

**The Public Safety Impact
of Public Safety Answering Points
Not Affiliated with
an Emergency Communications District**



**TACIR Commission Report
Pursuant to Public Chapter 473 (2009)**

September 2011



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The Public Safety Impact of Public Safety Answering Points Not Affiliated with an Emergency Communications District

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Purpose

The Tennessee Advisory Commission on Intergovernmental Relations (TACIR) has prepared this report in response to a mandate by the Tennessee General Assembly found in Public Chapter 473 (2009). PC 473 (shown in Appendix A) was passed after a 2009 Office of the Comptroller performance audit of the Department of Commerce and Insurance found that “there are weaknesses in emergency communication services in Tennessee, which could put residents in some areas at risk.”

Public Chapter 473 directs TACIR to

- perform a study of the impact on public safety of Public Safety Answering Points (PSAPs) not affiliated with an Emergency Communication District (ECD);
- review the emergency communications equipment capabilities of non-affiliated PSAPs;
- report its findings and recommendations, including any proposed legislation or interim reports, upon conclusion of its study. The report is to be delivered to each member of the House and Senate Government Operations Committees by December 1, 2011.

Executive Summary

Tennessee is a leader in 911 service and emergency communications. It was the third state in the nation to have statewide E-911 Phase II technology and is on the forefront with Next Generation 911 technology, the latest in public emergency communications services. Tennessee is also one of 35 states that has a state 911 board: the Tennessee Emergency Communications Board (TECB).

In the spirit of maintaining the state’s status as a leader in emergency communications, the Tennessee General Assembly asked TACIR to assess the public safety impact and technology of certain public safety answering points (PSAPs). These PSAPs retain their right to dispatch services without affiliating with their local emergency communications districts.

In the spirit of maintaining the state’s status as a leader in emergency communications, the Tennessee General Assembly asked TACIR to assess the public safety impact and technology of certain public safety answering points (PSAPs).

Findings

1. At the date of publication, there are 21 public safety answering points (PSAPs) that are not affiliated with their local emergency communication district (ECD) in Tennessee. This is allowed under state law.
2. There is no definition of the term *public safety answering point* in Tennessee Code Annotated 7-86-103, which created some confusion regarding the classification of the non-affiliated PSAPs during the course of this study.
3. Related to finding 2, several of the entities that the Tennessee Emergency Communications Board (TECB) staff submitted to TACIR staff as non-affiliated PSAPs did not consider themselves to be PSAPs. TACIR staff agrees that these agencies primarily provide dispatching services and are not truly E-911 PSAPs.
4. The most prominent concern expressed by the non-affiliated PSAPs interviewed was the loss of a local, “homegrown” approach if consolidation occurred, particularly because many did not see any negative safety impact due to non-affiliation.
5. The most prominent concern expressed by the ECDs interviewed for this report was the lack of adequate technology of many non-affiliated PSAPs to receive automatic number and location information.
6. TACIR staff agrees with the TECB and ECDs that, in most cases, there is a technological disparity of non-affiliated PSAPs in comparison to their counterparts.
7. TACIR staff does not believe there is an adverse impact to public safety that would require changing current law to require consolidation. Staff research shows that only one non-affiliated PSAP in Tennessee receives 911 calls directly, and that PSAP is Phase II compliant. The other non-affiliated PSAPs receive transferred calls from Phase II compliant PSAPs.

8. TACIR staff encourages consolidation where appropriate but stops short of mandating it, recognizing the importance of local autonomy and community relationships.

Recommendations

1. While PSAP is a standard term in the emergency communications field, there is no statutory definition of “public safety answering point” (PSAP) in Tennessee Code Annotated (TCA) 7-86-103, which contains the definitions for the Emergency Communications chapter. Staff believes a definition of PSAP should be included in the TCA for classification purposes. To that end, TACIR staff recommends the Tennessee General Assembly consider adopting a clear definition of public safety answering point for the TCA. That would clarify any ambiguity regarding what constitutes a PSAP in light of Tennessee’s unique working relationship between emergency communications districts, public safety answering points, and public safety emergency service providers.
2. TACIR staff recommends that entities not affiliated with their local ECD that do not meet the definition of a PSAP should be recognized and classified as public safety emergency service providers (PSEPs); this term is defined in TCA 7-86-103. The term *non-affiliated PSAP* would cease to apply to these entities upon acceptance of this recommendation. The term *non-affiliated PSAP* would apply only to those entities that have a 911 controller but are not affiliated with their local ECD, which is the case with the Spring Hill Police Department. Staff is unaware of any other PSAP with 911 access that is not affiliated with its local ECD.
3. The General Assembly may wish to amend TCA 7-86-107 to include language indicating that any call made by dialing 911 in Tennessee must be delivered to a public safety answering point equipped with at least Phase II compliant technology, if not Next Generation 911 technology. Emergency calls can still be relayed or transferred to a separate public safety emergency service provider to dispatch services (which is already allowed and practiced across the state).

This recommendation applies only to the actual placement and routing of a 911 call.

4. TACIR staff recommends that state law continue to encourage consolidation where appropriate but not require it. Current law allowing for emergency service providers to retain the right to dispatch their own services respects Tennessee's history of decentralizing power and granting local powers the autonomy to run their affairs.
5. TACIR staff recommends that non-affiliated PSAPs and PSEPs that receive 911 calls (relayed, transferred, or otherwise) submit an annual report to their local ECD, which the ECD will in turn submit to the TECB. This annual report would include contact information, notification of any interlocal agreements, and a contingency plan in case of network, equipment, or facility failures, fashioned after TECB policies.
6. TACIR staff believes these issues should be visited as necessary in the future.

Introduction

Tennessee has always been a national leader in 911 service. It was nationally recognized as the top 911 state program in 2005 and was the third in the nation to be E-911 Phase II compliant. Currently, the state emergency communications board is working toward completing the shift to Next Generation 911, which uses Geographic Information Systems (GIS) mapping to locate callers.

In the state of Tennessee, the three integral components of 911 service are emergency communications districts (ECDs), public safety answering points (PSAPs), and public safety emergency service providers (PSEPs). E-911 operations are conducted by, or are under the authority of, local ECDs. They, in turn, work with PSAPs and PSEPs to handle 911 calls and dispatch emergency services. Two previous reports published by TACIR provide additional background information on the history of E-911 and related issues, including funding, structure, and consolidation. *E-911 Emergency Communications Funding in Tennessee* (2010) and *Emergency Challenge: A Study of E-911 Technology and Funding Structure in Tennessee* (2006) are available on the TACIR website.

Under current state law, PSAPs are encouraged to consolidate with ECDs. Consolidation entails sharing technology, submitting to specific job training and technology standards, and, in some instances, sharing the same building and staff (which is up to local discretion and agreements). However, state law does grant emergency service providers the right to dispatch their own services without consolidating or affiliating with their local ECD. These PSAPs that are not affiliated with an ECD are referred to as non-affiliated or unaffiliated PSAPs.

In an effort to address public safety concerns and maintain the state's position as a leader in emergency communications, the legislature asked the Tennessee Advisory Commission on Intergovernmental Relations (TACIR) to review the impact of public safety answering points that are not affiliated with their county emergency communications district, as outlined in Public Chapter (PC) 473 (2009). This report is a response to PC 473 and assesses the public safety impact of non-affiliated PSAPs and their equipment capabilities.

E-911 operations are conducted by, or are under the authority of, local ECDs. They, in turn, work with PSAPs and PSEPs to handle 911 calls and dispatch emergency services.

The material in this report was obtained using a comprehensive methodology that consisted of four major research components:

1. Interviews
2. Literature review
3. A review of additional material
4. TACIR staff analysis

First, readers will find a brief explanation of how emergency communications and services work, in addition to statutory definitions of commonly used terminology throughout the report. Then, a brief review of the Comptroller's performance audit that resulted in the passing of PC 473 (2009) is presented, followed by a thorough and scholarly literature review. The report then shares findings based on interviews with all interested parties, a discussion of relevant issues, and, finally, staff recommendations.

Explanation of Terms

There are several terms used in this report to describe what happens when a call is placed to 911:

- ***Routing*** a call refers to a 911 call going through an ECD's 911 trunk and being delivered directly to a PSAP based on the caller's location. ECDs route calls.
- ***Call-taking*** refers to the actual process of answering calls. PSAPs answer calls.
- ***Transferring*** a call refers to when a PSAP answers a call and then transfers it to another entity that will dispatch services.
- ***Dispatching*** is the actual process of dispatching the appropriate emergency personnel based on the call and nature of emergency. PSEPs dispatch personnel.

In communications, a trunk is a way of allowing several calls through a smaller and/or shared number of communication lines,

in the same manner as a tree trunk supports several branches.¹ For 911 services, it is the incoming line from the telephone company to the ECD. The National Emergency Number Association (NENA) defines a trunk as, “a communication path between central office switches, or between the 911 Control Office and the PSAP.”²

What’s what?

While related, call-taking and dispatching are not the same thing. State law makes this distinction, and it is reflected in the relationships between public safety answering points (PSAPs) and emergency communication districts (ECDs). Current law offers ECDs and local governments the flexibility and discretion to determine the method most suitable for dispatching emergency services in their community.

What is an emergency communications district (ECD)?

ECDs may act as a PSAP—that is, they may take calls or they may choose to provide only the 911 trunk and route calls to a PSAP. ECDs, also known as 911 centers, have a board of directors that serve as the governing body for 911 in each district. Per the Tennessee Emergency Communications Board (TECB), call-taking and dispatch E-911 operations throughout the state are conducted by, or are under the authority of, local ECDs—they may, but are not required to, dispatch. An ECD may function as a PSAP if its employees take calls on site; or an ECD may just provide the 911 trunk that routes calls to a district’s primary PSAP. More information about the structure of E-911 funding and dispatch roles can be found in TACIR’s 2010 report *E-911 Emergency Communications Funding in Tennessee* (available online).

It should be noted that 911 calls are only delivered to ECDs or ECD-affiliated PSAPs that have the most current technology. Staff only

¹U.S. Government Printing Office. 2004. Title 47, Vol 2. Code of federal regulations (47CFR36). <http://frwebgate2.access.gpo.gov/cgi-bin/TEXTgate.cgi?WAISdocID=5B3zD1/5/1/0&WAIAction=retrieve>. Versadial. 2011. Call recording terms dictionary. <http://www.versadial.com/learn-call-recording/call-recording-terms.html#trunk>. Genesis. No date. Resources: ABCs of trunking. http://www.genesisworld.com/resources/ABC.asp#. (accessed August 23, 2011).

²National Emergency Number Association. Master glossary of 9-1-1 terminology. http://www.nena.org/sites/default/files/NENA%2000-001_V16.pdf. (accessed August 23, 2011).

A PSAP is responsible for taking 911 calls and providing dispatching services for public safety organizations, including law enforcement, fire, and ambulance services.

came across one instance in which 911 calls could be delivered to a non-affiliated PSAP, which is the case in the city of Spring Hill. The Spring Hill Police Department has a Phase II compliant controller and its own emergency service number that allows it to receive 911 calls directly from anyone calling within the city limits.

What is a public safety answering point (PSAP)?

A PSAP is responsible for taking 911 calls and providing dispatching services for public safety organizations, including law enforcement, fire, and ambulance services. Primary PSAPs receive incoming calls and can transfer them to secondary PSAPs, which dispatch emergency services and serve as a backup in case the primary PSAP is overloaded. Public service emergency service providers (PSEPs) are the agencies responsible for actually providing the service. Some PSAPs, therefore, can also be considered PSEPs—like a police department that receives 911 calls and dispatches law enforcement officers.

PSAPs can be affiliated with their local ECD but not necessarily be physically consolidated, that is, they have a 911 controller or workstation in their own building separate from the ECD. For example, the Bartlett Police Department (a PSAP) has workstations in their own building that allows the Shelby County ECD to route calls to them with automatic location and number identification (ALI and ANI) displayed.³

In Tennessee, the majority of the state’s 178 PSAPs are operated by, or affiliated with, one of the state’s 100 ECDs. Affiliation with an ECD provides a PSAP with technical assistance, operational funding, equipment reimbursement, Phase II technology, and guarantees minimum training standards for dispatchers. However, state law allows for PSAPs to dispatch their own services⁴ independent from an ECD. These PSAPs receive relayed or transferred calls from the local ECD and dispatch their emergency service personnel. These are known as non-affiliated or unaffiliated PSAPs and are the focus of this report. As of the date of publication, there are approximately 21 PSAPs not affiliated with their county ECD in Tennessee.

³Chiozza, Raymond. Reem Abdelrazek. Telephone interview. Nashville, August 5, 2011.

⁴Tennessee Code Ann. §7-86-107(b).

How it works

To explain briefly, when a caller in Tennessee places a call to 911, the call is delivered through an ECD trunk. Then, one of the four scenarios happens:

1. The call is answered and services are dispatched directly by the ECD employees;
2. The ECD trunk automatically routes the call to the appropriate public safety answering point (PSAP) based on the callers location where the call is answered and services are dispatched by PSAP employees;
3. The call is answered by ECD or PSAP employees and transferred to a PSAP affiliated with the ECD for dispatch (and therefore has E-911 Phase II compliant equipment that allows for caller number and location information to be displayed); or
4. The call is answered by ECD or PSAP employees and transferred to a PSAP not affiliated with the ECD (that may or may not have Phase II technology).

Statutory Definitions

The legal definition of a PSAP as defined by the Federal Communications Commission—the agency responsible for the regulation of interstate and international communications by radio, television, wire, satellite and cable—is a “facility that has been designated to receive 911 calls and route them to emergency services personnel.”⁵

The National Emergency Number Association (NENA)—a national organization made up of emergency communication personnel members—develops and researches 911 policy, technology, operations, and education issues.⁶ NENA defines a PSAP as a “set of call takers authorized by a governing body and operating under common management, which receives 911 calls and asynchronous

⁵FCC, 47 C.F.R. Subpart AA—Universal Emergency Telephone Number § 64.3000 Definitions.

⁶National Emergency Number Association. No date. About NENA. <http://www.nena.org/about>. (accessed August 5, 2011).

event notifications for a defined geographic area and processes those calls and events according to a specified operational policy.”⁷

Tennessee Code Annotated (TCA) 7-86-103, which defines the terms found in chapter 86 relating to Emergency Communications, does not include a definition of PSAP. It does, however, spell out several important terms that are referenced throughout this report:

- *Direct dispatch method* means a 911 service in which a public service answering point, upon receipt of a telephone request for emergency services, provides for the dispatch of appropriate emergency service units and a decision as to the proper action to be taken.
- *District* means any emergency communications district created pursuant to the provisions of this part.
- *911 service* means regular 911 service enhanced universal emergency number service or enhanced 911 service that is a telephone exchange communications service whereby a public safety answering point may receive telephone calls dialed to the telephone number 911. “911 service” includes lines and may include the equipment necessary for the answering, transferring and dispatching of public emergency telephone calls originated by persons within the serving area who dial 911, but does not include dial tone first from pay telephones that may be made available by the service provider based on the ability to recover the costs associated with its implementation and consistent with tariffs filed with the Tennessee regulatory authority.
- *Public safety emergency services provider* means any municipality or county government that provides emergency services to the public. Such providers or services include, but are not limited to, emergency fire protection, law enforcement, police protection, emergency medical services, poison control, animal control, suicide prevention, and emergency rescue management.

⁷National Emergency Number Association. Master glossary of 9-1-1 terminology. http://www.nena.org/sites/default/files/NENA%2000-001_V16.pdf. (accessed August 5, 2011).

- *Relay method* means a 911 service in which a public safety answering point, upon receipt of a telephone request for emergency services, notes the pertinent information from the caller and relays such information to the appropriate public safety agency or other agencies or other providers of emergency service for dispatch of an emergency unit.
- *Transfer method* means a 911 service in which a public safety answering point, upon receipt of a telephone request for emergency services, directly transfers such request to an appropriate public safety agency or other provider of emergency services.

TACIR Definitions

The question staff came across early in the interviews is this: what constitutes a PSAP? While the Federal Communications Commission (FCC) and NENA definitions are clear in theory, the definition was not so clear in practice. Some non-affiliated PSAPs did not, in fact, consider themselves a PSAP because a caller cannot reach them directly by dialing 911. TACIR staff agrees that these agencies primarily provide dispatching services and are not truly E-911 PSAPs.

During a telephone interview, the executive director of the TECB, Ms. Lynn Questell, indicated that in order for an entity to be considered a PSAP, it should have 911 trunk access and a 911 controller. It should be noted this is not a legal or binding definition but reflects the position of Ms. Questell.

TACIR staff agrees that only an entity that has 911 trunk access and/or a controller should be classified as a PSAP. There is no statutory definition of “public safety answering point” (PSAP) in TCA 7-86-103, which contains the definitions for the Emergency Communications chapter. While PSAP is a standard term in the emergency communications field, the TCA does not provide a definition. To that end, TACIR staff recommends the Tennessee General Assembly consider adopting a clear definition of public safety answering point for the Tennessee Code. This would clarify any ambiguity regarding what constitutes a PSAP, in light of Tennessee’s unique working relationship between ECDs, PSAPs, and PSEPs. Staff believes a definition of PSAP should be included in the Code for classification purposes.

In the state of Tennessee, public safety emergency service providers have the right to dispatch their own services unless they choose to affiliate with their local ECD, as laid out in TCA 7-86-107(b).

In the state of Tennessee, public safety emergency service providers have the right to dispatch their own services unless they choose to affiliate with their local ECD, as laid out in TCA 7-86-107(b). The option for emergency service providers to retain the right to dispatch their own services (but not create their own ECD) was a measure used to garner support of city governments when the legislature created the Tennessee Emergency Communications Board in 1998.

TACIR staff also recommends that entities not affiliated with their local ECD, and that do not meet the definition of a PSAP, should be recognized and classified as public safety emergency service providers (PSEPs); this term is defined on page 8 of this report and in TCA 7-86-103. The term *non-affiliated PSAP* would cease to apply to these entities upon acceptance of this recommendation. The term non-affiliated PSAP would apply only to those entities that have a 911 controller but are not affiliated with their local ECD, which is the case with the Spring Hill Police Department. Staff is unaware of any other PSAP with 911 access that is not affiliated with its local ECD.

For the purpose of this report, however, we will continue to refer to non-ECD affiliated PSAPs as non-affiliated PSAPs. Therefore, any recommendations made in this report for non-affiliated PSAPs are intended for both non-affiliated PSAPs and public safety emergency service providers as defined in the previous paragraph.

PSAPs in Question

Based on information provided by the TECB, Table 1 lists the 21 non-affiliated PSAPs across the state. It also includes the population of the city or county the non-affiliated PSAP serves, the area covered by the PSAP, and the local ECD corresponding to the PSAP.

These PSAPs were the focus of this report, though staff did contact other PSAPs and ECDs not listed here. The original list sent to TACIR staff by the TECB included Etowah Police Department, which consolidated with the McMinn ECD in early 2011.

Table 1. PSAPs Not Affiliated With Local ECD (as of September 2011)			
PSAP	Population*	Sq. Miles	Local ECD
Sewanee Police Department	2,361	4.7	Franklin
Humboldt Police Department	8,452	9.7	Gibson
Milan Police Department	7,851	8.0	Gibson
Trenton Police Department	4,264	5.6	Gibson
Greene County Sheriff's Department	66,282	626	Greene
Greeneville Police Department	15,062	13.72	Greene
Hardeman County EMS	27,613	670	Hardeman
Hardeman County Sheriff's Department	"	"	Hardeman
Henry County Sheriff's Department	31,876	593	Henry
Lauderdale County Sheriff's Department	26,471	507	Lauderdale
Ripley Police Department	8,445	12.8	Lauderdale
Maury County Sheriff's Department	84,302	616	Maury
Maury County EMS	"	"	Maury
Mount Pleasant Police Department	4,561	11.1	Maury
Athens Police Department	13,458	13.5	McMinn
Adamsville Police Department	2,207	6.9	McNairy
Oneida Police Department	3,752	10.3	Scott
East TN State University Police Department	15,234**		Washington
Jonesborough Police Department	5,051	4.3	Washington
Franklin Police Department	62,487	30.1	Williamson
Spring Hill Police Department	29,036	17.7	Williamson

*City population is from 2010 data. County data is from 2009 data.

**Student population, this figure does not include faculty and staff

Sources: Tennessee Emergency Communications Board, Municipal Technical Advisory Service, County Technical Advisory Service, U.S. Census Bureau

Comptroller's Audit Findings

In April 2009, the Tennessee Comptroller's Division of State Audit published the results of its performance audit of the Department of Commerce and Insurance and related entities. The audit was conducted pursuant to state law to assist the Joint Government Operations Committee in determining whether several state

departments should be continued, terminated, or restructured.⁸ The Tennessee Emergency Communications Board (also known as the state 911 board or TECB) was among the departments evaluated.⁹ Its authority, policies, and procedures were assessed to determine whether any areas within the state's existing emergency communications system could be improved for greater efficiency.

State law requires each ECD's board of directors to create an emergency communications service with the ability to use at least one of three emergency response methods: direct dispatch, relay, or transfer.¹⁰ State law also requires the board to create and implement basic (Phase I) and wireless enhanced (Phase II) 911 services throughout the state.¹¹ As set forth in Federal Communications Commission Order 94-102, the TECB has complied with Phase I and Phase II requirements. Phase I requires that the PSAPs have the ability to transmit to the 911 center a wireless caller's telephone number and the location of the tower receiving the call. Phase II requires the PSAPs to identify the coordinates of a wireless call, within a 125-meter radius, in at least two-thirds of all cases. The Comptroller's audit found that many non-affiliated PSAPs do not have Phase II compliant technology and, thus, may adversely impact public safety.

Three primary weaknesses were revealed, highlighting the need for legislative and administrative review:

1. Auditors determined that the TECB lacks statutory authority and oversight over the PSAPs that are not affiliated with one of the state's 100 ECDs.
2. Minimum dispatcher training requirements cannot be verified for non-affiliated PSAPs.

⁸Tennessee Governmental Entity Review Law, *Tennessee Code Ann.* §§ 4-29-101 et seq. Several state departments were scheduled to terminate on June 30, 2009, including the Tennessee Emergency Communications Board (the TECB). See also *Tennessee Code Ann.* § 4-29-230(a)(13) amended and transferred to *Tennessee Code Ann.* § 4-29-234(a)(25) (showing that the TECB is now set to terminate on June 30, 2013).

⁹By statute, the Comptroller of the Treasury is a member of the TECB. State law permits the Comptroller to retain its auditing authority of the TECB while concurrently serving as a member. See *Tennessee Code Ann.* § 7-86-302(b)(2). See also *Tennessee Code Ann.* § 8-4-116.

¹⁰*Tennessee Code Ann.* §7-86-107.

¹¹*Tennessee Code Ann.* §7-86-307.

3. While no PSAP is currently required to file a contingency plan with the TECB, non-affiliated PSAPs are not required to develop one at all.

These findings prompted PC 473, which led to TACIR's current study to determine the potential impact of non-affiliated PSAPs on public safety.

Auditors determined that only 157 of Tennessee's 178 PSAPs were affiliated with one of the state's ECDs at the time of the audit.¹² It should be noted that while the Comptroller's Office determined this to be an audit finding, the choice of a PSAP not to affiliate with its local ECD is allowed under state law. Addressing the finding would require a change to state law. All affiliated PSAPs receive funding, equipment reimbursements, and training standards, and are Phase II ready. However, because current legislation has allowed some entities to opt out of the statewide 911 system and dispatch their calls independently, there were 17 non-affiliated PSAPs not subject to the TECB's operational standards at the time the audit was published. (That number is now 21.)¹³

As outlined in the audit, because all PSAPs are not affiliated, the TECB cannot ensure that they all have access to the necessary technology to locate callers in the event of an emergency or that minimum dispatcher training requirements are met. Similarly, the TECB's Policy No. 36 requires ECDs to create contingency plans so that PSAPs may operate effectively in the event of power outages or other service disruptions. At the time of the audit, the TECB had not implemented any filing requirements, so ECDs and PSAPs were not required to submit a plan. Another issue is that non-affiliated PSAPs are not required to create a plan at all. In the event of network outages, callers in those areas may not be able to secure emergency assistance in a timely manner. The audit also noted that when 911 calls are transferred to a non-affiliated PSAP, it may not have number and location information unless ECD or affiliated PSAP staff stays on the line to relay the information.

Auditors determined that only 157 of Tennessee's 178 PSAPs were affiliated with one of the state's ECDs at the time of the audit. It should be noted that while the Comptroller's Office determined this to be an audit finding, the choice of a PSAP not to affiliate with its local ECD is allowed under state law.

¹²Based on other data provided by the TECB, there were 163 PSAPs and only 17 of them were non-affiliated at the time of the audit. In June 2011, the TECB reported that 22 PSAPs are non-affiliated.

¹³TACIR staff recognizes the discrepancies in the number of PSAPs previously reported and inconsistencies regarding who is considered a PSAP. State law does not currently define the term.

To facilitate increased operational safety, auditors recommended that the General Assembly consider legislation that will extend the TECB's current authority to include oversight of non-affiliated PSAPs, or require them to obtain the appropriate technology or consolidate with an ECD that already has the technology in place. Auditors suggested that the General Assembly clarify which entities have authority to monitor and enforce training requirements. Administratively, auditors recommended that the TECB revise Policy No. 36 and require all PSAPs to create and submit contingency plans. Those plans should be filed with the TECB to ensure that sufficient emergency communications services are available in all emergency situations across the state. Further, the TECB should take corrective action when ECDs fail to comply with its operational standards.

In response to these concerns, the TECB expressed its limited oversight authority. The TECB has maintained that it does not have the capacity to operate in an auditory fashion; in order to oversee training standards for affiliated and non-affiliated PSAPs throughout the state, additional staff would be required. Lastly, Policy No. 36 was amended by the TECB in May 2009 so that ECDs are required to develop and submit a contingency plan to the TECB.

In May and June 2011, TACIR staff contacted the Division of State Audit to learn more about the steps taken throughout the auditing process and the basis for its recommendations. Those inquiries revealed that the findings were based largely on documentation and information provided by the TECB. TACIR was unable to secure the Division of State Audit's working papers because those are protected by state law.¹⁴ Auditors directed TACIR to the TECB, the FCC, and other states, but TACIR staff had already conducted the appropriate research. In response to TACIR's inquiry regarding which factors could be used to gauge the risk to residents, auditors listed the following: percent of population served by a non-affiliated PSAP, degree to which an area is a large geographic region or rural, and volume or degree of past incidences.

¹⁴Tennessee Code Ann. § 10-7-504(22).

Literature Review

To help assess the potential impact of non-affiliated public service answering points (PSAPs) on public safety, TACIR staff conducted a thorough literature review to determine the current status of emergency communications services in Tennessee and other areas across the country. To accomplish this, staff consulted a wealth of public and private sources, including entities at the federal, state, and local levels and previous TACIR reports. Highlighting the strides that have been made in recent years, this review focuses on coordination and consolidation issues in Tennessee.

As the demand for wireless technology increases, emergency communications systems face new and unique challenges. Most wireless calls to 911 do not provide the same caller identification and location data as calls from landlines, leaving some users with a degree of confidence that exceeds actual system capabilities. Studies show that services can be improved through consolidation and by working together, but some districts have retained individual control and distinct, minimal guidelines. Recognizing weaknesses in their existing systems and acknowledging a lack of consistent operational standards, some states recently adopted statewide plans to reduce costs and provide more efficient services to users.

As emergency communications services evolve to meet changing needs, some states are looking to the National Emergency Number Association (NENA) for guidance in implementing sustainable plans. The Federal Communications Commission (FCC) provides oversight over wireless communications service providers and has established regulations to facilitate a uniform approach. These measures are designed to better protect the public by maintaining the level of service that users have come to know and expect over the years.

Consolidation Issues

In 2006, TACIR published a commission report on the technology and funding structure of emergency communication districts in Tennessee. That report set forth the organizational framework for the 100 ECDs across the state, which are spread across 95 counties and organized according to local standards. Eighty-five districts

As the demand for wireless technology increases, emergency communications systems face new and unique challenges.

cover a one-county area, and one district covers a two-county area. Six districts cover a city area, and eight districts cover the county outside the city districts. Two cities with districts are located in multiple counties. Approximately 75% have one primary PSAP that receives 911 calls. An additional 9% have one primary PSAP and one or more secondary PSAPs.

About half of the seventy districts that responded to TACIR's 2005 survey (in preparation for the 2006 report) have one PSAP that answers 911 calls and directly dispatches for public service agencies. An additional 29% have one PSAP that answers, dispatches, and transfers some calls. Approximately 3% of districts have one PSAP that answers calls and transfers calls to other agencies for dispatch. Of the remaining districts that have multiple PSAPs answering calls, roughly 7% directly dispatch the calls received, and 13% dispatch some calls while transferring others. Seventy percent of responding districts said their emergency communications district operated as an independent unit of government. About 30% said they operated more like a division of county or city government.

While districts are responsible for a variety of daily operational tasks, they also perform a host of administrative duties, including hiring employees. Staffing decisions are determined locally by the ECDs, local governments, and local public service agencies. In most instances (74% of responding districts), telecommunicators are employees of one public safety agency. Most (52%) are directly employed by the ECD of the responding district. In 15% of districts, telecommunicators are employed by three or more public safety agencies. Some are employed by the sheriff (12%), a separate emergency communication agency (6%), by the city police (3%), or by the emergency medical service (one district).

Dividing employee responsibilities across multiple agencies means that some employees must take other jobs to make ends meet. Although most (89%) of the telecommunicators were employed full-time, 64% of responding districts employed part-time staff at the time of the survey. All but one (59 out of 60) telecommunicators accepted E-911 and non-emergency calls. Only one district reported that telecommunicators have additional duties outside the call center. Examples of outside duties include checking for criminal histories and warrants, switchboard operation, and alarm registration. Of the 60 reporting, several indicated that they have

shifts with only one telecommunicator working. In those districts, telephones may go unattended when the telecommunicator needs to be away from his console or provide additional information to callers or public safety officers. This included nine districts with one person assigned on an evening shift and eighteen districts with one person assigned on a night shift.

About 59% of the seventy districts reporting are staffed and trained to provide pre-arrival medical instructions to E-911 callers. An additional 13% of districts refer or transfer calls to another agency for pre-arrival medical emergency instruction. At least two telecommunicators are needed on a shift to be able to provide pre-arrival instructions as needed.

Consolidation may become more of an issue as technological changes in telecommunications result in the need for a new E-911 system network and major changes to PSAP equipment. Newer network solutions should also allow greater interoperability among PSAPs and districts to enhance consolidation or backup in times of greater 911 needs or in a local disaster. Also, as the TECB continues to define statewide technical, operating, staffing, and training standards, consolidation may be a more cost-efficient and effective means of meeting a higher level of service, especially in areas with limited E-911 service charge revenue.

Tennessee has a policy of encouraging consolidation within and among ECDs. TCA 7-86-105(b)(7) states that "it is the policy of the state to encourage the consolidation of emergency communications operations in order to provide the best possible technology and service to all areas of the state in the most economical and efficient manner possible." Also, TCA 7-86-310 prohibits the creation of new ECDs within the boundaries of an existing district without the approval of the TECB. TCA 7-86-305 authorizes the TECB, as a means to restore financial stability to financially distressed ECDs and to ensure continued 911 service for the benefit to the public, to study the possible consolidation or merger of two or more adjacent ECDs if one of the ECDs is financially distressed.

Tennessee has used incentives to encourage PSAP consolidation. The TECB allows full benefits of its grant programs and reimbursement programs to continue after consolidation. In July 2005, the TECB approved a program to encourage consolidation of rural ECDs by

Tennessee has a policy of encouraging consolidation within and among ECDs.

reimbursing the costs of consolidation up to \$300,000, subject to the availability of funds.

During this study, TACIR staff contacted several ECDs and PSAPs within the state to determine local sentiment about consolidation. Responses can be found in the next section. Based on 2005 TACIR survey results, the trend in the emergency communications field is to consolidate equipment and telecommunicators into fewer, more centralized call centers. Tennessee's district directors were asked their opinions on several statements related to the consolidation of emergency communications. Overall, directors were positive toward the possibilities and benefits of consolidation within a county. Directors were not supportive of consolidation of PSAPs among more than one county. Most directors agreed that telecommunicators can be trained (84%) and held accountable (63%) to effectively handle calls of multiple public safety agencies and for a larger geographical area (61%). Most (71%) agreed that personnel cost savings were possible by combining PSAPs within a county. Directors were evenly split (agree, neutral, and disagree) on the need for call centers to handle a minimum number of calls for cost-effectiveness, non-personnel cost savings, and effective management control by combining PSAPs within more than one county.

Humphreys County converted to a consolidated dispatch center in 2001. The director indicated that consolidation reduced overlap and costs among public safety agencies, and they can now offer better coverage for emergency communication. The director of Tipton County ECD said that consolidation reduced costs; he knows the smaller cities could not operate a dispatch center from the funds they contribute to the consolidated center. The director of the Bradley County ECD said their consolidation in 1996 allowed them to pool the 911 call workload and smooth out the peaks and valleys in the receipt of calls throughout several agencies.

All the directors said the biggest issue they have successfully overcome was the perceived loss of control from some of the agencies involved. The districts were able to overcome these concerns by involving all the affected agencies in establishing the standards, procedures, and agreements, and eventually, by showing that service was not compromised.

The TECB encouraged four counties (Van Buren, Grundy, Sequatchie, and Bledsoe) to implement E-911 in Tennessee and to develop a regional call center; however, after about three years of discussion, each of the four counties decided they wanted to keep their dispatchers in their own county and have an E-911 facility in their own county as well.

Overton and Pickett counties merged their ECDs in 2001. Pickett County was in financial distress. They approached Overton County about a possible merger to continue E-911 service in the area, and the TECB provided funds for updated equipment in a consolidated center. According to the director of the merged district, the merger has worked because both counties wanted it and have worked together to achieve it. The merger saved Pickett County the costs of new equipment, which it could not afford with its small population and service fee base. The consolidation has provided improved service for both counties.

In its 2006 study, TACIR recommended that districts and local governments with multiple PSAPs or multiple districts determine whether the additional personnel and equipment costs are justified.

Impact on Public Safety of Non-ECD Affiliated PSAPs

The Comptroller's audit found weaknesses in emergency communication services because the law allows for PSAPs to remain separate from their ECD and dispatch their own calls. The main concerns with regard to public safety, found in both the audit and interviews with stakeholders, followed four main themes:

1. Lack of adequate technology limits the information non-affiliated PSAPs receive when taking 911 calls, particularly number and location information.
2. The TECB does not have any legal oversight of non-affiliated PSAPs, which means it does not have the authority to ensure those PSAPs have access to appropriate technology or that minimum dispatcher training requirements are met. PSAPs

affiliated with their ECD must meet both technology and dispatcher training requirements.

3. The TECB requires ECDs to create contingency plans so that PSAPs continue to operate effectively in the event of power outages or other service disruptions. Non-affiliated PSAPs are not required to create a contingency plan at all.
4. If an ECD transfers a call to a non-affiliated PSAP and the initial call taker does not stay on the line, number and location information may be lost. If the initial call taker stays on the line, number, location, and any necessary information can be relayed. Similarly, problems may arise when a non-affiliated PSAP takes a call directly from the public and it does not have the necessary location technology.

Has the right of PSAPs to dispatch its own services and the lack of oversight of these PSAPs by the TECB created a negative impact on public safety? TACIR staff interviewed the non-affiliated PSAPs, ECDs, the TECB, and additional emergency communications personnel to explore the answer to this question and respond to the mandate laid out in PC 473.

Interviews

TACIR staff received a list of 22 non-affiliated PSAPs from the TECB in May 2011. An e-mail with questions was sent to every available e-mail contact at each PSAP. The survey instruments can be found in Appendix B of this report. TACIR staff proceeded to call each non-affiliated PSAP in order to collect responses to the questions. This process was repeated for each of the ECDs located in the same district as the non-affiliated PSAPs. The full content of the interview responses can be found in Appendix C.

Tables 2 and 3 represent general answers divided into three categories as told from the perspective of the PSAP or ECD. For example, the responses found in Table 2 are reflections from non-affiliated PSAPs and, thus, pronouns like “we” and “us” refer to the non-affiliated PSAP. (All responses are confidential.)

Non-affiliated PSAPs

The crux of this study is whether or not non-affiliated PSAPs and the technology they use have a harmful impact on public safety. The questions TACIR staff sent were crafted, however, not to reflect any bias. TACIR staff was very careful to remain completely neutral during interviews. Nonetheless, responders were very vocal and passionate about the issue. Of the 22 non-affiliated PSAPs on the list drafted by the TECB, TACIR staff was able to collect responses from 15 of them. TACIR staff contacted the remaining PSAPs several times without success.

Table 2 summarizes and generalizes answers to the questions based on area of concern (consolidation, technology, and public safety). The full responses can be found in Appendix C.

If the non-affiliated PSAP responses could be summarized into one sentiment, it would be: *What can they do for us that we are not already doing?* None of the PSAPs believe they are creating a harmful situation for the community by dispatching their own services. One responder was concise: if there were several incidents of callers slipping through the cracks, the state and local authorities would remedy it. Additionally, these PSAPs work hand in hand with their local ECDs and have established a routine that works for their communities. In fact, several have a great working relationship with their ECD and some of the interviewed ECD directors echoed the same positive attitude.

The main concern non-affiliated PSAPs expressed about consolidation seemed to be the potential loss of jobs and ability to interact directly with their residents. It is obvious a certain amount of control would be lost through consolidation as well, but that was never directly stated.

It should be noted that the original list sent by TECB staff included one PSAP that recently consolidated with its ECD, whose director provided a different perspective to the interviews. Similarly, there were a few PSAPs interviewed that were previously affiliated with their ECD but parted ways due to leadership disagreements.

The overall message taken from PSAP interviews follows the old adage, "If ain't broke, don't fix it."

If the non-affiliated PSAP responses could be summarized into one sentiment, it would be: *What can they do for us that we are not already doing?*

The Public Safety Impact of Public Safety Answering Points
Not Affiliated with an Emergency Communications District

Table 2. Non-Affiliated PSAP Responses		
Consolidation Issues	Calls & Technology	Public Safety Impact
The reason for consolidation was simple economics. The city had a mounting debt load during a bad economy. Consolidation was not about better quality of services at all. We went from having a dispatching service that cost the city well over \$100K to roughly \$40K. It was simple math but the quality is always like that old saying, "You get what you pay for."	Our PSAP has 15 non-emergency lines without caller ID and one phone line dedicated for transferred 911 calls.	No, there is not a negative public safety impact and our dispatchers are capable.
E911 does a fine job, however it is not the same quality of service as we can provide. Should consolidation be mandatory? Absolutely NOT. It should be a choice of the people who are served in that area not the state house or any federal entity.	Our PSAP has two lines with caller ID and one private line strictly for 911 calls [transfers].	No, this allows residents to contact local police in their city, not someone who is 20 to 30 miles away who may be unfamiliar with the city. A lot of older residents will not dial 911 because they would rather call the local police department.
It is just an money issue. We have a good relationship with the ECD and we may look to consolidation in the future.	In addition to 911 calls, we receive non-emergency calls, break-ins, suspicious behavior reports, etc.	No, if there was anything jeopardizing public safety, the state would take measures to remedy that. The biggest issue is the ability to have the same technology as ECD [without consolidating]
Consolidation is too expensive in terms of dispatcher pay and insurance.	We have over 12,000 calls a year on CAD, including complaints.	We would not get the service we need given our call volume and their [ECD] limited staff.
It is our preference not to consolidate and we believe we would lose a lot more, not to mention our officers are not interested in such an arrangement.	We have five phone lines and one 911 line with caller ID. We answer radio calls and can hear county and fire radio calls. We do not separate emergency calls from over all calls.	There is no risk through transferred calls.
No, they would not provide the services we need.	We have a full-time dispatcher who answers calls on a seven-digit phone line and transferred 911 calls.	Consolidation is better for medical emergency calls, but not law enforcement. Other dispatchers overstep bounds when it comes to law calls.
We have too much call volume for the ECD to handle. Service would not be adequate.	We use radios and computers but do not have 911 equipment. Our dispatchers receive on-the-job training and we send them to training classes.	Other than the caller's address, the ECD does not have much more than we do. We have a backup generator that keeps everything running in case of an outage.
We are heavily involved with the ECD and communicate with them openly. We must have our own dispatchers to enter data for things like missing persons reports, etc.	We use Winsom's CAD system, Motorola dispatch panel, Blue Ridge recording system, E-agent. We do have caller ID but no ALI.	Our complaint rate is so low, most businesses would love to have our success rate. Our calls are recorded for quality control. The risk is just not great.
Pooling resources is a good thing however, people in town like to call someone who is in their city. Our system is easier in critical situations, but we agree standards should be met.	Our dispatchers have basic Qwerty/entry certification, a training week in Nashville, and 5-8 weeks of training depending on experience.	Older residents prefer calling us directly.
How our system is now works better because it allows for more dispatchers both at the other [affiliated] PSAPs and our dispatchers answering the local number.	We have a designated phone line for 911 calls that is recorded.	The ECD employee stays on the line until the call is connected, so there is little chance for losing a call.
Prefer being on their own; they know 911 dispatched calls know its emergency, always have 2 dispatchers on duty.	We have one 911 line with a live dispatcher, plus seven active lines and more lines in the jail.	There is not a negative impact on public safety.
We looked at consolidation earlier this year. The cost and trade off were worth it, but due to technological issues, the legislative body decided not to consolidate. We want to use certain technology that differs from the ECD.	We have dispatchers on the job 24 hours a day, 7 days a week.	The ECD employee stays on the phone and tells our dispatcher the address, so dropped calls are not a big issue. If it does happen, we call back 911 and get the number, including area/address.
We answer to citizens.	We have caller ID on our seven-digit line that receives calls.	
We were previously consolidated but split because our director and the ECD director did not get along well together.	Our dispatchers are sent to basic NCIC school, attend a 40-hour course on NCI, plus eight hours of continuing education.	
No need for consolidation. We work with the ECD over the radio in case of something serious and they stay on phone when transferring calls. We radio and monitor each other and work well together.	Our caller ID shows the number when calls come in. We have one line with rollover that is capable of five lines at a time with one line designated for 911 transfers.	

Table 2. Non-Affiliated PSAP Responses		
Consolidation Issues	Calls & Technology	Public Safety Impact
Things are working fine now, but if calls continue to grow, we might want to consolidate.	The ECD employee stays on the line until call is connected; but usually release after that.	
It comes down to money--the ECD does not do anything we cannot do. The city should take care of city and the county takes care of county. The more people involved, the more chaos.	Our phone lines have caller ID only. Dispatchers receive on the job training and occasional special training at communication classes.	
While we want the better technology, we have to have a dispatcher 24/7. As the largest town in county, not feasible for us to consolidate.		
Consolidation will occur in near future unless money falls out of the sky because new technology is needed.		
Each county should decide what is best for itself, nor could we give up dispatchers.		

ECDs

Currently, there are 12 ECDs that have non-affiliated PSAPs within their districts. TACIR staff collected responses from ten, plus interviews with two ECD directors that have full affiliation of PSAPs in their districts. There were two general opinions shared: One, it is dangerous that non-affiliated PSAPs do not have the most up-to-date technology. The other—perhaps surprisingly—was that non-affiliated PSAPs are not a major concern because the job is still getting done.

In addition to creating problems such as busy telephone lines, dropped calls, and callers having to repeat information once the call was transferred to the PSAP, proponents of consolidation said that the lack of ANI and ALI is dangerous. Another apprehension expressed by ECD directors was that while they and ECD-affiliated PSAPs have the most current technology that adheres to TECB standards, many non-affiliated PSAPs utilize regular telephone lines (in some cases, without caller identification). As Tennessee moves forward in its steps to implement Next Generation (NG) 911 technology under the TECB’s leadership, these non-affiliated PSAPs will be left behind. NG 911 utilizes GIS mapping capabilities to locate callers and assist in dispatching services. This information can be relayed over the telephone to non-affiliated PSAPs, but that will result in lost time.

Those ECD directors who seemed less interested in consolidation reflected a similar attitude as those of the non-affiliated PSAPs:

In addition to creating problems such as busy telephone lines, dropped calls, and callers having to repeat information once the call was transferred to the PSAP, proponents of consolidation said that the lack of ANI and ALI is dangerous.

it works; and if it was very dangerous, it would not be allowed to continue. Additionally, some ECD directors appreciated that sheriff and police departments handle calls that require law enforcement personnel on the line to assist the caller. One ECD director remarked that it is just too expensive for some of the smaller PSAPs to pay the fees associated with ECD-affiliation. Another noted that ECDs should use their funds on 911 technology not salaries, and having PSAPs (affiliated or otherwise) dispatch their own services allows his ECD to do so.

Table 3. ECD Responses		
Consolidation Issues	Calls & Technology	Public Safety Impact
Consolidation would require more funds for our ECD to obtain extra dispatchers and building space to take on additional PSAPs.	We transfer the call to regular phone line (with or without caller identification) and stay on the line until it connects.	Our ECD dispatchers are not trained for law enforcement dispatching, so it is good those PSAPs handle those calls.
We have a good working relationship with our affiliated and non-affiliated PSAPs.	Sometimes the phone line to which we transfer is busy.	No, non-affiliated PSAPs do not have negative public safety impact.
Consolidation would help ECDs become more efficient.	At our ECD, 23% of calls in last month were sent to non-affiliated PSAPs.	Residents are paying for 911 services but they are not receiving equal service.
Non-affiliated PSAPs do not want to lose the jobs or control they currently enjoy.	The various technology of our PSAPs include function on radio, Motorola radio equipment, regular telephone equipment, regular phone line with and without caller identification, dedicated phone lines.	Yes, non-affiliated PSAPs do have a negative public safety impact; dangerous because they do not have adequate technology
Consolidation can usually help PSAPs save money, so we use that as incentive.	We stay on the line until all information is shared with non-affiliated PSAP even though our liability is over once calls is transferred.	The state provides money to upgrade technology to increase public safety, and these PSAPs will be left behind.
Consolidation not necessary because each agency is different and performs special duties that require them to have a dispatcher at their location. 911 does not perform those type services nor would we be able to do so at this location.	We transfer police calls only to each agency, and stay on the line until someone answers, we dispatch fire and medical call from our center to those locations.	No negative impact, all citizens receive the same service except ANI/ALI, which we can give to them if needed and we can pass along the coordinates.
Consolidation allowed our county fire department to add men to duty (since they were freed from dispatching duties).	When we purchase NG911 equipment we will be purchasing a switch, a controller and individual workstations;* We currently transfer the call to a regular telephone line.	Due to the speed dial process, not losing that much [time], and because our ECD handles medical calls directly, negative public safety impact is lessened.
Not sure if consolidation should be required, but perhaps recommended; it serves the public in a more timely manner. Why do the same job out of two (or more) buildings?	We transfer calls on a regular phone line, make sure the caller gets connected and that the PSAP gets the information.	For the case of CPR, our ECD stays on phone line and also sends the call via radio on direct dispatch or relays dispatch on direct phone line. Non-life threatening calls are transferred to EMS, police, and fire.
A consolidated PSAP allows for a quicker response to the caller.	CAD system helps keep track of calls, 5-10% of calls transferred to non-affiliated PSAPs.	90-95% EMS calls come through our ECD, so less concern with regard to public safety.
It is not always more economical to consolidate.	Our employees do not have to stay on the line, but we will stay on the line to make sure the info gets through.	For the sake of public safety, consolidation should be required. How can public safety be served with law enforcement handling incoming visitors, records, and 911 calls - safety is jeopardized.
Things are working fine as they are, why change it?	911 funds are intended for technology; not salaries, we do not need to take on new tasks.	Any PSAP (affiliated or otherwise) will respond in a professional manner, not jeopardizing public safety.
Consolidation would bring on turf and political battles.	We transfer calls and generally make sure the call is connected, but our employees do not stay on the line until the PSAP has picked up.	
*A workstation is a telephone answering position where you answer 911 calls. When an ECD routes or transfers a call to a PSAP with a controller or workstation, it will have exactly the same information as the ECD.		

Table 3 summarizes and generalizes answers to the questions based on area of concern (consolidation, technology, and public safety). The full responses can be found in Appendix C.

Three of the six ECD directors interviewed would prefer consolidation because it serves the public in a more timely and efficient manner. However, there were those that acknowledged consolidation may not fit within every community. Ultimately, life-threatening emergencies did not seem to be a serious issue since they are handled immediately with no extra time lost in responding.

TECB

The TECB is the entity responsible for oversight of the state's 100 ECDs. The TECB is self-funded by a monthly \$1.00 surcharge imposed on all wireless users. It provides funds to ECDs, telecommunications carriers, and E-911 service providers for costs associated with implementing, maintaining, and advancing wireless E-911 service.¹⁵

According to the TECB website, it is authorized to

1. implement wireless 9-1-1 service across the state according to the orders of the Federal Communications Commission (FCC);
2. assist emergency communications districts boards of directors in the areas of management, operations and accountability;
3. adjust the emergency telephone service charge on landlines in emergency communications districts;
4. oversee the finances of the state's 100 local emergency communications districts which are statutory municipalities;
5. establish technical operating standards for all E-911 districts;

¹⁵Emergency Communications Board. No date. Mission and authorities. <http://tn.gov/commerce/911/missionAuthority.shtml>. (accessed August 5, 2011).

The primary concern expressed by TECB staff was that non-affiliated PSAPs do not have access to the same technology as ECD-affiliated PSAPs, namely ALI and ANI, putting residents at risk in case of dropped or interrupted calls.

6. act as the deciding agency between local governmental entities concerning E-911 service and emergency communications;
7. supervise the operations of a “financially distressed” emergency communications district;
8. provide technical assistance to emergency communications districts;
9. establish training and course of study standards for all 911 dispatchers and call takers receiving an E-911 call from the public; and
10. provide grants for operating and capital expenditures for basic or enhanced 911 service and wireless enhanced 911 service to assist emergency communications districts.

TECB staff members provided helpful information and assistance to TACIR for its 2010 staff report, *E-911: Emergency Communications Funding in Tennessee*. This working relationship extended to this report, and TECB staff were helpful and forthcoming with information and data. The following are reflections gathered from e-mails, telephone interviews, and a meeting with TECB staff members.

TECB staff believes the public safety impact of non-affiliated PSAPs lies in lack of adequate technology. To summarize, non-affiliated PSAPs that have not purchased their own 911 controllers can only receive the voice part of an emergency call. Address and coordinate information must be relayed between the receiving ECD or PSAP and the non-affiliated PSAP call taker, or it must be repeated by the caller. This process can slow down the dispatch of services.¹⁶ The primary concern expressed by TECB staff was that non-affiliated PSAPs do not have access to the same technology as ECD-affiliated PSAPs, namely ALI and ANI, putting residents at risk in case of dropped or interrupted calls.

¹⁶Holloway, Rex. Reem Abdelrazek. E-mail. Nashville, May 12, 2011.

TECB staff also explained that very careful standards have been set by the TECB for ECDs (like backup generator requirements, GIS mapping capabilities, etc.), and it is unaware if non-affiliated PSAPs have such standards or equipment. In fact, it does not have the authority to oversee such issues. This is particularly daunting in light of NG 911; ECDs will have calls routed via GIS mapping systems, which none of the non-affiliated PSAPs currently have. The TECB believes that affiliation is the optimal situation for PSAPs and ECDs because it standardizes technology and training requirements, assuring Phase II and NG 911 compliance.

Findings

The following section synthesizes interview results and staff research related to emergency service provision, technology, consolidation and oversight issues, and equal protection of citizens.

Service Provision

Based on the Comptroller's audit, interviews with stakeholders, and concerns raised by TACIR members, the areas of concern regarding service provision as related to non-affiliated PSAPs include:

- Dispatchers at non-affiliated PSAPs often have additional job duties, like answering other telephone calls (non-emergency), greeting visitors, receptionist, etc.
- The extent to which non-affiliated dispatchers receive training is unknown.
- When a call is transferred, the caller often has to repeat information, delaying response time.
- Some residents choose to report emergencies by calling a local, non-emergency telephone number.

In many of the non-affiliated PSAPs, the person(s) responsible for taking 911 calls often function(s) as receptionist, switchboard operator, or even a jailer in the case of law enforcement agencies. While these call-takers are usually trained dispatchers, they have additional tasks that occupy their work time. This concern was raised by the TECB and a member of TACIR. The ECDs interviewed

did not report this as a problem, however. Understandably, this was not reported as a problem by non-affiliated PSAPs either. Many of the larger PSAPs have dedicated dispatchers and only those PSAPs with a small service base had multi-function dispatchers.

Another concern related to service provision (and also mentioned in the Comptroller's audit) was dispatcher training at non-affiliated PSAPs. While the TECB ensures minimum dispatcher training for ECD-affiliated PSAPs, the extent to which non-affiliated PSAP dispatchers receive training is unknown. During interviews, TACIR staff asked each of the non-affiliated PSAPs what training their dispatchers receive. These answers can be found in the second column (Calls & Technology) in Table 2. Many of the non-affiliated PSAPs send their dispatchers to regional training classes and receive extensive on-the-job training under supervision. TACIR staff believes the oversight of dispatcher training should remain with the directors of non-affiliated PSAPs, and that they do not need to submit dispatcher training information to their local ECD or the TECB.

A complaint that was voiced by some ECD directors and TECB staff was that occasionally callers have to repeat information when their call is transferred to another PSAP. This was also a concern raised by TACIR members at their June 2011 Commission meeting. Additionally, the Comptroller's audit was unsure of the extent of this problem when a non-affiliated PSAP takes a call directly without any relayed information. While location information may have to be repeated if a call is transferred to a non-affiliated PSAP that does not have Phase II technology, the nature of the emergency would have to be reported again to the second call-taker. Again, unless the initial call-taker relays the emergency situation information to the PSAP responsible for dispatching services, the caller must repeat the nature of his/her emergency—regardless of whether that second PSAP has Phase II technology.

An interesting discovery made during research and interviews was that some residents choose to call a local, non-emergency number to report emergencies. This trend seemed common amongst older residents in smaller communities. Because residents know which agency they are calling, they feel a sense of familiarity and comfort, as opposed to a 911 center that may be further away in the county or in another city. However, unless the non-emergency

telephone line has caller identification, the call-taker will have no information about the caller. While this may seem problematic, it is the choice of the resident to call a local, non-emergency number and therefore, does not place the safety onus on ECDs or PSAPs.

TACIR staff did not find services to be lacking among non-affiliated PSAPs and therefore does not believe there is an adverse impact to public safety that would require changing current law to require consolidation. TACIR staff agrees with the spirit of the law that encourages consolidation but stops short of mandating it, recognizing the importance of local authority and community relationships.

Technology and Equipment Capabilities

Because non-affiliated PSAPs do not qualify for funding or equipment reimbursements from the TECB, the technology they use is not clearly reported. Three issues raised in the Comptroller's audit were related to non-affiliated PSAPs' technology: the technology they use is unknown, the TECB cannot ensure Phase II technology since it does not have any oversight authority of non-affiliated PSAPs, and their possible inability to integrate with NG 911 systems.

Even though Tennessee was the third state in the nation to achieve statewide E-911 Phase II compatibility throughout all the state's ECDs, there are several PSAPs who rely solely on regular seven or ten-digit telephone lines to receive relayed or transferred 911 calls. In most cases, the non-affiliated PSAP has a private line dedicated just for transferred 911 calls from the ECD. There was one non-affiliated PSAP interviewed that has only one telephone line for both emergency and non-emergency calls. Its director estimated his PSAP receives less than ten transferred 911 calls each month.

The following is a summary of call systems and technologies that non-affiliated PSAPs have and use:

- Three non-affiliated PSAPs have E-911 controllers.
- Of those three, one non-affiliated PSAP has its own emergency service number, which allows it to directly receive 911 calls made within city limits.

TACIR staff agrees with the spirit of the law that encourages consolidation but stops short of mandating it, recognizing the importance of local authority and community relationships.

- One PSAP with a Phase II compliant controller (not counted among the three mentioned in the first bullet) consolidated with its local ECD in early 2011.
- One non-affiliated PSAP with a very small service area “shares” technology with its local ECD but is not affiliated with it.
- Of the 14 non-affiliated PSAPs interviewed, seven reported caller identification available on their telephone lines.

It should be noted that while dropped calls were a concern of ECD directors, data on dropped calls was not available from the PSAPs interviewed. The middle column (titled “Calls and Technology”) in Tables 2 and 3 highlights the call system and technology used, as answered by the non-affiliated PSAPs in question and their local ECDs.

The lack of adequate technology currently represents a problem with regard to ANI and ALI. In fact, the most prominent concern expressed by the ECDs interviewed was the limited technology of most non-affiliated PSAPs. As ECDs move beyond Phase II technology, this problem is expected to grow. According to the director of technical services at the TECB, non-affiliated PSAPs are not Phase II compliant if they do not have a 911 controller. Once the TECB implements its NG 911 network, even a 911 controller will not be capable of making an internet protocol (IP) connection.¹⁷

E-911 service and dispatching are expensive. Not only is technology required, but salaries are also a large budgetary component. New technology is more costly to acquire and maintain. The TECB reported that the average cost for an NG 911 controller is \$200,000. This does not include the additional cost of GIS mapping systems and recorders, maintenance, and staff (or contractors) required to update necessary components. Current TECB procedure is to pay for one NG 911 controller per ECD. If an ECD wants an additional controller, it is responsible for the cost.

Non-affiliated PSAPs do not qualify for any technology upgrade assistance from the TECB. Pursuant to TCA 7-86-108(e), ECDs may only use 911 revenue for the operation of the district and for the

¹⁷Holloway, Rex. Reem Abdelrazek. E-mail. Nashville, May 12, 2011.

purchases of necessary equipment for the district. The TECB does not provide any direct grants to ECDs; funds are distributed through an operational funding formula, NG 911 update funds, or other qualifying equipment reimbursements.¹⁸ Since the TECB does not currently have a grant system, it would not be feasible for them to provide grants to non-affiliated PSAPs.

TECB staff explained that it is likely ECDs or PSAPs using NG 911 technology will have to relay caller number and location information to non-affiliated PSAPs over voice calls. The Comptroller's audit also raised the issue of ECD or affiliated PSAP call-takers staying on the line with non-affiliated PSAP dispatchers to relay information. Because this is not a departure from the status quo—relayed calls are used and allowed now—TACIR staff does not believe changing technology will have a great negative impact on public safety. As NG 911 technology changes and is implemented, it may present new challenges and these should be visited as needed by emergency service providers and policymakers.

TACIR staff agrees with the TECB and ECDs that there is a great technological disparity in most cases of non-affiliated PSAPs in comparison to their counterparts. Nonetheless, service provision is not suffering as a result of this disparity. Therefore, non-affiliated PSAPs should continue to maintain levels of acceptable service and strive to improve their technology and equipment when possible.

The General Assembly may wish to amend TCA 7-86-107 to include wording to the effect that any caller dialing 911 in Tennessee must have the call delivered to a public safety answering point equipped with at least Phase II compliant technology, if not Next Generation 911 technology. Emergency calls can still be relayed or transferred to a separate public safety emergency service provider to dispatch services (which is already allowed and practiced across the state). This recommendation applies only to the actual placement and routing of a 911 call.

Consolidation

The big question is: should non-affiliated PSAPs be required to consolidate with their local ECD? The law, which has been in place

¹⁸Questell, Lynn. E-mail to Reem Abdelrazek, August 11, 2011.

The most prominent concern expressed by the non-affiliated PSAPs interviewed for this report was the loss of a local, “homegrown” approach if consolidation occurred—particularly because many did not see any negative safety impact due to non-affiliation.

for almost 12 years, was crafted in such a way as to grant cities and counties autonomy and the discretion to manage emergency service provision in a way that suits their communities. While that has created a technological gap in most cases, TACIR staff does not believe the gap is so wide that it would require consolidation.

There are several studies that show emergency communications services can be improved through consolidation. Some studies cite ample benefits, including decreased operational costs, increased efficiency, and better service overall. Yet careful consideration should be given to potential adverse impacts. Two primary challenges to consolidation are dispatcher unfamiliarity and job elimination. Other considerations are cost, lack of sufficient incentives, existing law, retention of local control, and tradition. Two major difficulties have been reported by various parties: reaching an agreement to the terms of consolidation and a perceived loss of control by the agencies involved. Differing pay scales and benefits among consolidating agencies as well as other staffing issues are also areas of concern.

The most prominent concern expressed by the non-affiliated PSAPs interviewed for this report was the loss of a local, “homegrown” approach if consolidation occurred—particularly because many did not see any negative safety impact due to non-affiliation. As mentioned earlier, these directors believe that service provision is sufficient, and that consolidation would not increase their service quality. In fact, several feared it would have the opposite effect. More than one story was shared of a PSAP that consolidated and was unhappy with the results. While these stories may simply be anecdotal, it does reveal the culture and apprehension surrounding consolidation for many of the non-affiliated PSAPs. There was one PSAP that was previously affiliated with its local ECD but discontinued affiliation several years ago due to leadership clashes.

Consolidation seems unlikely for many of the non-affiliated PSAPs. More than half of the PSAPs interviewed use their dispatchers for additional duties. There were also three non-affiliated PSAPs who reported that they would need more “manpower” than their local ECD could provide, i.e., current ECD staff would not be sufficient to manage all their calls if consolidation occurred. One of the ECD directors interviewed stated that his ECD would not be able to take on another PSAP without additional building space and more

dispatchers. Of the six ECDs that responded to TACIR staff (out of eight total) three strongly recommended consolidation and the three did not feel it a necessary measure, though they said it would help ECDs run more efficiently. Two of the ECD directors reported that they appreciate having law enforcement-trained dispatchers taking over calls that require that kind of expertise.

There are, as expected, instances of leadership tension between ECDs and non-affiliated PSAPs, just as there are with most service providers who work together and often compete for resources. Surprisingly, however, directors of both non-affiliated PSAPs and ECDs reported a good working relationship with each other. These agencies have established a routine that meets the needs of their communities. Ironically, when speaking to state and local government officials about this study, examples of local problems came from ECDs in which all the PSAPs are affiliated. One local government consultant complained there is a lack of communication, coordination, and an operational dysfunction between the several PSAPs located within one ECD. He said these two issues often lead to duplication of tasks and technology.

Based on research, interviews, and analysis, staff does not believe consolidation or affiliation is necessary. **State law should continue to encourage consolidation, as made clear in TCA 7-86-105(b)(7), but should not require it.** Current law that allows for emergency service providers to retain the right to dispatch their own services respects Tennessee’s history of decentralizing power and granting local powers the autonomy to run their affairs.

Oversight

One of the findings in the Comptroller’s audit was the lack of oversight that the TECB has over non-affiliated PSAPs, particularly as it relates to Phase II technology and minimum dispatcher training requirements. Legally, oversight of non-affiliated PSAPs is outside of the jurisdiction of the TECB. The majority of non-affiliated PSAPs are law enforcement agencies—though there are two emergency medical service (EMS) agencies not affiliated with their local ECD. Consequently, their oversight usually stems from their appointing power, like the municipal or county legislative body, city or county executive, or city manager.

Surprisingly, however, directors of both non-affiliated PSAPs and ECDs reported a good working relationship with each other. These agencies have established a routine that meets the needs of their communities.

Because the TECB lacks oversight authority, the non-affiliated PSAPs are not required to submit any information to either their local ECD or the TECB. Nonetheless, every PSAP that TACIR staff interviewed has some form of oversight; they report to their police chief, city manager, county mayor, city council, or county commission. The types of information the non-affiliated PSAPs submit to these appointing or monitoring powers varies by PSAP.

In an effort to improve public safety and create uniform standards, TACIR staff recommends that public safety emergency service providers (PSEPs, as defined above in the *Statutory Definitions* section earlier) and non-affiliated PSAPs submit annual reports to their local ECD with information fashioned after TECB policy. The ECDs would submit that information, along with their own annual reports, to the TECB. This annual report would include their contact information, notification of any interlocal agreements, and a contingency plan in case of network, equipment, or facility failures. The Comptroller's audit recommended a similar measure: all PSAPs should be required to submit a contingency plan to the TECB per its Policy No. 36 for rerouting 911 calls in the case of interrupted service.

TACIR staff recommends that PSEPs and non-affiliated PSAPs be asked to submit an annual report to their local ECD containing the following:

- a contact list of supervisor, call-back number (for use by CMRS providers), and address (TECB Policy No. 9)
- notification of any interlocal agreements (TECB Policy No. 25)
- minimum backup power requirements (TECB Policy No. 32)
- a written contingency plan in case of network, equipment, or facility failure (TECB Policy No. 36)

Additionally, any PSEP or non-affiliated PSAP that has GIS mapping capabilities must submit all the information requested of ECDs in TECB Policy No. 20 under section C. These policies are available on the TECB website.

TACIR staff suggests these annual reports be submitted to the local ECD by August of each year. The ECD would in turn submit them

to the TECB. The TECB would keep track of each non-affiliated PSAPs' responses. ECDs already submit budgets, audits, and back-up contingency plans to the TECB in addition to regular site visits and e-mails. TACIR staff informally surveyed several of the non-affiliated PSAPs, and the responses received were in favor of such a measure.

Equal Protection

Some ECD directors and TECB staff mentioned they believe that the law which authorizes non-affiliated PSAPs may violate the equal protection clause.¹⁹ They think that residents whose calls are sent to non-affiliated PSAPs will not have access to the same technology as calls sent to ECD-affiliated PSAPs.

The concept of equal protection espoused by the federal and state constitutions guarantees that, "all persons similarly circumstanced shall be treated alike."²⁰ If there are no suspect or quasi-suspect classifications (which would include classifications based on race, gender, religion, or national origin), or there are no fundamental rights (like the right to vote) involved, the courts will use the rational basis test when looking at a law to determine if it violates the equal protection clause.²¹

This situation raises two issues:

1. Are residents serviced by affiliated PSAPs treated differently than residents serviced by non-affiliated PSAPs?
2. If these groups are treated differently, is there a rational basis for doing so?

Both of these issues are subject to debate, and they have not been addressed by the Tennessee courts.

¹⁹*Tennessee Code Ann.* § 7-86-107(b).

²⁰*Doe v. Norris* 751 S.W.2d 834, 840-42 (Tenn. 1988).

²¹Tenn. AG Op. No. 01-107.

TACIR staff did not find overwhelming evidence that would merit changing the current law, which allows these PSAPs to function as they are. State law should continue to encourage consolidation but should not require it.

Conclusion

While it is clear the majority of non-affiliated PSAPs have technology that is lacking in comparison to ECD-affiliated PSAPs and ECDs, interviews and analysis did not indicate that emergency service provision and public safety are suffering as a consequence. TACIR staff did not find overwhelming evidence that would merit changing the current law, which allows these PSAPs to function as they are. State law should continue to encourage consolidation but should not require it. Current law that allows for emergency responders to retain the right to dispatch their own services respects Tennessee's history of decentralizing power and granting local powers the authority to run their affairs. These issues should be revisited as necessary by state lawmakers as E-911 technology and emergency service needs continue to change.

Summary of Findings

1. At the date of publication, there are 21 public safety answering points (PSAPs) that are not affiliated with their local emergency communication district (ECD) in Tennessee. This is allowed under state law.
2. There is no definition of the term *public safety answering point* in Tennessee Code Annotated 7-86-103, which created some confusion regarding the classification of the non-affiliated PSAPs during the course of this study.
3. Related to finding 2, several of the entities that the Tennessee Emergency Communications Board (TECB) staff submitted to TACIR staff as non-affiliated PSAPs did not consider themselves to be PSAPs. TACIR staff agrees that these agencies primarily provide dispatching services and are not truly E-911 PSAPs.
4. The most prominent concern expressed by the non-affiliated PSAPs interviewed was the loss of a local, "homegrown" approach if consolidation occurred, particularly because many did not see any negative safety impact due to non-affiliation.

5. The most prominent concern expressed by the ECDs interviewed for this report was the lack of adequate technology of many non-affiliated PSAPs to receive automatic number and location information.
6. TACIR staff agrees with the TECB and ECDs that, in most cases, there is a technological disparity of non-affiliated PSAPs in comparison to their counterparts.
7. TACIR staff does not believe there is an adverse impact to public safety that would require changing current law to require consolidation. Staff research shows that only one non-affiliated PSAP in Tennessee receives 911 calls directly, and that PSAP is Phase II compliant. The other non-affiliated PSAPs receive transferred calls from Phase II compliant PSAPs.
8. TACIR staff encourages consolidation where appropriate but stops short of mandating it, recognizing the importance of local autonomy and community relationships.

Recommendations

1. While PSAP is a standard term in the emergency communications field, there is no statutory definition of “public safety answering point” (PSAP) in Tennessee Code Annotated (TCA) 7-86-103, which contains the definitions for the Emergency Communications chapter. Staff believes a definition of PSAP should be included in the TCA for classification purposes. To that end, TACIR staff recommends the Tennessee General Assembly consider adopting a clear definition of public safety answering point for the TCA. That would clarify any ambiguity regarding what constitutes a PSAP in light of Tennessee’s unique working relationship between emergency communications districts, public safety answering points, and public safety emergency service providers.
2. TACIR staff recommends that entities not affiliated with their local ECD that do not meet the definition of a PSAP should be recognized and classified as public safety emergency service providers (PSEPs); this term is defined in TCA 7-86-

103. The term *non-affiliated PSAP* would cease to apply to these entities upon acceptance of this recommendation. The term *non-affiliated PSAP* would apply only to those entities that have a 911 controller but are not affiliated with their local ECD, which is the case with the Spring Hill Police Department. Staff is unaware of any other PSAP with 911 access that is not affiliated with its local ECD.

3. The General Assembly may wish to amend TCA 7-86-107 to include language indicating that any call made by dialing 911 in Tennessee must be delivered to a public safety answering point equipped with at least Phase II compliant technology, if not Next Generation 911 technology. Emergency calls can still be relayed or transferred to a separate public safety emergency service provider to dispatch services (which is already allowed and practiced across the state). This recommendation applies only to the actual placement and routing of a 911 call.
4. TACIR staff recommends that state law continue to encourage consolidation where appropriate but not require it. Current law allowing for emergency service providers to retain the right to dispatch their own services respects Tennessee's history of decentralizing power and granting local powers the autonomy to run their affairs.
5. TACIR staff recommends that non-affiliated PSAPs and PSEPs that receive 911 calls (relayed, transferred, or otherwise) submit an annual report to their local ECD, which the ECD will in turn submit to the TECB. This annual report would include contact information, notification of any interlocal agreements, and a contingency plan in case of network, equipment, or facility failures, fashioned after TECB policies.
6. TACIR staff believes these issues should be revisited as necessary in the future.

Appendix A

Public Chapter 473 (2009)

Public Chapter No. 473

PUBLIC ACTS, 2009

1

STATE OF TENNESSEE

PUBLIC CHAPTER NO. 473

SENATE BILL NO. 1006

By Johnson

Substituted for: House Bill No. 999

By Lynn, Jim Cobb, Kernell, Hardaway

AN ACT to amend Tennessee Code Annotated, Title 4, Chapter 29 and Title 7, Chapter 86, relative to the emergency communications board.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. Tennessee Code Annotated, Section 4-29-230(a), is amended by deleting item (23) in its entirety.

SECTION 2. Tennessee Code Annotated, Section 4-29-234(a), is amended by adding the following language as a new subdivision thereto, as follows:

() Emergency communications board, created by § 7-86-302;

SECTION 3. (a) The Tennessee Advisory Commission on Intergovernmental Relations (TACIR) is directed to perform a study of the impact on public safety of non-emergency communications district affiliated public service answering points (PSAPs). The study shall review the emergency communications equipment capabilities of non-affiliated PSAPs. This study shall be conducted from TACIR's existing resources.

(b) All appropriate state departments and agencies shall provide assistance to TACIR.

(c) TACIR shall report its findings and recommendations, including any proposed legislation or interim reports upon conclusion of its study. Such report shall be delivered to each member of the House and Senate Government Operations Committees by December 1, 2011.

SECTION 4. This act shall take effect upon becoming a law, the public welfare requiring it.

PASSED: June 1, 2009

Appendix B

Survey Instruments

Dear [PSAP Director],

In accordance with Public Chapter 473 (2009), TACIR staff is contacting public service answering points, emergency communication districts (ECDs), and local law enforcement officials. Section 3 (a) of PC 473 directs TACIR, "to perform a study of the impact on public safety of non-emergency communications district affiliated public service answering points (PSAPs)." Section 3 (b) indicates, "[a]ll appropriate state departments and agencies shall provide assistance to TACIR."

Below, please find questions for you and/or your staff. TACIR staff will contact you within two days to collect your responses. These responses will remain confidential and summarized by TACIR staff for its report to the General Assembly. Please answer the following questions to the best of your ability. Additional comments may also be submitted.

If you have any questions, please feel free to contact me, the lead researcher on this project. Thank you for your time and cooperation.

1. When was your PSAP established?
2. What is the reason your organization has chosen not to affiliating/consolidating the local ECD?
3. Who operates the non-ECD affiliated PSAP? What additional duties does that entity have?
4. What kind of equipment do you have? What kind of training do your dispatchers receive?
5. How many calls do you receive? How many calls are transferred to you from another PSAP (including & especially ECD-affiliated PSAPs)?
6. Do you think all non-ECD affiliated PSAPs should be required to consolidate with their corresponding ECD? Why or why not?
7. Do you think the non-ECD affiliated PSAP jeopardizes the safety of citizens? Why or why not?
8. What measures would you use to determine "risk" (with regards to public safety)?
9. Do you think consolidation of affiliated PSAPs is more likely to happen with NG-911?
10. Do you qualify for federal grants or do you have to be affiliated with the ECD? What are your major funding sources?
11. Is there an agency that has oversight of your PSAP? Who collects data on your calls, dispatches, responding, etc?

Appendix B *(continued)*

Dear [ECD Director],

In accordance with Public Chapter 473 (2009), TACIR staff is contacting public service answering points, emergency communication districts (ECDs), and local law enforcement officials. Section 3 (a) of PC 473 directs TACIR, "to perform a study of the impact on public safety of non-emergency communications district affiliated public service answering points (PSAPs)." Section 3 (b) indicates, "[a]ll appropriate state departments and agencies shall provide assistance to TACIR."

Below, please find questions for you and/or your staff regarding the [agency name]. TACIR staff will contact you soon to collect your responses. These responses will remain confidential and summarized by TACIR staff for its report to the General Assembly. Please answer the following questions to the best of your ability. Additional comments may also be submitted.

If you have any questions, please feel free to contact me. Thank you for your time and cooperation.

1. Have you thought about buying the non-affiliated PSAP a controller so they can be affiliated?
2. What is the major roadblock to affiliating/consolidating the PSAP?
3. How often do you ever transfer calls to the non-affiliated PSAP? Does your dispatcher have to stay on the phone to be sure the call connects?
4. To your knowledge, what kind of equipment does the non-affiliated PSAP have?
5. Do you think all non-affiliated PSAPs should be required to consolidate with their corresponding ECD? Why or why not?
6. Do you think the non-affiliated PSAP jeopardizes the safety of citizens? Why or why not?
7. Do you think consolidation of affiliated PSAPs is more likely to happen with NG-911?
8. Have any of these PSAPs consolidated recently or are they considering it?
9. How has that changed things for the better and worse? Are citizens safer?
10. How and when did you get them to affiliate? (For example, did you have to give them incentives or did they ask to affiliate to save costs?)
11. Related: Have any of the non-affiliated PSAPs accepted training by ECDs and offered backup? If so, which ones?

Appendix C

Collected Interview Responses

These answers were modified to keep the identity of the interviewed parties completely anonymous. Figure 1 contains the responses from non-affiliated PSAP interviews and Figure 2 is based on interviews with ECDs.

Figure 1. Non-Affiliated PSAP Interview Responses
Question 1. When was the non-affiliated PSAP established?
2003 purchased starter center; full center in early 2004
Prior to 1969, no police chief
Dispatch established over 10 years ago
When telephones came into [us]; 911 in the late 1970s
Not sure about the exact year when we started probably in early 1970s or earlier
1960s, in last 5-10 years 911 calls transferred
[Agency] was PSAP from 1991-2003, bought own controller
My agency is not a PSAP
The reason for consolidation was simple economics. The [entity] had a mounting debt load during a bad economy. Consolidation was not about better quality of services at all. If you can imagine we went from having a dispatching service that cost the [entity] well over \$100,000.00 to one that cost the [entity] around \$40,000.00. It was simple math but the quality is always like that old saying, "You get what you pay for"
Question 2. What is the reason your organization has chosen not to affiliate/consolidate the PSAP?
This is what has worked best for [us]. [ECD] was first providing service prior to 2003, but we want more control even though no funding comes with that
Even though we want better technology, we have to have someone (dispatcher/communications) onsite 24/7. 10-28s 10-29s come through central control (privately owned) and they charge our department a fee. We are the largest town in county, not feasible to consolidate
I do not know that we were ever asked...it is a political thing probably
We were consolidated in [year] and split because it did not work in [year]
We are in both [two ECDs]; neither could dispatch for our entire [area], so we decided to do it all
This works better because it gives more dispatchers (through 911 and local number)

We are heavily involved with our ECD; communicate with them openly. We are a terminal agency - missing persons/vehicles must have own dispatchers, otherwise cannot enter data
We have too much call volume for the ECD to handle. Service would not be adequate. Recently had a small town [law enforcement] department in our [community] come to us to see if we would dispatch for them. They were not happy with the service they were getting from the ECD.
We get over 12,000 calls a year on CAD, including complaints; would not get the service we need.
Just money; good relationship with ECD. We serve as their 911 back-up center, looking at building space now, so maybe moving in that direction
Political, fundamental issues that cannot be resolved with [ECD], [entity] can not get same service provided to citizens with similar costs to consolidate -- pay more for less service. Cost analysis has been done and spend a few more thousand
We are a separate entity with 24/7 dispatchers, we answer to the citizens
Question 3. Who operates the non-affiliated PSAP? What additional duties does that entity have?
We are a full service department
Campus police department; handles calls on campus domain only
Full service department; also dispatch fire and EMS
Full service department and fire; full public safety agency though fire is dispatched through ECD
Full service department plus records management and running the jail
Question 4. What kind of equipment do you have? What kind of training do your dispatchers receive?
911 training; basic telecom training
Share technology with local ECD
911 controller; has both ALI and ANI; Phase II compliant. EMD certified; APCO training; 3 APCO comm training officers
4 different numbers; non-emergency dispatch; 2 dedicated 911 lines
Interoperability within city and county departments; can talk to street and utility departments.
Training on the job; certain requirements in service training, jail school; rack & tack - records type school

Regular telephone line with RMS-CAD system; calls come from any on-campus phone dialing 911 and emergency telephones on campus with button, no location information yet
Caller ID on telephone line
On the job training and occasional special training communication classes
Caller ID on one 7-digit telephone line
Telephone with live dispatcher (7 active lines) and additional lines in the jail
CAD system; Motorola dispatch panel; Blue Ridge recording system; E-Agent; caller ID but no ALI
Basic qwerty/entry certification; week of training in Nashville; 5-8 weeks training depending on experience
Radios and computers but no 911 controller
On the job training and we send dispatchers to classes
5 telephone lines with caller ID and dedicated 911 line; answer radio calls; can hear county and fire radio
2 telephone lines with caller ID plus dedicated 911 telephone line
[Receive 911 calls via] one-button transfer which has ANI and ALI
15 non-emergency lines without caller ID and dedicated 911 telephone line
Regular state-mandated dispatcher training; annual training through 911 center
Caller ID shows number when calls come in; capable of 5 calls at a time; with one designated line for 911 transfers
Question 5. How many calls do you receive? How many calls are transferred to you from another PSAP (including & especially affiliated PSAPs)?
ECD or other PSAP generally stay on line to be sure call connects; monthly log of calls received tracking percentage of emergency and non-emergency; police and fire; 30% of our police/fire calls annually are from 911
ECD dispatches any calls on campus property
We do not always know when a call is transferred. Some land line telephone calls will come to us and cell phone calls too, depending what cell tower the caller hits. ECD may not always relay info, they just transfer and caller has to repeat information. We find out what jurisdiction they are in immediately to respond
Monthly department roll including all calls (traffic violations, etc.)
Keep a log of service calls, should be keeping track of 911 calls. Estimate 3-4 real emergency calls each which are immediately dispatched based on address reported by ECD

ECD redirects any calls in our area to us
ECD stays until call is connected but usually release call after that
Not too many, maybe 2 transferred 911 calls each month. ECD usually stays on telephone line until contact is made
This data is available
We receive all sorts of calls, including emergency calls; calls are recorded; we have a lieutenant of communications
Most residents call in [name] call the direct 7-digit non-emergency line for service
Designated telephone line that is recorded; ECD waits for our dispatcher and caller to talk then release call
2008-2009 we had 37% increase of CAD entries; 2009-2010 23% increase; case numbers for each call for service/arrest/crashes
April 2011 received 90 911 calls transferred from 911: we receive roughly 200 calls per day on our other telephone lines
We do not separate emergency calls from other calls
Operate a non-emergency line for residents to report accidents, break-ins, etc.
Kept a log of calls for a study but no longer do that
Question 6. Do you think all non-affiliated PSAPs should be required to consolidate with their corresponding ECD? Why or why not?
City takes care of the city better than county will; one center can handle all dispatch but does not need to be the only one
No. If we consolidate, who will have priority? Customer service and dispatchers are limited. We lie in two ECD districts and it would be awkward for [the two ECDs] to dispatch ambulances. How we do it is the best way to get service to residents. Working out logistics would be difficult
Depends on community. If service is not what community deserves or can afford, then yes, they should consolidate. What they can they do for us that we are not already doing for ourselves?
It comes down to money, they do not do anything we can not do. The city should take care of city and county takes care of county. The more people involved, the more chaos there is
Working fine as is now, but if calls continue to grow we may want to consolidate
No. It is better on the emergency side but not law enforcement . They overstep bounds when it comes to law-related calls
Pooling resources is a good thing, however, people in town like to call someone who is in their city. Consolidation may be easier in critical situations, but standards should be met

<p>We looked at consolidation earlier this year--it makes sense and cost/trade off was worth it. However, [legislative body] decided not to consolidate due to technological issue only (not due to physical boundaries, but difference in what system wanted and what ECD was using). That drove the desire to stay within their own system</p>
<p>Prefer being on our own. We know 911 only sends calls over when its emergency; we always have (and need to have) 2 dispatchers on duty</p>
<p>We have too much call volume for the ECD to handle. Service would not be adequate. Recently we had a small town [agency] in our [area] come to us to see if we would start dispatching for them. They were not happy with the service they were getting from the county ECD.</p>
<p>No, the ECD would not provide service they need. Older residents call non-emergency lines who want to talk to our staff</p>
<p>No, its our preference to stay alone; we would lose too much and officers not interested because they would lose one-on-one with callers</p>
<p>No, each county has their own entity and should decide what is best for them. Plus, we could not give up dispatchers</p>
<p>[Consolidation does not offer the] same quality of service. Should consolidation be mandatory? Absolutely NOT. It should be a choice of the people who are served in that area not the state house or any federal entity</p>
<p>Question 7. Do you think the non-affiliated PSAP jeopardizes the safety of citizens? Why or why not?</p>
<p>Callers repeat information but we do not believe this has created a serious issue of safety or endangered callers. When 911 center gets call, they automatically send ambulance. The majority of other calls are non-emergency and first responders are usually already dispatched before we even get calls</p>
<p>There is definitely a delay in transferring calls back and forth</p>
<p>No, because other than caller's address, they do not have much more than we do. Our generator keeps everything running in case of an outage</p>
<p>No</p>
<p>No, we still work with ECD over the radio in case of something serious. They stay on telephone/radio and monitor each other, and we work well together</p>
<p>No, if there was anything jeopardizing residents, we and others would take measures to remedy that. Biggest thing is ability to have same technology as ECD</p>

No, allows residents to contact local department in [area], not calling someone who is 20-30 miles away who does not know anything about [area]. A lot of older people will not call 911 and would rather call local department
ECD stays on the line and tells our dispatcher address, so dropped calls are not a serious issue. If call is dropped, we call back 911 and get number, area, and address
Dispatch is what ECD chooses to do, they are not required to do so. Any emergency that comes in, they dispatch it and we come in after that
Question 8. What measures would you use to determine “risk” (with regards to public safety)?
Sometimes ECD sends calls for residents that are not in our area just because the address appears to be our area and we have to send the call back, which creates delay. Lag time may be a risk measurement
Non-response (dropping the ball); number of complaints from public
No new risk to measure
No risk through dispatched calls
Question 9. Do you think consolidation of affiliated PSAPs is more likely to happen with NG 911?
The issue with consolidation is more than just consolidation. it is not essential to provide certain (i.e., non-emergency) services
We are working toward NG 911 so it is not a major reason to consolidate. We are planning ahead and trying to budget for NG 911
Consolidation will occur in near future unless money falls out of the sky, new technology is needed
Ultimate decision is based on funding; if cities and counties worked together would save them all money
We can maintain as is because they will transfer calls
Question 10. Do you qualify for federal grants or do you have to be affiliated with the ECD? What are your major funding sources?
We applied for funding through our ECD but were denied; the majority of our funding is local [i.e., authorizing agency] and we do qualify for federal grants
We qualify for several grants (weed and seed, officers, burn, etc.) and are doing okay financially, including a new radio that will allow low-band to high-band
The Board of Regents

Most funding comes is local, but we attend TENA conferences to look for new sources of funding
Funding through our [legislative body]
Funding is completely local; we do not get any of the 911 excise tax money
We do qualify for federal grants but usually are not applied toward communications
Most funding is local; we try to apply for every grant possible, especially for communications because equipment is expensive
Local funding with no outside grants
Local funding and had one ARRA grant
Local funding only
Strictly through local funding
Question 11. Is there an agency that has oversight of your PSAP? Who collects data on your calls, dispatches, responding, etc?
We send reports to ECD for emergency calls broken down by cell or residential, and if we transferred calls. Also report to [legislative executive], supervisor in our communications center, and our chief and assistant chief have access to data and they look at reports
Our [legislative body] plus our department head and communications supervisor. Records management in our department collects data
Oversight by [legislative executive] and [legislative body]
Campus president, our chief, and financial oversight by school accounting office
Dispatchers track calls on CAD system, though the calls are not sorted well
We do not collect data on our calls
City manager
Call volume logs are in-house; file state report submissions
Our executive director
Legislative body receives logs and legislative executive receives report
Keep records and track complaint calls
Our department head and [legislative body]

Figure 2. ECD Interview Responses	
Question 1. Have you thought about buying the non-affiliated PSAP a controller so they can be affiliated?	
Yes, we are planning to purchase one workstation for [PSAP] when we update to NG 911; we have communicated this information to [another PSAP] in the event they want to purchase a workstation to hook on to our controller	
911 board has been in conference with [PSAP] since the beginning; but have not made headway ever	
Not going to spend money but would consider offering them a discounted rate	
Not our place to do that	
Funds not available to do that	
Sharing a controller has been considered	
Have tried to offer everyone an opportunity	
In talks now with one PSAP to take emergency calls but leave non-emergency calls with them	
Question 2. What is the major roadblock to affiliating/consolidating the PSAP?	
[PSAP A] and [PSAP B] have always wanted to maintain a dispatcher at their locations, we have made [PSAP A] an offer to consolidate on two occasions but they do not wish to pay for a dispatcher at our center. They cited this would be an additional cost. Currently their dispatcher has other duties that they perform for the town. [PSAP B] wants to remain separate	
[PSAP] thinks they are their own entity and don't want help-that is not looking out for public safety, it is just about money and personal preference	
[PSAP] was previously with ECD but broke off over 10 years ago	
Police chief does not want to lose control; dispatchers probably do other tasks and they do not want to lose those jobs	
One [PSAP] inquired about consolidation and it was estimated they could save almost \$100,000 but perhaps hesitant due to their dispatcher's job loss	
The terms of the agreement	
Hard question to answer; some of it is "me, mine, ours;" it is the way it has always been done and it is working	
We approached [PSAP] last year to consolidate; put the money together but in the 3-year projection, they went in the red. The [PSAP] said that same amount of money can buy another dispatch unit and car; [legislative body] opted for that	
We had issues with previous PSAP director, and ECD was asked to leave building	
The PSAP losing personnel	

Question 3. Do you ever transfer calls to the non-affiliated PSAP? If so, does your dispatcher have to stay on the phone to maintain the caller's location?
We transfer police calls only to each agency; and stay on the line until someone answers; we dispatch fire and medical call from our center to those locations
Transfer calls from controller to [PSAP]; calls recorded. We generally make sure call is connected but do not stay until the PSAP picks up
For example, if it is CPR; we stay on the line, send call via radio on direct dispatch, relay dispatch on direct telephone line. If not life threatening, transfer to EMS, police, and/or fire
Yes, liability is over once calls is transferred but usually stay on line to make sure call is not dropped and information is shared; all 911 does is take and dispatch call
Make sure the call is answered and take caller information in case of dropped calls
Transfer call to regular telephone; we make sure caller gets connected and that the PSAP gets information
Our dispatcher stays on the line
We do not have to stay on the line but do so until the information reaches the PSAP
We stay on the line until information and location are shared, stay on the line as long as possible
Question 4. What kind of equipment does the non-affiliated PSAP have? What kind of training do their "dispatchers" receive?
Motorola radio equipment; regular telephone equipment
Transfer call on regular phone that has caller ID and ECD stays on the line until it connects
Radio
They only have two telephone lines now to receive calls
Sometimes their telephone line is busy
Regular telephone line
I have no knowledge of their equipment
We currently transfer 911 calls to their dedicated 911 telephone line
Regular telephone line without caller ID
We bought a radio system \$70,000 to allow us contact with all emergency personnel
Question 5. Do you know how many calls the non-affiliated PSAP receives? How does that compare to the number of calls your affiliated PSAP(s) receives?
Maybe 10% of our total calls
90-95% of EMS calls come through and are dispatched by us
23% of our calls are send to the non-affiliated PSAP, roughly 10-15 calls each day

5-10% of our calls are sent to the non-affiliated PSAP
On average, 5 times monthly
We do not keep a log like that, but CAD system keeps log of all of our calls
Question 6. Do you think all non-affiliated PSAPs should be required to consolidate with their corresponding ECD? Why or why not?
No, I do not. Each agency is different and each agency performs special duties that require them to have a dispatcher at their location. For example, [PSAP A] has to have someone at their [building name] to give out information to the public at a drive up window. [PSAP B] dispatchers take water department calls and also check on senior citizens. [Our ECD] does not perform those type services nor would we be able to do so at this location
The only way it would happen is if state law is amended to require it; for public safety it should be required. It should be mandatory that the 911 center dispatch
In discussions now to consolidate
No, can not be forced to consolidate unless it is passed by state law. Good working relationship with unaffiliated dispatch centers. Consolidation would require retrofit of our building to take on these new entities' dispatch, would love to have everyone in county consolidate for the safety citizens; that is eventually the only route to go
Yes, [number] of residents in [location] are paying for full 911 service but are not receiving equal service other residents do
No, my dispatchers are not trained to do law enforcement
It would be fine with us; we have the room for in our building
I am not sure if they should be required, but I would recommend it. I think it serves the public in a more timely manner
Nobody should be required; that brings about unfunded mandates; requirement is not necessary. If they are required to consolidate our ECD would need more funding to acquire additional dispatchers
There is validity to consolidating but logistics gets in the way, for example law enforcement requires NCIC controller, which requires user agreement, which costs money, etc.
Law is correct now; encourage but do not require
911 funds are intended for technology not salaries
Why do the same job [dispatching] out of two buildings?

Question 7. Do you think the non-affiliated PSAP jeopardizes the safety of citizens? Why or why not?
No, they receive the same service as all citizens, the only thing that [name] citizens do not have is ANI/ALI which we can give to them if needed. [PSAP A] has a phone system that gives them the ANI/ALI on [location] of each caller and if it is a cellular call it comes to us and we can pass along the coordinates
How can safety be served with law enforcement handling law enforcement, records, and 911 calls on top of that - safety is jeopardized
No
It would help ECDs become more efficient
Yes
No, stay on the line and retain caller information in case of disconnected calls
Not really
I think any PSAP will respond in a professional manner, not jeopardizing a life. However, I do feel a consolidated PSAP allows for a quicker response to the caller
No, not the way it is now. Because of the speed dial process, we are not losing that much time and because we handle medical calls directly. Law enforcement is more reactionary
It absolutely does because they are not equipped with the proper technology
Question 8. What measures would you use to determine "risk" (with regards to public safety)?
Dropped calls
Question 9. Do you think consolidation of PSAPs is more likely to happen with NG-911?
It will not help the situation much; it is a turf and political situation in cities and counties
The state provides money to upgrade technology, these small [PSAPs] will be left behind due to budgetary issues, they will not have money for NG 911
I do think it has been considered
Question 10. If X is now an affiliated PSAP, when did the consolidation occur?
No other option but ECD so they automatically joined
[PSAP] consolidated; first year they saved \$50,000 and next year it will be over \$100,000
[PSAP] in the last two years
[PSAP] at first and then another [PSAP] came over a year ago. After we moved to our own building, [PSAP] approached us and then another [PSAP] joined

Question 11. How has that changed things for the better and worse? Are citizens safer?

Expedited response time; stopped duplication of tax payer dollars, and cut budget in half

Their executive is very happy, and it has freed up their employees to complete other tasks

Easier to coordinate between departments; they have their own frequency still, and it has worked well

Things definitely changed for the better

Question 12. How and when did you get them to affiliate? (For example, did you have to give them incentives or did they ask to affiliate to save costs?) Related: Have any of the non-affiliated PSAPs accepted training by ECDs and offered backup? If so, which ones?

Yes, training. No backup

We coaxed them in through the budget; they were broke. Progressive thinking look for ways to save money

They saw another PSAP had joined and was happy with the results, so they approached us

New regulations required some agencies to have dispatchers 24/7, and it was cheaper for them to consolidate since we could offer that



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