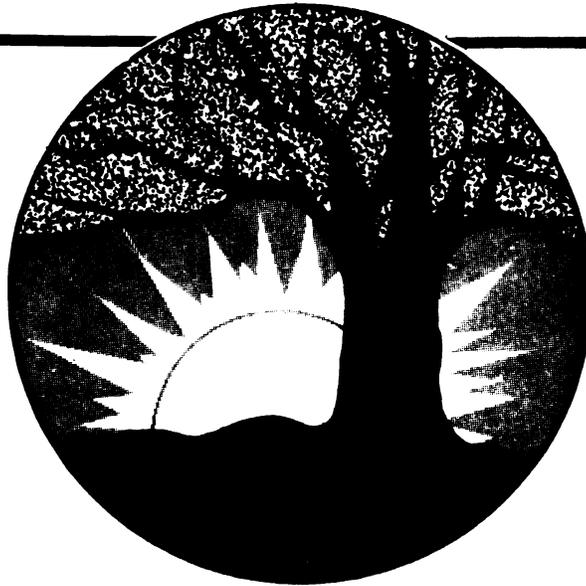


PERFORMANCE AUDIT

Emergency Communications Board
September 2012



Justin P. Wilson
Comptroller of the Treasury



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Comptroller of the Treasury
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September 18, 2012

The Honorable Ron Ramsey
Speaker of the Senate
The Honorable Beth Harwell
Speaker of the House of Representatives
The Honorable Mike Bell, Chair
Senate Committee on Government Operations
The Honorable Jim Cobb, Chair
House Committee on Government Operations
and
Members of the General Assembly
State Capitol
Nashville, Tennessee 37243

Ladies and Gentlemen:

Transmitted herewith is the performance audit of the Emergency Communications Board. This audit was conducted pursuant to the requirements of Section 4-29-111, *Tennessee Code Annotated*, the Tennessee Governmental Entity Review Law.

This report is intended to aid the Joint Government Operations Committee in its review to determine whether the Emergency Communications Board should be continued, restructured, or terminated.

Sincerely,

Arthur A. Hayes, Jr., CPA
Director

AAH/dww
12-071

State of Tennessee

A u d i t H i g h l i g h t s

Comptroller of the Treasury

Division of State Audit

Performance Audit
Emergency Communications Board
September 2012

AUDIT OBJECTIVES

The objectives of the audit were to determine the functions and capabilities of Next Generation 911; to assess the impact that Next Generation 911 will have on the 911 process; to evaluate the effectiveness of the Emergency Communications Districts; to follow-up on the prior audit finding on weaknesses in the emergency communication services in Tennessee and to follow-up on reports released by the Tennessee Advisory Commission on Intergovernmental Relations as a result of the prior performance audit; and to compare Tennessee to other states that are implementing Next Generation 911.

OBSERVATION AND COMMENTS

The audit report contains no findings but discusses the following issue: while there is a lack of uniformity with the E-911 process at each of the emergency communications districts, the implementation of Next Generation 911 (NG 911) will help to streamline E-911 and create a more unified process across the state (page 5).

Performance Audit Emergency Communications Board

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Performance Audit Emergency Communications Board

INTRODUCTION

PURPOSE AND AUTHORITY FOR THE AUDIT

This performance audit of the Emergency Communications Board was conducted pursuant to the Tennessee Governmental Entity Review Law, *Tennessee Code Annotated*, Title 4, Chapter 29. Under Section 4-29-234, the Emergency Communications Board is scheduled to terminate June 30, 2013. The Comptroller of the Treasury is authorized under Section 4-29-111 to conduct a limited program review audit of the agency and to report to the Joint Government Operations Committee of the General Assembly. The audit is intended to aid the committee in determining whether the Emergency Communications Board should be continued, restructured, or terminated.

OBJECTIVES OF THE AUDIT

The objectives of the audit were

1. to determine the functions and capabilities of Next Generation 911;
2. to assess the impact that Next Generation 911 will have on the 911 process;
3. to evaluate the effectiveness of the Emergency Communications Districts;
4. to follow up on the prior audit finding on weaknesses in the emergency communication services in Tennessee and to follow up on reports released by the Tennessee Advisory Commission on Intergovernmental Relations as a result of the prior performance audit; and
5. to compare Tennessee to other states that are implementing Next Generation 911.

SCOPE AND METHODOLOGY OF THE AUDIT

The activities of Emergency Communications Board were reviewed for the period January 2010 to July 2012. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a

reasonable basis for our findings and conclusions based on our audit objectives. Methods used included

1. review of applicable legislation and policies and procedures;
2. review of prior audit reports and documentation;
3. examination of the entity's records, reports, and information summaries;
4. interviews with commission staff and emergency communications district directors; and
5. interviews with other states.

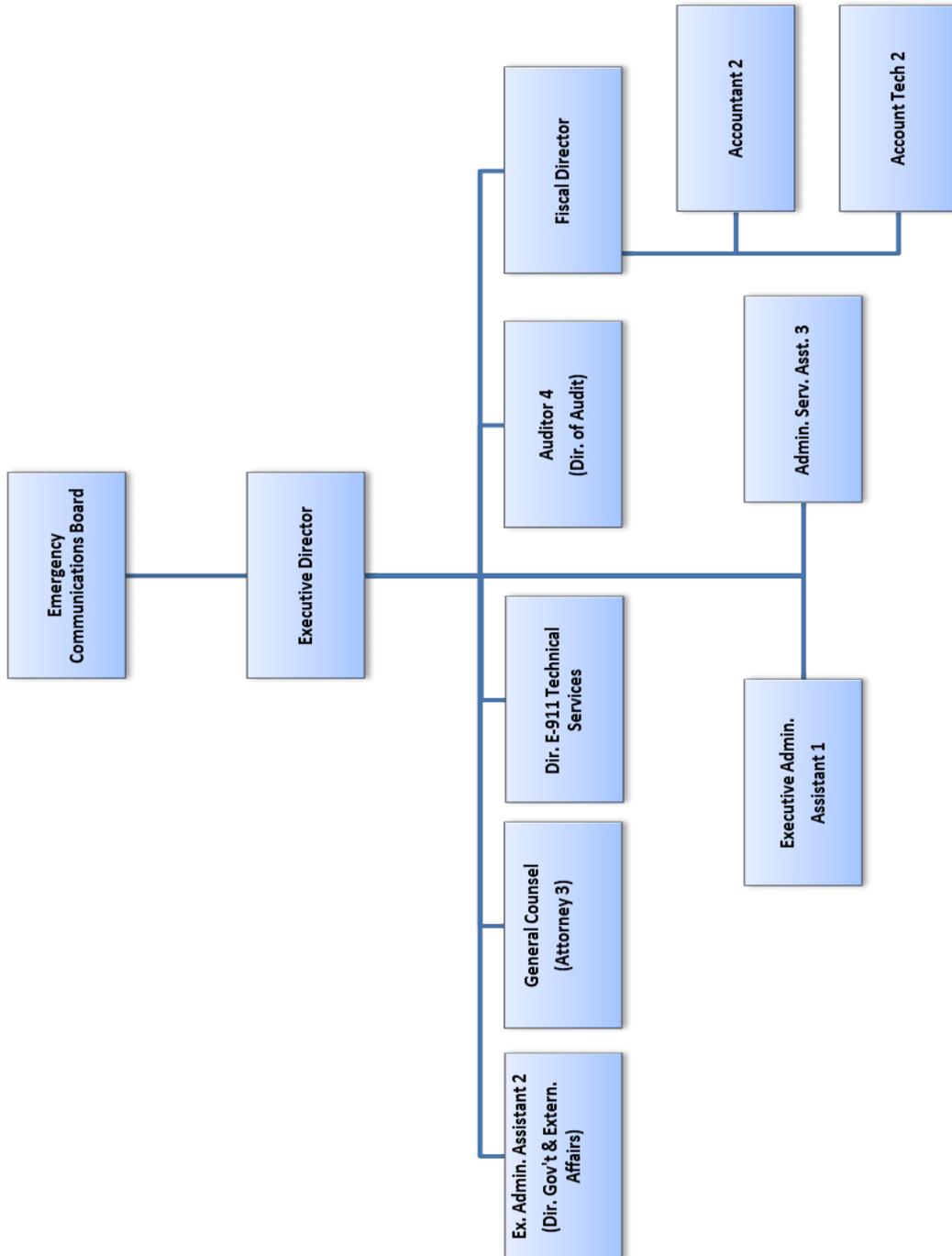
The Comptroller of the Treasury or the Comptroller's designee is a member of the Emergency Communications Board. During the audit, the Comptroller's designee served on the board. We do not believe the Comptroller's designee's service on this board affected our ability to conduct an independent audit.

HISTORY AND STATUTORY RESPONSIBILITIES

The Emergency Communications Board is a self-funded, nine-member agency created in the Department of Commerce and Insurance for the purpose of assisting emergency communications district boards of directors in the area of management, operations, and accountability, and establishing emergency communications for all citizens of the state. The board is funded through a monthly emergency telephone service charge on users and subscribers on non-wire line communications services. By statute, the board oversees finances and operations of the state's 100 emergency communications districts, which are statutory municipalities that administer or facilitate local E-911 call taking and/or dispatching services across the state.

The board is composed of nine members: one member, appointed by the Governor, who has no connection to emergency communications districts and does not fulfill any other requirements for appointment to the board; the Comptroller of the Treasury or the Comptroller's designee; one representative of county government, appointed by the Governor from a list of three nominees submitted by the Tennessee County Services Association; one representative of city government, appointed by the Governor from a list of three nominees submitted by the Tennessee Municipal League; and five members, appointed by the Governor, who are either current directors of emergency communications districts or current members of emergency communications district boards of directors at the time of their appointment. Members are appointed to four-year terms, and the board is required to meet at least quarterly and at the call of the chair. (See organization chart on the following page.) See Appendix 1 for a breakdown of department staff and board members by job title, gender, and ethnicity.

**Emergency Communications Board
Organization Chart
July 1, 2012**



The Emergency Communications Board's major responsibilities are to implement wireless 911 service across the state according to the Orders of the Federal Communications Commission; assist emergency communications district boards of directors in the areas of management, operations, and accountability; adjust the emergency telephone service charge on landlines in emergency communications districts; oversee the finances of the state's 100 local emergency communications districts, which are statutory municipalities; establish technical operating standards for all E-911 districts; act as the deciding agency between local governmental entities concerning E-911 service and emergency communications; supervise the operations of a "financially distressed" emergency communications district; provide technical assistance to emergency communications districts; establish training and course of study standards for all 911 dispatchers and call takers receiving an E-911 call from the public; and provide grants for operating and capital expenditures for basic or enhanced 911 service and wireless enhanced 911 service to assist emergency communications districts.

The Emergency Communications Board also provides cost recovery to emergency communications districts, telecommunications carriers, and E-911 service providers for costs associated with implementing, maintaining, and advancing wireless E-911 service. Call taking and dispatch E-911 operations throughout the state are conducted by, or are under the authority of, local emergency communications districts. These local districts are financially supported primarily by monthly fees placed on wire line (landline) telephone service but also through a combination of dispatch fees for services to local governments, reimbursements and grants from the state board, and the statutory remittance from state board wireless fee collections.

REVENUES AND EXPENDITURES

According to the Fiscal Year 2012-2013 Budget, the Emergency Communications Board's expenditures for the year ended June 30, 2011, totaled \$47.6 million—\$47.4 million from state appropriations and \$163,400 from other revenue sources. Estimated expenditures for the year ended June 30, 2012, are \$75.6 million—\$61.1 million from state appropriations, \$1.5 million from the federal government, and \$13,018,900 from other revenue sources. The state appropriations that the board receives solely consist of the 911 service charge on non-wire line telecommunications services.

OBSERVATION AND COMMENTS

The topics discussed below did not warrant a finding but are included in this report because of their effect on the operations of the Emergency Communications Board and on the citizens of Tennessee.

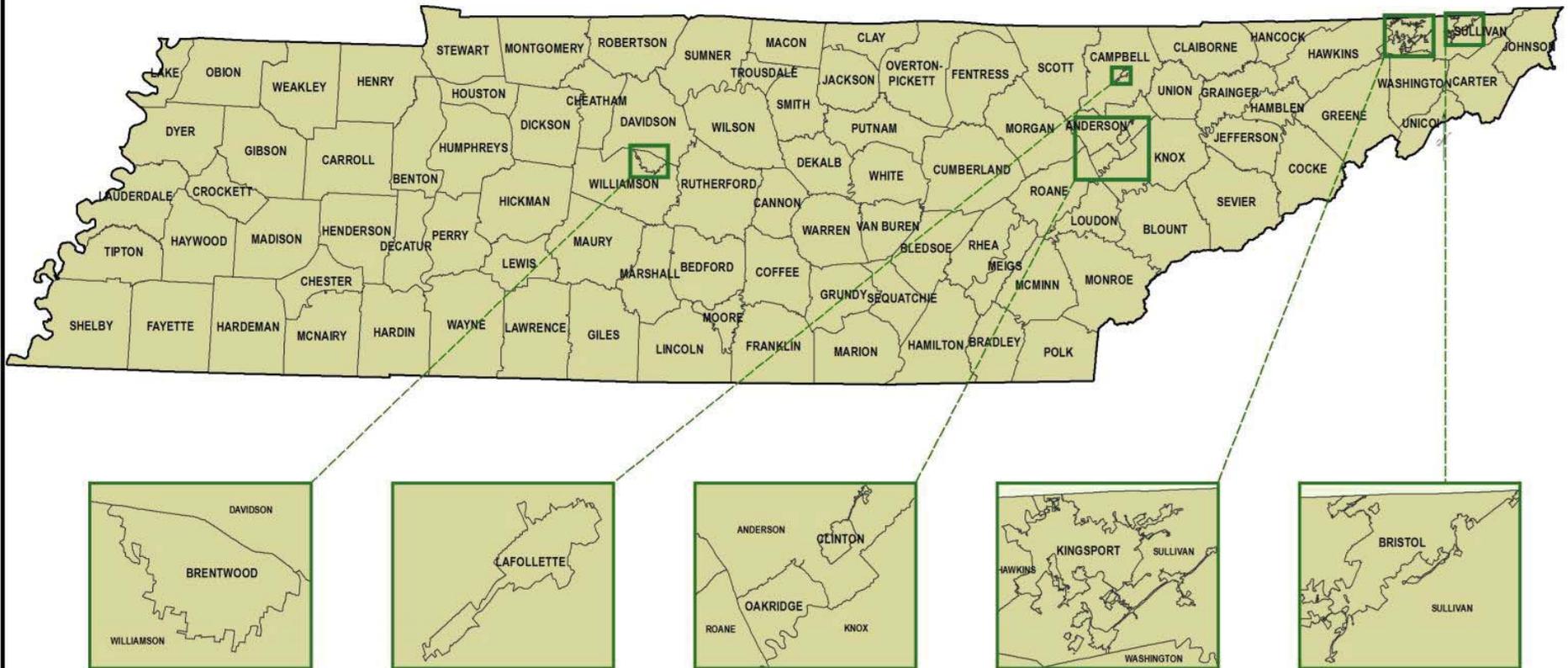
While there is a lack of uniformity with the E-911 process at each of the emergency communications districts, the implementation of Next Generation 911 (NG 911) will help to streamline E-911 and create a more unified process across the state

The Emergency Communications Board was created under the Department of Commerce and Insurance for the purpose of assisting emergency communications district boards of directors in the area of management, operations, accountability, and establishing emergency communications for all citizens of the state, as stated in Section 7-86-302, *Tennessee Code Annotated*. The board oversees finances and operations of the state's 100 emergency communications districts, which are statutory municipalities that administer or facilitate local E-911 call taking and/or dispatching services across the state.

We selected a random sample of 52 out of the 100 emergency communications districts to determine which response method is used for answering emergency calls, the advantages and disadvantages of the method used, and the 911 call volume data. In addition, we also determined how Next Generation 911 (NG 911) will benefit the districts. While the emergency communications districts operate autonomously, we noticed differences with the response methods used, how 911 call data are collected, and varied financial situations of the districts. However, the implementation of NG 911 should improve 911 call deliveries, enhance interoperability, and increase the ease of communication between districts, allowing immediate transfer of 911 calls, maps, photos, caller information, and other data statewide. NG 911 will help to streamline 911 and create a more unified process across the state. (See page 10.) The map below illustrates all 100 of the emergency communications districts across the State of Tennessee. The separate boxes on the map indicate the cities that created a separate district from the county. Those cities are Brentwood, LaFollette, Oak Ridge, Kingsport, Clinton, and Bristol.

EMERGENCY COMMUNICATIONS DISTRICTS

June 2012



Response Method

According to state law, the legislative bodies of any municipality or county may create an emergency communications district within all or part of their boundaries. The law requires the board of directors of the district to create an emergency communications service designed to have the capability of using at least one of the following three methods in response to emergency calls: direct dispatch method, relay method, or transfer method.

- The direct dispatch method is a 911 service in which a public service answering point provides for the dispatch of appropriate emergency service units and decides the proper action to be taken.
- The relay method is when a public safety answering point notes the pertinent information from the caller and relays it by communication to the appropriate public safety agency, other agencies, or other providers of emergency service for dispatch of an emergency unit. An example of a district that uses the relay method is Wilson County, which receives calls and notes the name, location, and emergency of the caller and relays the information to the police department, fire department, or EMS.
- The transfer method is when a public safety answering point directly transfers requests to an appropriate public safety agency or other provider of emergency services. An example of a district that uses the transfer method would be the Memphis Police public safety answering point (PSAP). When Memphis Police PSAP answers a 911 call about a fire, it will transfer that call to the Memphis Fire PSAP for call processing and dispatch.

The Emergency Communications Board's Executive Director stated that there is no set standard response method that emergency communications districts have to use for emergency calls. Under state law, the district board of directors chooses the method that it determines to be the most feasible for the district. Each public safety emergency services provider retains the right to dispatch its own services, unless a voluntary agreement is made between a provider and the district board of directors.

Of the 52 emergency communications districts contacted, we received 39 responses. We were unable to reach the other 13 districts by phone or e-mail. Of the 39 districts responding, 18 use more than one response method for emergency calls. Nineteen of those districts use the dispatch-only method. There are 15 districts that use the dispatch and transfer methods, and one uses only relay. Common advantages listed by the districts using the dispatch method are the following:

- calls are handled more quickly;
- calls are handled immediately by the same person;
- situational awareness is better;
- no call information is lost; and

- costs are more stable when the district uses the local government to dispatch.

Some of the disadvantages listed for all three methods used by the districts are the following:

- funding resources for dispatchers' salaries and benefits are inadequate in the districts that dispatch their own services instead of the local government;
- dispatchers become overwhelmed with high call volume, and the focus is split between call taking and dispatching;
- transferring calls takes longer and has a slower response time;
- information is duplicated when calls are transferred; and
- some information is missed when calls are relayed.

911 Call Data Collection

Although the Executive Director and board chairman stated that they do not request emergency call volume data from the emergency communications districts, such as percentage of calls dispatched, response time of calls, etc., because they do not feel obtaining such information is helpful to them in fulfilling their responsibilities, we requested that information from the districts to understand their operations. The districts receive funding for 911 equipment and dispatcher training; however, it was noted during the interviews that each emergency communications district uses a different phone carrier and has a different computer aided dispatch (CAD) system that records 911 call data. Therefore, some of the districts were not able to pull the data requested, such as response times of 911 calls, the number of abandoned calls (when the caller hangs up before the call is answered), the number of nonemergency calls, and the percentage of calls dispatched. Although there was not enough data received to complete a full analysis, from the data we did receive, the average peak time when 911 calls are received is in the morning between 8:00 and 10:00, in the afternoon between 12:00 and 3:00, and in the evenings between 5:00 and 11:00.

Financial Situation

The board's activities are self-funded through a monthly surcharge of \$1.00 imposed on all commercial mobile radio service/wireless/cellular users, including prepaid wireless/cellular services. The \$1.00 per month fee is collected by the board and deposited in the Emergency Communications Fund. State law requires the board to distribute 25% of the \$1.00 fee to the local districts based on the census population of each district. In addition to receiving revenues from the board, districts are locally funded through a 911 service charge placed on users and subscribers of landline service. District boards of directors may unilaterally set the 911 fee on local landlines up to a maximum of \$0.65 per line for residential lines and \$2.00 for business lines, as stated in Section 7-86-108, *Tennessee Code Annotated*.

According to the Emergency Communications Board chair and Executive Director, the revenue that districts receive from the landline fees has decreased due to the reduction in use of landlines. This has been the main financial complaint by the districts and the board. In addition,

some of the districts, such as Hawkins, Hamilton, Sequatchie, Jackson, Sullivan, Carter, Greene, Unicoi, Bradley, and Obion, have been deemed financially distressed or financially at risk by the board. According to board Policy 16, the board may determine that a district is financially distressed if there is a negative change in net assets for a period of three consecutive years as stated in the annual audits. A district is deemed at risk if it has deficits or net losses for two consecutive years as identified by budgets or audits. The table below illustrates the districts that have been deemed financially distressed or at risk financially. It was noted that the Jackson County district has had a positive change in net assets, but it is still considered financially distressed until it has two consecutive years of positive changes in net assets.

Table 1: Financially Distressed or At-Risk Districts				
District	Year	Total Revenue	Total Expenditures	Change in Net Assets (revenues less expenses)
Bradley "At Risk"	2009	\$2,313,361	\$2,246,703	\$66,658
	2010	\$2,204,596	\$2,373,634	-\$169,038
	2011	\$2,239,669	\$2,403,764	-\$164,095
Carter "At Risk"	2009	\$893,081	\$873,485	\$19,596
	2010	\$980,805	\$986,992	-\$6,187
	2011	\$954,016	\$996,133	-\$42,117
Greene "At Risk"	2009	\$762,084	\$776,142	-\$14,058
	2010	\$725,072	\$793,207	-\$68,135
	2011	\$740,466	\$822,186	-\$81,720
Hamilton "At Risk"	2009	\$8,384,231	\$8,522,425	-\$138,194
	2010	\$10,519,636	\$12,881,340	-\$2,361,704
	2011	\$10,812,165	\$11,623,993	-\$811,828
Hawkins "Distressed"	2009	\$639,116	\$732,908	-\$93,792
	2010	\$792,953	\$848,952	-\$55,999
	2011	\$671,105	\$793,056	-\$121,951
Jackson "Distressed"	2009	\$198,678	\$168,958	\$29,720
	2010	\$236,493	\$242,951	-\$6,458
	2011	\$250,003	\$202,489	\$47,514
Obion "At Risk"	2009	\$392,783	\$397,757	-\$4,974
	2010	\$442,780	\$474,009	-\$31,229
	2011	\$430,024	\$436,532	-\$6,508
Sequatchie "Distressed"	2009	\$358,099	\$443,926	-\$85,827
	2010	\$389,933	\$463,114	-\$73,181
	2011	\$400,017	\$465,083	-\$65,066

Table 1: Financially Distressed or At-Risk Districts (cont.)				
District	Year	Total Revenue	Total Expenditures	Change in Net Assets (revenues less expenses)
Sullivan “At Risk”	2009	\$1,127,005	\$1,082,744	\$44,261
	2010	\$1,054,162	\$1,147,408	-\$93,246
	2011	\$1,051,073	\$1,083,394	-\$32,321
Unicoi “At Risk”	2009	\$332,878	\$433,020	-\$100,142
	2010	\$322,308	\$371,810	-\$49,502
	2011	\$357,093	\$365,289	-\$8,196

The decrease in landline rates has been a contributing factor to some of the districts that are at risk or financially distressed. The districts have the option of increasing the landline rate if they are not already at the maximum amount that can be charged. It was also noted that some of these districts choose to dispatch their own services instead of having the local government make the dispatches. When districts dispatch their own services, they are responsible for funding the salaries and benefits of the dispatchers. The local government, such as the sheriff’s department or police department, is responsible for funding the salaries and benefits of the dispatchers when they dispatch for the districts.

Another option to assist the emergency communications districts in alleviating financial strains is consolidation. According to Section 7-86-305, *Tennessee Code Annotated*, the board may study the possible consolidation or merger of two or more adjacent districts, if at least one is financially distressed, as a means to restore financial stability and to ensure continued 911 services for the benefit of the public. The Executive Director stated that the board has not mandated the consolidation of any of the districts that are currently financially distressed. She stated that the decision to consolidate is ultimately up to the board. Two districts voluntarily consolidated in the past; however, it is very difficult to force a district to consolidate, according to the Executive Director.

As it relates to funding, the board is in the process of conducting a survey of the 100 districts to determine what it actually costs the district to dispatch. The board has contracted with Kimball and Associates (based in Pennsylvania) to conduct this survey.

Next Generation 911

The board is currently engaged in a project modernizing the state’s aging 911 infrastructures and converting them from analog to digital. The project, Next Generation 911 (NG 911), involves construction and management of an Internet protocol platform that will improve 911 call deliveries, enhance interoperability, and increase the ease of communication between districts, allowing immediate transfer of 911 calls, maps, photos, caller information, and other data statewide.

Next Generation 911 is an initiative of the U.S. Department of Transportation being carried out by the department's Transportation Safety Advancement Group. The project was launched in September 2010 at a forum in Washington, D.C. NG 911 will replace the existing narrowband circuit, which carries only voice and very limited data. It is a highly standardized system essential to supporting communications and transferring data across country, state, and international borders, and across the many emergency response professions and agencies. NG 911 is a system composed of hardware, software, data, and operational policies and procedures that will process all types of emergency calls including non-voice (multi-media) messages, acquire and integrate additional data useful to call routing and handling, and deliver the calls/messages to the appropriate public service answering points (PSAPs) and other appropriate emergency entities.

The board received all information about NG 911 from the National Emergency Number Association (NENA) and will follow NENA's NG 911 Transition Policy Implementation Handbook. NENA is a nonprofit organization chartered to represent both public safety and the 911 industry in its mission to focus on the development, evolution, and expansion of emergency communications. NENA is the organization responsible for defining NG 911, and coordinating the development and support of NG 911 as a system and a service to the public, the industry, and to Public Safety entities. The goal is for NG 911 to be a nationwide system. Tennessee is one of the first states taking steps to implement NG 911. Below is a summary of NG 911 progress in other states as provided by the Emergency Communications Board Next Generation 911 Status Update as of June 2012.

State	Status
Alabama	Planning process started
Arizona	Planning process started
California	Planning process started; roadmap complete
Florida	Contract awarded for ESI net design
Hawaii	Moving to IP-(Internet Protocol) enabled routers
Idaho	Started research
Illinois	Working through tariff and governmental issues
Indiana	IP network in place for wireless; moving 10-20 PSAPs this year that are Next Generation-ready later this year
Iowa	IP pilots now moving wireless to IP-enabled network
Kansas	Three-site NG 911 testing in progress
Maine	NG 911 RFP Process
Maryland	Pilot testing of IP-enabled, direct network transfer slated to begin in the third quarter of 2012

State	Status
Michigan	Completed study/recommendations and draft project plan
Minnesota	Started install process for IP-enabled network that will be transitioned to NG 911 network later
Montana	RFQ/RFP process
New Mexico	Started planning process
North Carolina	RFP released for SIP (Session Initiation Protocol) routing
Oklahoma	Oklahoma City Area Council of Governments installing IP network
Oregon	Completed funding study, did RFP for Network Design
Pennsylvania	Regional planning for IP system
Tennessee	Core network build complete, deploying all PSAPs statewide to the NG network for wireless call traffic, and statewide GIS mapping project nearing completion
Texas	Completed planning, governance and GIS, Regional Networks being built locally
Utah	Early planning
Vermont	Bought IP Enabled Network
Washington	Bought IP Enabled Network
West Virginia	Working on IP infrastructure (fiber, etc.)

According to the Executive Director and board chairman, AT&T and TCS (Telecommunications Systems) will outline the plans for implementing NG 911 at the Tennessee districts. AT&T will visit each district and PSAP to determine if any changes are required prior to equipment installation, starting with the districts closest to Nashville. According to the Executive Director, as of August 2012, the NG 911 equipment has been installed in more than half of the districts and PSAPs, and 22 sites are live. The final completion date for NG 911 is projected to be in 2014.

While some of the operations of the emergency communications districts will not change after NG 911 is implemented, it will improve the process. During our interviews with the 39 districts, we asked how NG 911 would benefit them. In addition to calls being received quicker, some of the benefits of NG 911 stated by the districts are that there will be

- increased/improved uniformity regarding how the centers operate, such as connectivity, backups, and contingency plans, across the state;
- more accurate caller location, faster routing, and quicker dispatch time;
- greater ease in transferring calls across the state;

- more stable structure and support from other counties;
- a streamlined 911 service to make it simpler for upkeep and maintenance;
- help for the dispatch function to operate more smoothly;
- an improved call taking process and monitoring of work load;
- removal of trunk costs paid to AT&T (trunk costs are fees paid for the connection or dial tone);
- greater ability to stay abreast of changing technology; and
- the ability to capture and retrieve data more easily.

According to the board chairman, some districts do not have access to their own 911 call database. In order to receive access, they must pay a fee to their district's phone carrier. NG 911 will change this by using a set of database systems to house and provide management of the following data content: validation, routing control, policy/business rules, and system-wide detail call records. NG 911 provides the mechanisms to access external sources of data, either automatically or manually, via the Emergency Service IP network (EISnet) to support more knowledgeable and efficient handling of emergency calls and messages.

In addition, NG 911 will allow the districts to reroute non-emergency calls from non-initialized cell phones to a separate call center. The receipt of harassing calls to the 911 districts has been an issue for the board. "Harassing non-initialized 911 phone calls" are 10 or more non-emergency calls within a one-hour period or 20 or more non-emergency calls within a 24-hour period made to 9-1-1 from a handset that is not registered for service with any Commercial Mobile Radio Service (CMRS) carrier. The General Assembly passed legislation in April 2012 (Public Chapter 705) to allow districts to divert these calls.

Although the emergency communications districts will continue to operate autonomously (resulting in a lack of uniformity), the implementation of NG 911 should improve the overall 911 process. The board should continue to monitor the operations and financial information of the 100 emergency communications districts and should encourage consolidation for those districts that are continuously at risk financially or that are financially distressed.

RESULTS OF OTHER AUDIT WORK

The following topic, reviewed as part of our audit objectives, is included in this report to provide additional information about the Emergency Communications Board.

The board has addressed findings and recommendations from the Tennessee Advisory Commission on Intergovernmental Relations

Based on an evaluation of actions taken by the Emergency Communications Board—and considering the board’s responsibilities under state law—the board appears to have taken reasonable efforts in addressing the recommendations identified by the Tennessee Advisory Commission on Intergovernmental Relations (TACIR). The recommendations contained in two separate reports released by TACIR address two issues integral to the Emergency Communication Board’s operational mission—E-911 funding mechanisms and public safety. Both reports provide an evaluation of the status quo and specific recommendations intended for both the board and the General Assembly—designed to enhance the overall operational effectiveness of E-911 services for the entire state. The information presented in this section updates the resultant efforts undertaken by the board to address the TACIR recommendations—including recent legislative action pertinent to the issues recognized.

2009 Department of Commerce and Insurance Performance Audit

The 2009 performance audit of the Department of Commerce and Insurance identified existing weaknesses in emergency communication services that could jeopardize public safety in some areas. The audit revealed a lack of jurisdictional oversight and statutory authority necessary to ensure Phase II compliance (technology which is crucial for caller location-identification) at all Public Service Answering Points including the inability to enforce minimum dispatcher training requirements. This finding prompted the General Assembly to request a study by TACIR that would attempt to evaluate the finding contained in the Comptroller’s report. The commission released two reports per the request of the Legislature—a September 2010 report titled *E-911 Emergency Communications Funding in Tennessee* and a September 2011 report titled *The Public Safety Impact of Public Safety Answering Points Not Affiliated with an Emergency Communications District*. Both reports included important findings and subsequent recommendations necessitating both legislative and agency action.

2010 Tennessee Advisory Commission on Intergovernmental Relations Report

The Tennessee Advisory Commission on Intergovernmental Relations (TACIR) was directed by the General Assembly to conduct a study of Tennessee’s 911 emergency communications funding system. The study followed the proposed funding changes contained in legislation that was introduced in 2009. The primary objective of the study was to evaluate alternative funding mechanisms for E-911 and determine whether a different approach should be

adopted in Tennessee. However, TACIR was unable to make an assessment for individual emergency communications districts due to the lack of statewide reporting on taxable land line accounts. Such information would provide a breakdown of customer types and would facilitate the ability to accurately track and analyze fee distribution and accumulation across the state. The 2010 TACIR report contained the following actionable recommendations:

1. Require providers to file standard line count returns (line count returns are the reporting of taxable landlines by type—residential and commercial—for each emergency communications district) with each district and require the districts to file monthly or quarterly statistics with the board;
2. The board should analyze the differences in the amount of per capita landline revenue raised by the emergency communications districts with similar populations and determine the reason for those differences;
3. A sub-committee of TACIR should be appointed to evaluate potential funding structures;
4. Continue encouragement of district consolidation through the reimbursement of associated costs—including the completion of a thorough cost-benefit analysis demonstrating the potential benefits of a specific consolidation by any district seeking reimbursement of consolidation costs.

The Emergency Communications Board responses to the 2010 TACIR recommendations were as follows:

1. The General Assembly did not propose any legislation based on the TACIR recommendations—thus the board does still not receive monthly or quarterly statistics from the emergency communication districts. Furthermore, it is believed that wire line carriers would have likely opposed such legislation because they consider line counts proprietary information.
2. Because line count information was not available to the board, no study of landline revenues was conducted. Additionally, landlines are phasing out as Voice over IP service replaces them, making these statistics of less relevance.
3. The board policy committee has been appointed to study district and PSAP funding—contracting with Kimball & Associates to conduct a survey producing such funding information.
4. The emergency communication districts have not yet asked the board for reimbursement funding to consolidate, but that is something that the board would be willing to provide upon request.

2011 Tennessee Advisory Commission on Intergovernmental Relations Report

The 2011 TACIR report concluded that public safety is not adversely affected by the 21 unaffiliated Public Service Answering Points (PSAPs) and—most importantly—these PSAPs are either Phase II compliant or receive transferred calls from PSAPs which are. As outlined in Federal Communications Order 94-102, Phase II of enhanced 911 service requires the capacity to identify the latitude and the longitude of a wireless 911 call, within a radius of 125 meters (401 feet), in 67% of all cases. The TACIR report contained eight findings and these six recommendations.

1. A definition of PSAP should be included in *Tennessee Code Annotated*;
2. PSAPs that are not affiliated with their local Emergency Communications Districts and do not meet the definition of PSAP should be classified as Public Safety Emergency Service Providers (PSEPs);
3. The General Assembly may want to consider amending Section 7-86-107, *Tennessee Code Annotated*—requiring 911 calls be delivered to PSAPs with a minimum of Phase II compliant technology;
4. State law should encourage PSAP consolidation—yet not require it;
5. Non-affiliated PSAPs and PSEPs receiving 911 calls (relayed, transferred, or other) should submit annual reports to their respective Emergency Communications District; and
6. TACIR staff believes these issues should be visited as soon as possible.

Based on discussions with the Emergency Communications Board Executive Director, we obtained the following responses and actions to the 2011 TACIR recommendations. The board has amended legislation contained in Public Chapter No. 935 to add the definition of PSAP (the legislation was passed in April 2012). A PSAP is defined as a facility that has been designated to receive 911 phone calls and route them to emergency services personnel. According to the Executive Director, non-affiliated PSAPS have no interest in consolidating with other PSAPs. The General Assembly did not act upon the recommendation to classify dispatch centers as PSEPS—nor did it act on the recommendation to amend Section 7-86-107, *Tennessee Code Annotated*. Section 7-86-105(b)(7) continues to encourage but not require consolidation. The General Assembly did not take action on TACIR’s recommendation to set up a reporting process, and none currently exists.

Appendix 1

Title VI and Other Information

All programs or activities receiving federal financial assistance are prohibited by Title VI of the Civil Rights Act of 1964 from discriminating against participants or clients on the basis of race, color, or national origin. In response to a request from members of the Government Operations Committee, we compiled information concerning federal financial assistance received by the Emergency Communications Board and the authority's efforts to comply with Title VI requirements. The results of the information gathered are summarized below.

For fiscal year 2011, the board received approximately \$1.5 million in federal funds from the National Highway Traffic Safety Administration, to pay for Next Generation 911 routers and equipment. The board's Title VI information is included with the Department of Commerce and Insurance's Title VI implementation plan. The department submitted its Title VI Implementation Plan to the Human Rights Commission on October 3, 2011. Statute requires submission by October 1 of each year.

According to the board's Executive Director, all board employees are required to read and sign the department's Workplace Harassment Policy, which prohibits harassment of any employee, applicant for employment, or third party on the basis of an individual's race, color, national origin, age (over 40), sex, pregnancy, religion, creed, or disability. Additionally, each board employee has undergone training to avoid workplace discrimination and harassment.

Other Information

Detailed below is a breakdown of board staff and members by gender and ethnicity.

Emergency Communications Board Staff by Job Position, Gender, and Ethnicity July 2012

Title	Male	Female	Asian	Black	Hispanic	American Indian	White	Other Ethnicity
Accounting Technician 2	0	1	0	0	0	0	1	0
Admin. Services Assistant 3	0	1	0	0	0	0	1	0
Auditor 4	1	0	0	0	0	0	0	1
Fiscal Director 1	1	0	0	0	0	0	1	0
ECB Executive Director	0	1	0	0	0	0	1	0
Attorney 3	1	0	0	0	0	0	1	0
Executive Admin. Assistant 1	0	1	0	1	0	0	0	0
Accountant 2	1	0	0	0	0	0	1	0
Executive Admin. Assistant 2	1	0	0	0	0	0	1	0
Total	5	4	0	1	0	0	7	1

**Emergency Communications Board
Board Members by Gender and Ethnicity
August 2012**

	Gender		Ethnicity					
	Male	Female	Asian	Black	Hispanic	American Indian	White	Other Ethnicity
Commission Member	8	1	0	1	0	0	8	0
Percent	89%	11%	0%	11%	0%	0%	89%	0%

Appendix 2 Performance Measures Information

As stated in the Tennessee Governmental Accountability Act of 2002, “accountability in program performance is vital to effective and efficient delivery of governmental services, and to maintain public confidence and trust in government.” In accordance with this act, all executive branch agencies are required to submit annually to the Department of Finance and Administration a strategic plan and program performance measures. The department publishes the resulting information in *Agency Strategic Plans: Volume 1 - Five-Year Strategic Plans* and *Volume 2 - Program Performance Measures*. Agencies were required to begin submitting performance-based budget requests according to a schedule developed by the department, beginning with three agencies in fiscal year 2005, with all executive-branch agencies included no later than fiscal year 2012. The Emergency Communications Board began submitting performance-based budget requests to the Department of Commerce and Insurance effective for fiscal year 2008 - 2009.

Detailed below are the Emergency Communications Board’s performance standards and performance measures, as reported in the September 2011 *Volume 2 - Program Performance Measures*. Also reported below is a description of the agency’s processes for (1) identifying/developing the standards and measures; (2) collecting the data used in the measures; and (3) ensuring that the standards and measures reported are appropriate and that the data are accurate.

Performance Standards and Measures

Performance Standard 1

Provide sufficient oversight to prevent ECDs (Emergency Communications Districts) from becoming financially distressed.

Performance Measure

Of the 100 ECDs, the number of ECDs deemed financially distressed pursuant to TCA 7-86-304(d).

Actual (FY 2010-2011)	Estimate (FY 2011-2012)	Target (FY 2012-2013)
2	2	2

The Emergency Communications Board was created to assist the state’s 100 emergency communications districts (ECDs), which provide or facilitate 911 services, in the areas of management, operations, and accountability and to establish emergency communications for all citizens. Part of the board’s responsibility is to supervise ECDs that are financially distressed, a status that could impact the level and quality of the 911 service they are able to provide. Section 7-86-304(d), *Tennessee Code Annotated*, deems ECDs with three consecutive years of negative changes in net assets as shown in their annual audit reports to be financially distressed. Board staff meets with the leadership of ECDs with two years of negative changes in net assets to

counsel them on avoiding distressed status. Staff also works with distressed ECDs to assist them in terminating their distressed status.

The performance measure result is calculated by reviewing the annual audits of the ECDs every year and keeping a record of those with negative changes in net assets. Those with two years of negative changes are counseled. Those with three years are brought before the board for additional analysis and to set the terms of board supervision.

Performance Standard 2

Ensure that every ECD is an integral component of the statewide Next Generation 911 Internet Protocol (IP) platform.

Performance Measure

Number of ECDs connected to the Next Generation 911 IP infrastructure

Actual (FY 2010-2011)	Estimate (FY 2011-2012)	Target (FY 2012-2013)
0	50	80

The Emergency Communications Board’s Next Generation 911 project (NG 911) is modernizing Tennessee’s aging 911 infrastructure, by converting it from analog to digital. The project involves construction of a redundant, private, secure MPLS (Multi-Protocol Label Switching) network managed by the Net TN Program in the Office for Information Resources in the Department of Finance and Administration. The 911 system will run on this network, and all current and future participants in providing 911 services in Tennessee must deliver and receive 911 calls over this network. Accordingly, assuring that all 100 of the state’s emergency communications districts, which either provide or facilitate 911 service in Tennessee, are connected to the infrastructure is necessary to ensure that 911 calls are properly delivered to the 911 call centers located in each district.

Connection to the core involves a number of steps. The ECD must submit to the board an executed user agreement which establishes the rules to ensure security of the system. In addition, service orders must be submitted and equipment installed. Once the circuits between the core and the 911 call center are complete, the call center is deemed connected. Additional steps, including testing and the development of an alternative routing plan, are required before the call center begins taking live traffic over the NG 911 infrastructure.

At present, the actual number of ECDs with their controllers connected to the NG 911 infrastructure is 11. A number of ECDs have more than one call center. In addition to the 18 call centers currently connected, an additional 61 PSAPs have Net TN equipment installed and are connected to the core, although their controllers are not connected yet, for a total of 79 sites installed.