring December 31, 2024, be and is hereby approved.

Section 2. The Executive Director or designee is authorized execute agreements necessary to carry out this program, in the name of the North Central Texas Emergency Communications District.

Section 3. This resolution shall be in effect immediately upon adoption.

Hal Richards
North Central Texas Emergency Communications District
Judge, Kaufman County

I hereby certify that this Resolution was adopted by the Board of Managers of the North Central Texas Emergency Communications District on September 14, 2022.

N. Lane Akin
North Central Texas Emergency Communications District
Sheriff, Wise County



North Central Texas Emergency Communications District

Item # 2022-09-06

Meeting Date: September 14, 2022

Submitted By: Jason Smith
NCT9-1-1 Operations Manager

Item Title: Resolution Amending the NCT9-1-1 Emergency Communications Center (ECC)
Logging Reimbursement Policy

NCT9-1-1's ECCs may be eligible for reimbursement following the upgrade or purchase of a new logging function. A logging recorder is a device used by ECCs to record, store, and that is capable of playing back all communication media within the domain to which it is assigned. Media can include, but is not limited to: voice, radio, text, and network elements involved with routing a 9-1-1 call. Logging recorders should have the capability to simultaneously record from several sources. An established five-year schedule identifies ECCs which are eligible for reimbursement based on the age of the current logging function, reimbursement amount, and availability of funds. The number of current 9-1-1 positions within a ECC determines the reimbursement amount and ranges from \$15,000 to \$25,000.

The Board of Managers initially approved the ECC Logging Reimbursement policy at the December 2019 Board meeting. The following substantive changes are being presented for consideration:

1. In addition to the purchase of new logging recorders, upgrades and annual maintenance costs are now eligible for reimbursement.
2. If an ECC does a logger replacement, or upgrade outside of their eligible year, they can submit the required documentation during their eligible year as long it does not exceed five years since the replacement was made.
3. Addition of a section outlining the process for declining reimbursement during an ECC's designated year.

The Strategic Advisory Committee reviewed the amended policy at its August 2022 meeting and recommends it for adoption.

A draft amended NCT9-1-1 Emergency Communications Center Logging Reimbursement policy is attached for Board consideration (Attachment D).

Future changes to the above policy will require Board approval. In addition, procedures and guidelines will be maintained internally to guide staff on the details of program operation.

I will provide a brief presentation and be available to answer any questions at the Board meeting.



**RESOLUTION AMENDING THE NCT9-1-1 EMERGENCY COMMUNICATIONS CENTER (ECC)
LOGGING REIMBURSEMENT POLICY**

WHEREAS, the North Central Texas Emergency Communications District (NCT9-1-1) was created pursuant to Chapter 772, Subchapter H, of the Texas Health and Safety Code as amended by the 84th Legislature, through the passage of resolutions by County Commissioners Courts and City Councils within the NCT9-1-1 service area; and,

WHEREAS, the NCT9-1-1 service area consists of Collin, Ellis, Erath, Hood, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwall, Somervell, and Wise counties, as well as the Dallas County cities of Balch Springs, Cockrell Hill, Sachse, Seagoville, and Wilmer; and,

WHEREAS, NCT9-1-1 is a political subdivision of the State and carries out essential governmental functions related to the provisioning of emergency communications services; and,

WHEREAS, NCT9-1-1 is engaged in the planning, implementation, and maintenance of an emergency 9-1-1 system for more than 40 Emergency Communications Centers (ECC) within its 9-1-1 service area; and,

WHEREAS, ECCs may be eligible for reimbursement following the upgrade or purchase of a new logging function; and,

WHEREAS, the Board of Managers previously approved an Emergency Communications Center (ECC) Logging Reimbursement policy outlining the requirements to receive reimbursement for the purchase of logging devices; and,

WHEREAS, the language in that policy has been amended to include upgrades and maintenance to logger devices, allows for reimbursements to be made under some circumstances for purchases/upgrades made outside of an ECC's designated reimbursement year, and outlines the process for declining funding; and,

WHEREAS, the Strategic Advisory Committee reviewed the amended policy at its August 2022 meeting and recommends it for adoption; and,

WHEREAS, any subsequent changes to the approved policies will require Board approval.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1. The NCT9-1-1 Board of Managers hereby amends the NCT9-1-1 Policy on Emergency Communications Center (ECC) Logging Reimbursement as shown in Attachment D.

Section 2. This resolution shall be in effect immediately upon its adoption.

Hal Richards
North Central Texas Emergency Communications District
Judge, Kaufman County

I hereby certify that this Resolution was adopted by the Board of Managers of the North Central Texas Emergency Communications District on September 14, 2022.

N. Lane Akin
North Central Texas Emergency Communications District
Sheriff, Wise County



600 Six Flags Drive, Suite 226
Arlington, Texas 76005-5888
Phone: 817-704-2525
E-mail: 911OpsTeam@NCT911.org
In Partnership with the North Central Texas Council of Governments

POLICY NUMBER:
ADM 2.5

Policy Name: <u>Public Safety Answering Point (PSAP) Emergency Communications Center (ECC) Logging Reimbursement</u>	Description: The policy outlines logging reimbursement opportunities for <u>PSAPs/ECCs</u> .
Date of Approval: 12/05/2019	Revision History: v.1.0 10/25/2019 <u>v 1.1 08/16/2022</u>
Effective Date: 12/05/2019	Scheduled for Review:
Policy Topic: Logging Reimbursement	Administering Department: North Central Texas Emergency Communications District

POLICY STATEMENTS: PSAPs-ECCs may be eligible for reimbursement following the upgrade, ~~or~~ purchasing or maintenance of a new logging function. An established five-year schedule identifies PSAPs-ECCs who could receive reimbursement based on the age of the current logging function, reimbursement amount, and available funds. The number of current 9-1-1 positions determines the reimbursement amount:

- Two positions- \$15,000
- Three positions or more- \$25,000

Funds are only available to eligible ECCs during the dedicated fiscal year and only applies towards replacement, upgrades, and annual maintenance costs.

ACTIONS REQUIRED:

When an PSAP-ECC becomes eligible for reimbursement:

- I. The 9-1-1 Quality Assurance Coordinator (QAC) provides notification to PSAP-ECC Managers/Supervisors and is responsible for collecting all documentation associated with/including:
 - a. New purchase
 - Vendor quote
 - Invoices
 - Purchase orders
 - Proof of payment
 - Recipient of funds~~Canceled checks~~
 - b. Upgrade
 - Vendor quote
 - Invoices
 - Purchase orders
 - Proof of payment
 - Recipient of funds

c. Annual Maintenance

- Invoice
 - Proof of payment
 - Recipient of funds
- II. The QAC forwards supporting documents to the appropriate accounting staff for verification and approval.
- III. The QAC then notifies the PSAP-ECC once reimbursement has been approved and payment has been sent.
- IV. If an ECC does a logger replacement, or upgrade outside of their eligible year, they can submit the required documentation during their eligible year as long it does not exceed five (5) years- since the replacement was made.
- ECCs can only submit maintenance costs that are accrued during their dedicated fiscal year.

Undistributed Reimbursement

- I. If an ECC chooses not to seek reimbursement as it pertains to a replacement, upgrade, or maintenance cost, they must notify the QAC in writing.
- II. ECCs must notify the QAC of their intentions as soon as possible.
- III. ECCs that decline logger reimbursement are not eligible until the next five-year cycle.
- IV. Funds not utilized for logger reimbursement will be re-distributed to the district's general funds.

DEFINITIONS AND AUTHORIZATIONS:

RELATED POLICIES/RESOURCES:

INQUIRIES: Direct questions regarding this policy to 911OpsTeam@NCT911.org.

Approved

Executive Director

North Central Texas Emergency Communications District



FINANCIAL STATUS REPORT
FOR NINE MONTHS ENDING: JUNE 30, 2022

TOTAL RESOURCES AVAILABLE:					
Resources Category	Revenue Budget	9 Mo Target	Actual Revenue	Amount Over / (Under) Target	% of Target Earned
Revenue (1)					
Wireless	9,060,000	6,795,000	7,086,603	291,603	104%
Landline	1,550,000	1,162,500	1,246,936	84,436	107%
Other Revenue	7,000	5,250	11,862	6,612	226%
Subtotal Revenue	10,617,000	7,962,750	8,345,401	382,651	105%
Capital Replacement Fund Balance	597,250	447,938	-	(447,938)	0%
Total Resources Available	11,214,250	8,410,688	8,345,401	(65,287)	99%
EXPENDITURES:					
NCT9-1-1 STAFF COSTS (2)					
Category	Budget	9 Mo Target	Actual Expenditures	Amount Over / (Under) Target	% of Target Expended
Salaries	2,338,980	1,754,235	1,515,657	(238,578)	86%
Fringe Benefits	1,141,420	856,065	739,706	(116,359)	86%
NCTCOG Indirect Costs	616,030	462,023	399,199	(62,824)	86%
Occupancy	417,000	312,750	312,716	(34)	100%
NCTCOG Information Technology	176,000	132,000	131,633	(367)	100%
Travel	56,300	42,225	20,582	(21,643)	49%
Other Staff Costs	311,040	233,280	168,961	(64,319)	72%
Total NCT9-1-1 Staff Costs	5,056,770	3,792,578	3,288,453	(504,125)	87%
FISCAL AGENT SUPPORT					
Category	Budget	9 Mo Target	Actual Expenditures	Amount Over / (Under) Target	% of Target Expended
Administrative, Legal Support	329,830	247,373	228,489	(18,884)	92%
COST OF OPERATIONS (3)					
Categories	Budget	9 Mo Target	Actual Expenditures	Amount Over / (Under) Target	% of Target Expended
9-1-1 Network	2,661,650	1,996,238	2,131,793	135,555	107%
Equipment and Software Supp & Maint	948,830	711,623	685,154	(26,469)	96%
Contract Services	317,990	238,493	207,328	(31,165)	87%
Communications (Public Education)	70,000	52,500	15,765	(36,735)	30%
ECC Training	58,050	43,538	17,228	(26,310)	40%
Telecom	583,880	437,910	445,909	7,999	102%
County Reimbursements	590,000	442,500	365,006	(77,494)	82%
Total Cost of Operations	5,230,400	3,922,802	3,868,183	(54,619)	99%
CAPITAL EXPENDITURES (4)					
Category	Budget	9 Mo Target	Actual Expenditures	Amount Over / (Under) Target	% of Target Expended
Capital Expenditures	597,250	447,938	123,025	(324,913)	27%
TOTAL EXPENDITURES					
Category	Budget	9 Mo Target	Actual Expenditures	Amount Over / (Under) Target	% of Target Expended
Totals	11,214,250	8,410,691	7,508,150	(902,541)	89%

NOTES		
Reference No.	Category	Description
1	Wireless / Landline Revenue	<p>Total Revenues are 105% of the 9 month target</p> <p>A. Wireless revenue - (104% of target)</p> <p>1. Wireless receipts to the Comptroller has increased 4% this fiscal year compared to the same time period last year.</p> <p>2. NCT9-1-1 percentage of state wireless revenue increased 3% beginning in January 2021</p> <p>B. Landline revenue - (107% of target)</p> <p>Landline budget was set at 6% less than a projected final of fiscal year 2021. Actual revenue was only 1% less than fiscal year 2021 quarterly average.</p> <p>C. Local revenue - (226% of target). \$6,000 of interest earned in FY 2022. Due to nominal amounts, this was not included in the FY 2022 budget.</p>
2	NCT9-1-1 Staff Costs	<p>Costs total 87% of the 9 month target</p> <p>A. Salaries, fringe benefits and indirect costs-(86% of target)- below target primarily due to equivalent of two (2) unfilled full-time positions and three (3) part-time intern positions.</p> <p>B. Travel-(49% of target)- Increased travel in the 3rd quarter. This should continue in the 4th quarter, however travel should still be well below target at year end.</p> <p>C. Other staff costs-(72% of target) - Primarily due to payment to reimburse 9-1-1 Alliance will not be paid until the end of the fiscal year.</p>

Quality Assurance / Monitoring

Number of Monitoring Visits: 25		Number of Findings: 0
Somervell County Sheriff's Office	Wilmer Police Department	
Hood County Sheriff's Office	Hood County Sheriff's Office	
Johnson County Sheriff's Office	Somervell County Sheriff's Office	
Cleburne Police Department	Johnson County Sheriff's Office	
Johnson County Emergency Services District	Cleburne Police Department	
Prosper Police Department	Johnson County ESD	
Frisco Police Department		
Allen Police Department		
McKinney Police Department		
Collin County Sheriff's Office		
Murphy Police Department		
Sachse Police Department		
Forney Police Department		
Terrell Police Department		
Kaufman County Sheriff's Office		
Seagoville Police Department		
Balch Springs Police Department		
Cockrell Hill Police Department		
Wilmer Police Department		

Communication

Facebook

<u>Dates</u>	<u>Total Reach</u>	<u>Total Impression</u>	<u>Engaged Users</u>	<u>Negative Feedback</u>
May-22	18579	9043	643	0
Jun-22	8434	3359	359	0
Jul-22	11487	3469	1072	0

Twitter

<u>Date</u>	<u>Impressions</u>	<u>Engagements</u>	<u>Retweets</u>	<u>Likes</u>	<u>Clicks</u>	<u>Expands</u>	<u>Followers</u>
May-22	1737	232	14	22	43	11	1
Jun-22	1745	111	14	16	26	20	0
Jul-22	1446	202	9	40	27	12	0

Website

Home Page Views

<u>Date</u>	<u>Unique View</u>	<u>Users</u>	<u>Bounce Rate</u>	<u>Time on Page</u>
May-22	4944	4784	1	0
Jun-22	4701	4580	1	0
Jul-22	4280	4192	1	0

Sources Overview

<u>Date</u>	<u>Direct Traffic</u>	<u>Referrals</u>	<u>Social Media</u>	<u>Search</u>	<u>Email</u>	<u>Paid</u>
May-22	589	166	359	3496	324	2
Jun-22	966	147	202	3258	320	3
Jul-22	483	146	125	3399	56	0

Public Education Supplies

<u>Date</u>	<u>Total Supplies Disbursed</u>
May-22	13100
Jun-22	3715
Jul-22	6332

Public Education Events

<u>Name of Event</u>	<u>Agency</u>
Senior Center event for Project H.O.M.E	Allen Police Department
Career Day for Crime Scene	Weatherford Police Department
Boys and Girls Club First Responder event	Corsicana Police Department
Careers on Wheels event	Decatur Police Department
Founders Day	Rockwall Police Department
4th of July Parade and Events Following	Erath County Sheriff's Office
Mayors Back to School Bash	North Central Texas Council of Government
Teen Safety Symposium	Dallas Police Department

Service Interruptions

Number of Outages: 0

GIS Errors

<u>County</u>	<u>May-22</u>	<u>Jun-22</u>	<u>Jul-22</u>
Collin	47	24	12
Ellis	24	22	27
Erath	2	18	14
Hood	42	110	77
Hunt	3	2	0
Johnson	41	285	1
Kaufman	39	122	157
Navarro	6	12	34
Palo Pinto	23	5	6
Parker	66	40	121
Rockwall	26	35	13
Somervell	3	13	2
Wise	72	47	52



PSAP Call Volume Statistics

PSAP	May-22	Jun-22	Jul-22
ALLEN POLICE DEPARTMENT	3307	3203	3410
BALCH SPRINGS POLICE DEPARTMENT	2923	2762	2706
BRIDGEPORT POLICE DEPARTMENT	237	219	253
CLEBURNE POLICE DEPARTMENT	1520	1426	1492
COCKRELL HILL POLICE DEPARTMENT	63	77	61
COLLIN COUNTY SHERIFF'S DEPARTMENT	6561	5928	6344
COMMERCE POLICE DEPARTMENT	278	286	341
CORSICANA POLICE DEPARTMENT	1343	1294	1341
DECATUR POLICE DEPARTMENT	427	456	478
ERATH COUNTY SHERIFF'S DEPARTMENT	832	841	886
FORNEY POLICE DEPARTMENT	1328	1195	1397
FRISCO POLICE DEPARTMENT	6543	6284	6671
GREENVILLE POLICE DEPARTMENT	2097	2018	2108
HOOD COUNTY SHERIFF'S DEPARTMENT	2606	2532	2799
HUNT COUNTY SHERIFF'S DEPARTMENT	3408	3021	3777
JOHNSON COUNTY ESD	1339	1344	1468
JOHNSON COUNTY SHERIFF'S DEPARTMENT	4478	4254	4647
KRCC	5608	5238	6034
LIFECARE EMS	848	847	840
MCKINNEY POLICE DEPARTMENT	6368	6020	6161
MINERAL WELLS POLICE DEPARTMENT	816	756	914
MURPHY POLICE DEPARTMENT	368	342	371
NAVARRO COUNTY SHERIFF'S DEPARTMENT	2215	2275	2391
NCT9-1-1 TRAINING CENTER A	26	40	43
NCT9-1-1 TRAINING CENTER B	19	38	39
NORTH ELLIS EMERGENCY DISPATCH	2213	1979	2331
PALO PINTO COUNTY SHERIFFS DEPARTMENT	961	1175	1194
PARKER COUNTY SHERIFF'S DEPARTMENT	4074	4115	4236
PROSPER POLICE DEPARTMENT	1145	1082	973
ROCKWALL COUNTY SHERIFF'S DEPARTMENT	2039	1744	1817
ROCKWALL POLICE DEPARTMENT	2463	2480	2632
SACHSE POLICE DEPARTMENT	724	742	771
SEAGOVILLE POLICE DEPARTMENT	1730	1487	1651
SOMERVELL COUNTY SHERIFF'S DEPARTMENT	429	415	513
SPRINGTOWN POLICE DEPARTMENT	128	170	146
STEPHENVILLE POLICE DEPARTMENT	643	578	593
TERRELL POLICE DEPARTMENT	1530	1533	1656
WAXAHACHIE POLICE DEPARTMENT	2099	2000	2234
WEATHERFORD POLICE DEPARTMENT	1450	1355	1386
WILMER POLICE DEPARTMENT	458	387	499
WISE COUNTY SHERIFF'S DEPARTMENT	2321	2109	2667

Officer	Last Name	First Name	Entity	Appointee Title	9/2/2021	12/2/2021	3/8/2022	6/8/2022
President	Richards	Hal	Kaufman County	Judge	P	A	P	P
VP	Berthiaume	Jennifer	City of Murphy	Mayor Pro Tem	P	P	P	P
Secretary	Akin	N. Lane	Wise County	Sheriff	P	P	P	P
	VACANT	VACANT	Dallas Co. Cities	Mayor Pro Tem	A	A	Vacant	Vacant
	Chambers	Danny	Somervell County	Judge	P	P	P	A
	Coates	Matt	Erath County	Sheriff	A	A	A	A
	Cornette	Dave	City of Allen	Councilmember	N/A	N/A	N/A	N/A
	Crews	Kerry	Hunt County	Judge (JOP)	A	A	A	P
	Deeds	Roger	Hood County	Sheriff	P	P	A	P
	VACANT	VACANT	Parker County	Judge	A	A	Vacant	Vacant
	Feltus	Gere	City of McKinney	Councilmember	N/A	N/A	A	P
	Garrett	Terry	Rockwall County	Sheriff	A	P	P	P
	Hale	Darrell	Collin County	Commissioner	A	P	A	P
	Hodges	Jeff	City of Prosper	Councilmember	A	P	P	P
	Long	Shane	Palo Pinto County	Judge	A	A	A	A
	Perry	Eddie	Navarro County	Commissioner	A	A	A	A
	VACANT	VACANT	City of Frisco	Councilmember	Vacant	Vacant	Vacant	Vacant
	Stinson	Randy	Ellis County	Commissioner	P	P	P	A
	White	Mike	Johnson County	Commissioner	P	P	A	P