



Capital Area Emergency Communications District Strategic Plan

FINAL

**APPROVED BY BOARD OF MANAGERS ON APRIL 12, 2017
CAPITAL AREA EMERGENCY COMMUNICATIONS DISTRICT**



MissionCriticalPartners

502 N. Carroll Avenue, Suite 120 | Southlake, TX 76092 | 888.8.MCP.911 or 888.862.7911 | www.MCP911.com



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EXECUTIVE SUMMARY

On September 1, 2013, the Capital Area Emergency Communications District (CAECD or District) was created by the adoption of resolutions; the adoption brought together jurisdictions in the ten-county region to work collaboratively in order to ensure that the residents have access to emergency communications. The 28-member Capital Area Council of Governments (CAPCOG) Executive Committee, which additionally serves as the CAECD Board of Managers, saw the need for a strategic plan and tasked the Strategic Advisory Committee to develop such a plan. The CAECD's strategic plan is intended to guide the District for the next three to five years and provide a framework for program development, future planning and funding.

As the strategic plan is developed and followed, the CAECD continues working to provide the best services possible to the residents, while taking into account new legislation that directly affects 9-1-1 and other emergency communication services.

As the basis of the strategic plan, the CAECD Strategic Advisory Committee has identified the following as its guiding principles:

- CAECD is committed to regional partnerships and collaboration to plan for and implement emergency communication solutions for the greater good for all in the region.
- CAECD is dedicated to innovative leadership, training, and understanding that ensures seamless quality service of safe and reliable emergency communications.
- CAECD values the safety of the public and our emergency responder community and is committed to the delivery of quality training for telecommunicators and responders.

Additionally, the CAECD has developed five core functions that provide the capabilities needed to accomplish the mission. Those functions include:

- 9-1-1 infrastructure
- 9-1-1 operations
- Training and outreach
- Voice and data interoperability
- Support systems

Within each functional area, the CAECD has developed a four-level matrix to help keep projects in alignment with the District's mission, vision, and guiding principles. The matrix gives examples of projects for each of the four levels, with details regarding their level of importance.

As the District navigates the next few years, it has identified projects that are currently in development, as well as those that are planned for the next two to five years. The development of a strategic map will help the CAECD further develop its plan for the future, as it works to implement and successfully complete the projects.



1. INTRODUCTION

The strategic plan is designed to establish a framework to advance 9-1-1 technologies and related emergency communication services in the Capital Area Emergency Communications District (CAECD or District). The framework established includes processes to:

- Identify and prioritize emergency communications projects that promote and support regional cooperation and response
- Promote education, training, and public outreach
- Foster collaboration and stakeholder feedback
- Establish achievable milestones
- Establish metrics to track success of programs and their alignment with the District's mission, vision and guiding principles.

1.1. BACKGROUND

On September 1, 2013, CAECD was created pursuant to Texas Health and Safety Code, Chapter 772, Subchapter G by the adoption of resolutions by Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, and Williamson counties and the City of Austin. The CAECD is a regional emergency communications district serving local governments in State Planning Region 12, and has boundaries coterminous with the Capital Area Council of Governments (CAPCOG) as created under Texas Local Government Code, Chapter 391.

1.2. ORGANIZATIONAL OVERSIGHT

The Capital Area Council of Governments (CAPCOG) Executive Committee is comprised of 28 members; in addition to this role, members also comprise the CAECD Board of Managers. They are responsible for determining funding, adopting a budget, setting policy, appointing an advisory committee, and staffing the district.

The CAECD Strategic Advisory Committee (SAC), is a standing committee of the CAECD Board of Managers that consists of 16 members from the jurisdictions in the CAECD; there are 15 full members and one liaison. Membership is based on population of the participating counties in the district. The SAC is charged with facilitating long-range technology planning to carry out regional emergency communication activities. These activities include:

- Systems and network architecture
- PSAP operations
- Training and outreach
- Integration of emergency communication systems including radio systems, geographic information systems (GIS), and other related programs determined to align with the CAECD mission



Further, the SAC is charged with developing this strategic plan, recommending service fee levels to fulfill strategic goals, standing up ad-hoc technical workgroups and recommending uses of CAECD funds.

1.3. ACCOMPLISHMENTS OF THE DISTRICT

The CAECD recognizes the need to provide equal access to the highest level of 9-1-1 service available. Prior to establishing this strategic plan, the District has successfully or substantially completed several projects that support its mission and vision:

- Reinstated and expanded training classes that had been eliminated due to reductions in state funding prior to becoming a district. Since becoming a district, classes have grown from 13 unique courses serving 1,470 students in FY 2013 to more than 22 courses serving 1,882 students in FY 2016.
- Completed district-wide implementation of a Next Generation 9-1-1 (NG9-1-1)-compatible, Internet Protocol (IP)-based system.
- Added a third host system to the 9-1-1 network and reconfigured the distribution of supported public safety answering points (PSAPs) to improve system resiliency and reliability.
- Deployed a testing-and-training system to enable full testing of new software releases, features and configurations prior to implementing those services at a live PSAP.
- Activated services of a second translation service provider to supply redundancy and improve service for callers whose primary language is not English.
- Provided a national quality assurance (QA) service to assist PSAP management in the evaluation of employee performance for those PSAPs that utilize pre-arrival dispatch protocols.
- Supported the cities of Austin and San Antonio to enable their 9-1-1 centers to back each other up in the event of network failure or other outages.
- Planned and began implementation of text-to-9-1-1 service throughout the district.
- Funded and started construction of a district-wide, fiber-based broadband backup network for routing 9-1-1 calls.

1.4. STRATEGIC PLAN METHODOLOGY

The CAECD's strategic plan is intended to guide the District for the next three to five years and provide a framework for program development, future planning and funding. The strategic plan will be updated annually and the framework will be utilized for yearly project planning and budgeting.



2. CAPITAL AREA EMERGENCY COMMUNICATIONS DISTRICT

2.1. DISTRICT VISION

To provide exceptional, seamless emergency communications that will get the right resource to the right place at the right time, while assisting with/promoting the safety of the public and emergency responders.

2.2. DISTRICT MISSION

To provide regional emergency communications for the public and responders by addressing infrastructure, operations, training, outreach, and support systems.

2.3. GUIDING PRINCIPLES

The CAECD strives to achieve its vision and mission by using guiding principles in its day-to-day decisions. To best achieve the CAECD's goals, the Strategic Planning Committee has identified the following as the District's guiding principles:

- CAECD is committed to regional partnerships and collaboration to plan for and implement emergency communication solutions for the greater good for all in the region.
- CAECD is dedicated to innovative leadership, training, and understanding that ensures seamless quality service of safe and reliable emergency communications.
- CAECD values the safety of the public and our emergency responder community and is committed to the delivery of quality training for telecommunicators and responders.

2.4. CORE FUNCTIONS MATRIX

The CAECD has identified a methodology to guide future planning and budgeting.

The Core Functions Matrix tool, in combination with the District's guiding principles and mission statement, will provide a means for the SAC, in cooperation with CAECD staff, to determine funding for future proposed work and make recommendations to the Board of Managers

The Core Functions Matrix identifies the CAECD's core functions, along the top axis row, and the four priority levels along the left axis column. Future proposed procurements or projects that align with the guiding principles and mission statement will be added within the cell under the appropriate core function and identified priority. All proposed procurements and projects must provide regional service in order to be considered valid and in alignment. Using the matrix, CAECD will be able to base funding decisions on the higher-priority projects.



Table 1: Core Functions Matrix, Objectives and Priorities

Mission: To provide regional emergency communications for the public and responders by addressing infrastructure, operations, training, outreach and support systems.					
CORE FUNCTION MATRIX, OBJECTIVES AND PRIORITIES					
Priority	9-1-1 Infrastructure	9-1-1 Operations	Training/Outreach	Voice/Data Interoperability	Support Systems
Level 1 Mandatory and/or required to meet the mission	EXAMPLE – District-wide primary and secondary voice and data communications connectivity for delivery of public calls for 9-1-1 emergency assistance	EXAMPLE – District-wide services and equipment for 9-1-1 call delivery, processing, routing and reporting. This includes GIS support, language translation, and other services	EXAMPLE – District-wide provisioning of mandatory state classes for licensing, and continuing education of telecommunicators	EXAMPLE – District-wide voice radio communications across disparate APCO ¹ Project 25 (P25) radio systems (e.g., ISSI ² between GATRRS ³ and LCRA; ⁴ infrastructure to sustain connectivity between radio systems)	
Level 2 <ul style="list-style-type: none"> Based on industry standards Best practice Not legally mandated 	EXAMPLE – Redundant connectivity to adjacent NG9-1-1 systems	EXAMPLE – Recording of 9-1-1 lines	EXAMPLE – Public education and outreach on 9-1-1 services, including information related to approved other emergency communications systems or services		EXAMPLE – Other emergency-related communications systems or services
Level 3 Enhances regional service		EXAMPLE -Pre-arrival dispatch protocols; recording of administrative phone lines used for emergency call disaster routing			EXAMPLE –Data sharing connectivity to enhance emergency communications between agencies (e.g., CAD-to-CAD network connectivity)
Level 4 Optional but strategic capabilities	EXAMPLE – Additional network redundancy (e.g., a third backup capability)			EXAMPLE – Mobile assets to provide regional response across the district	

¹ Association of Public-Safety Communications Officials

² Inter-RF subsystem interface

³ Greater Austin/Travis Regional Radio System

⁴ Lower Colorado River Authority



2.5. CORE FUNCTION MATRIX METHODOLOGY

The SAC will establish five Subject Matter Expert (SME) workgroups each comprising five members. Each SME workgroup will include members whose training and experience align with the core function assigned to that workgroup. Workgroups will develop project recommendations based on Priority Levels 1-4 and in accordance with the short- and long-term components of the strategic plan. Workgroups will complete a process worksheet for each project. The results of the process worksheet will help to document project details and prioritize projects that fall within the same Core Function and Priority category. The SME workgroup project selection process will be conducted each January with opportunity for staff input in February before being forwarded to the SAC at the March meeting. The SAC will recommend to the Board of Managers based on the two- and five-year goals, as well as projects that should be considered for the upcoming budget year. Workgroup and SAC members will be liaisons with the jurisdictions they represent, seeking input and gathering information on current and future needs related to the core functions. All proposed projects not originating in the workgroups must be documented using the process worksheet and will be reviewed and vetted by the workgroups.

The SAC shall receive from the workgroups a compilation of recommended projects no later than March 15 of each year for review at the regular March meeting and subsequent meetings as necessary. The SAC will make recommendations for projects to be budgeted no later than May 15 of each year.

3. PROGRAM AREA GOALS AND OBJECTIVES

3.1. 9-1-1 INFRASTRUCTURE

3.1.1. Current State

3.1.1.1. Network

- The District uses an AT&T leased AVPN/MLTS⁵ network to connect 31 PSAPs at 27 locations, as the primary network service.
- During FY 2016 the District contracted with AT&T for a dedicated fiber broadband network to provide a separate path to 23 of the 27 PSAP locations. Installation of this network is scheduled to take three years.

3.1.1.2. Equipment

- All PSAPs used the same 9-1-1 call-handling equipment. The district-wide system provides comprehensive call-taking capabilities via four networked, geographically diverse NG9-1-1-ready host systems.
- Integrated mapping support is provided to all PSAPs.

3.1.2. Years 2-3

⁵ AT&T virtual private network/multiline telephone system



3.1.2.1. Network

3.1.2.2. Equipment

3.1.3. Years 4-5

3.1.3.1. Network

3.1.3.2. Equipment

3.2. 9-1-1 OPERATIONS

3.2.1. Current State

The District provides a wide range of support services to the PSAPs including:

- All maintenance services for the call-handling equipment and District-provided mapping services.
- Pre-arrival dispatch protocol tools and QA services.
- Language translation services.
- Annual updating of aerial mapping images.

3.2.2. Years 2-3

3.2.2.1. Quality Assurance

3.2.2.2. Mapping

3.2.3. Years 4-5

3.2.3.1. Quality Assurance

3.2.3.2. Mapping

3.3. TRAINING AND OUTREACH

3.3.1. Current State

The District provides regularly scheduled classes including those required by the Texas Commission on Law Enforcement for Telecommunicator licensing and continuing education. More than 20 topics are included in the training program and classes are conducted at various locations throughout the district,



are scheduled at “off hours” to enable attendance for personnel working shifts. The District also provides agencies with a variety of educational material for use in 9-1-1 outreach efforts.

3.3.2. Years 2-3

3.3.3. Years 4-5

3.4. VOICE AND DATA INTEROPERABILITY

3.4.1. Current State

The District has funded an ISSI to improve radio interoperability between the two P25 radio systems in use by district agencies.

3.4.2. Years 2-3

3.4.3. Years 4-5

3.5. SUPPORT SYSTEM

3.5.1. Current State

The District provides funding for operation of the Regional Notification System and the WebEOC program, both operated by the CAPCOG Homeland Security Division.

3.5.2. Years 2-3

3.5.3. Years 4-5

4. PROGRESS TRACKING

4.1. STRATEGIC MAP

Development of a strategic map will provide the method that the CAECD will use to track and monitor progress of the adopted projects, their alignment with the guiding principles, associated budget information, timeline for completion and the current status of project completion. Using this document (see Appendix A below), the CAECD will update project status on a semi-annual basis.



Appendix A: Strategic Map Sample

The CAECD strategic map is the method used to track and monitor progress of the adopted projects, their alignment with the guiding principles, associated budget information, timeline for completion and the current status of project completion. This status is to be updated semi-annually in order to provide updated information regarding achievement of the organization's goals.

HOW TO USE THE STRATEGIC MAP

Column B, PROJECT NAME/DESCRIPTION — Once the projects have been included in the current matrix, they can be copied to column B for each of the functional areas. There will be as many lines under each core function as there are projects outlined in the strategic plan.

Column C, PRIORITY—This column identifies the level of priority assigned to the projects from the core function matrix.

Column D, GUIDING PRINCIPLE ALIGNMENT—This column identifies the guiding principle that this project addresses and supports. It can be expressed by either referring to the guiding principle number, such as 2.3.1, 2.3.2, or 2.3.3, or by spelling out the guiding principle.

Column E, ASSIGNMENT—This column identifies the project manager.

Column F, BUDGET APPROVED—Budgeted funds associated with this strategy should be recorded here. This amount should correlate with the related line item in the CAECD annual budget.

Column G, % BUDGET EXPENDED—Entries in this column will be updated semi-annually.

Column H, TIMELINE—This column can be completed by using timeline terms from the strategic plan—such as current state, 2-3 years, and 4-5 years—for each project.

Column I, % STRATEGY COMPLETE—Entries in this column will be updated semi-annually.

Column J, PROJECT STATUS—A brief narrative on the status of the project is entered in this column.



Table 1: Strategic Map Sample

STRATEGIC MAP									
	Project Name	Priority	Guiding Principle Alignment	Assignment	Budget Approved	% Budget Expended	Timeline	% Strategy Complete	Project Status
9-1-1 Infrastructure									
9-1-1 Operations									
Training and Outreach									
ice/Data Interoperabil									
Support Systems									