



STATE OF MICHIGAN

JENNIFER M. GRANHOLM
GOVERNOR

EMERGENCY TELEPHONE SERVICE COMMITTEE
EAST LANSING

SHERIFF DALE GRIBLER
CHAIR

November 9, 2006

Dear Michigan Legislators:

P.A. 249 of 2006, effective July 3, 2006, required a report be issued to the legislature and the governor by the state 9-1-1 administrator no later than December 1, 2006. The Act requires the report to include:

[R]ecommendations for stable, equitable long-term funding of the 9-1-1 system in this state and recommendations, if any, for the establishment of standards for the training and response time of 9-1-1 personnel. . . . [And] a recommendation that any 9-1-1 fees collected from communications providers are assessed in a competitively neutral manner.

The enclosed report has been prepared by the state 9-1-1 administrator and adopted by the Emergency Telephone Service Committee (ETSC) to satisfy the recommendations required by P.A. 249 of 2006.

The ETSC, with the assistance of its subcommittees and the State 9-1-1 Office, have been deeply involved in the process of researching and evaluating solutions to the key issues facing Michigan's 9-1-1 system. The enclosed report contains a set of comprehensive legislative recommendations that were developed over the past sixteen months and represents hours of extensive deliberation, research, and planning on the part of the broad 9-1-1 community in Michigan. We believe the recommendations proposed in this report will provide Michigan's 9-1-1 system the support it will need financially, technically, and operationally for the years ahead.

As Chair of the ETSC and the State 9-1-1 Administrator, we stand ready to assist you in moving these recommendations forward to ensure the critical life-saving and property-protecting services of 9-1-1 can continue to be delivered in our great state. Your time and action on these matters is appreciated.

Sincerely,

SHERIFF DALE GRIBLER, CHAIR
Michigan ETSC

HARRIET MILLER-BROWN
State 9-1-1 Administrator

Association of Public Safety Communications Officials • Commercial Mobile Radio Service • Department of Labor and Economic Growth •
Department of State Police • Deputy Sheriff's Association • Fraternal Order of Police • Michigan Association of Ambulance Services •
Michigan Association of Chiefs of Police • Michigan Association of Counties • Michigan Communications Directors Association • Michigan Association of Fire Chiefs •
Michigan Professional Firefighters Union • Michigan Public Service Commission • Michigan Sheriff's Association • Michigan State Police Troopers Association •
National Emergency Number Association • Telecommunications Association of Michigan • Upper Peninsula Emergency Medical Services •
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Michigan Emergency Telephone Service Committee
P.A. 249 of 2006
Legislative Recommendations

November 9, 2006

**Emergency Telephone Service Committee
P.A. 249 of 2006 Report**

Overview

Public Act 249 of 2006, MCL 484.1413 states:

Sec. 413. (1) The state 9-1-1 director shall issue a report to the legislature and the governor no later than December 1, 2006, providing recommendations for stable, equitable long-term funding of the 9-1-1 system in this state and recommendations, if any, for the establishment of standards for the training and response time of 9-1-1 personnel.

(2) The report shall contain a recommendation that any 9-1-1 fees collected from communications providers are assessed in a competitively neutral manner.

Included in this report are recommendations supported by the Emergency Telephone Service Committee (ETSC) to meet the requirements set forth above. This report will also provide additional legislative recommendations on issues that the ETSC believes will facilitate the future progress of Michigan's 9-1-1 system. Each of the following issues will be outlined and presented with the ETSC recommendations:

- 1) A two-tiered funding system for 9-1-1 in which all communications devices that have access to 9-1-1 contribute to the funding of 9-1-1 operations
- 2) 9-1-1 Operator Training:
 - a. A training program for 9-1-1 operators to be developed. The ETSC shall be the body to set training standards and that the tracking of training shall be performed by the State 9-1-1 Office
 - b. Certification of courses to be conducted by the ETSC rather than by MCOLES
- 3) Rule promulgation for the ETSC
- 4) Funds currently in the CMRS fund used for a feasibility study and initial capital outlay for a new IP-based 9-1-1 system
- 5) Multi-line telephone system (MLTS)
- 6) Simplification of 9-1-1 plan modification through the use of administrative findings

**Emergency Telephone Service Committee
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**Emergency Telephone Service Committee
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Recommendation on Issue 1:**

9-1-1 Funding

Funding Issue Overview:

In December 2004 the ETSC adopted a position paper setting out a number of key issues related to 9-1-1 in Michigan. One of the central issues in the ETSC's position paper is the impact that the disparate technology-based 9-1-1 surcharges had on funding 9-1-1 systems in Michigan. As the use of landline phone service decreases and the use of Voice over Internet Protocol (VoIP) and wireless communications increase, 9-1-1 centers are realizing decreasing revenues. In many cases the decreasing revenues are offset by raising landline surcharges. In some counties, landline surcharge revenue has decreased by as much as 6% annually.

In 2005 the ETSC's Legislative Action Subcommittee formed a work group known as the Stable Funding Work Group (SFWG). The SFWG, comprised of members from both public and private interests¹ in the 9-1-1 system, invested significant resources of time and energy to develop a funding concept for Michigan's 9-1-1 system. The ETSC's recommendation model on funding consideration, developed to the extent possible, is technologically and competitively neutral, requires accountability by the recipients, allows cost recovery by communications providers, is adjustable to avoid over-funding and under-funding, and provides options for funding that is locally determined and controlled².

ETSC Legislative Recommendation on 9-1-1 Funding:

A two-tiered operational surcharge system *that applies equally to all technologies that do or have the ability to access the 9-1-1 system.*

These technologies include:

- i. Traditional landline telephone services
- ii. Wireless (CMRS) services; including contract, resellers, and prepaid
- iii. VoIP 9-1-1 services

Initial suggested on "per device/access point" language:

The surcharge is applied to any service that is capable of accessing, connecting with, or interfacing with E911 by dialing or initializing or otherwise activating the Michigan E911 system through the numerals '9-1-1' by means of a local telephone device, cellular telephone device, wireless communications device, Voice over the Internet (VoIP) devices, or other means (including computers). Data-only subscriber lines or cables and internet connect lines or cables which are capable of accessing with or interaction with 9-1-1 as foreshad are subject to the subscriber surcharge.

¹ Members of the SFWG included representatives from wireless carriers, landline telephone companies, Michigan Association of Counties, Telecommunications Association of Michigan, PSAP directors, 9-1-1 coordinators, VoIP service, and others. A complete list of members is available via request through the ETSC at: mmpetsc@michigan.gov.

² It is important to note that individual members of the SFWG held a number of opposing opinions on the best way to reform Michigan's 9-1-1 funding mechanism. In order to continue meaningful discussions, SFWG members approached this complex issue for collaborative purposes in order to determine where there might be areas of agreement and disagreement. Each SFWG member represented-interest reserved the right to disagree with specific provisions of the SFWG's conceptual approach as any legislative effort moves forward.

Tier One: A statewide 9-1-1 operational surcharge collected through Treasury

The Tier One surcharge will fund:

1. Baseline funding for counties
2. Dispatcher Training Program
3. State 9-1-1 Office
4. Common 9-1-1 Network Elements
5. Billing and collection of tier one (2%)

Specifics to Tier One:

Tier One Amount:

The initial amount should be set at 25 cents

Tier One Distributions:

2% - Retained by communications providers for billing and collection

The remaining amount distributed as follows:

- 62.25% → counties distributed on a 40% equally and 60% by per capita basis
- 31.25% → fund common 9-1-1 network costs
- 3.75% → 9-1-1 training program
- 2.75% → fund state 9-1-1 office/services

Tier One Adjustability:

1. The Tier One surcharge should range between a 20 cent minimum and a 30 cent maximum to allow for adjustability.
2. The initial recommended surcharge is in middle of range.
3. The annual adjustment effective July 1 of each year.
4. Funds can be adjusted in second year based on pre-statute levels from wireless distributions to counties for Fiscal year 2006 to balance distributions (i.e. if the first year is higher than expected, then a downward adjustment can be made).
5. Adjustable by Treasury as necessary not to exceed the pre-set statutory cap of 30 cents in 2nd/3rd year based on recommendation to Treasury from ETSC through reporting process.
6. Adjusted by legislature as necessary in fourth and fifth year.

Common Network Costs:

Reimbursement occurs in a manner similar to wireless cost recovery. A legislatively designated ETSC subcommittee that reviews the invoices and makes recommendations to ETSC on payment.

Tier Two: Locally determined county-based operational surcharge to fund local 9-1-1 operations

1. County Commissioners have the option to:
 - a. impose surcharge by commission vote, or
 - b. for ballot consent, or
 - c. combination, and/or
 - d. millage ballot

Specifics to Tier Two:

Tier Two Amount:

- 1) Local surcharge not to exceed amount necessary to operate 9-1-1 system, meeting Headlee requirements.
- 2) Commissioner resolution (or resolution addendums) and ballot proposals must contain language pertaining to the expected amount generated.

Tier Two Collections:

- 1) 2% - Retained by communications providers for billing and collection
- 2) Actual collection (after 2%) will be remitted to counties
- 3) Submitted by providers to counties on a quarterly basis
- 4) Uniform date for all changes – once a year (notice on April 1, change on July 1)
- 5) Proprietary data on local line count information is exempt from FOIA

Additional Specifics to Both Tiers of Funding System:

- 1) Annual report to legislature by the ETSC
- 2) Business cap on both state operational and local operational surcharges: The surcharge shall be applied to each line up to ten lines and then shall be applied in increments of one-tenth of the surcharge for each line thereafter.
- 3) Requirement for receipt of surcharge funds by counties: Enhanced 9-1-1 is available on all services (Landline, Wireless, VoIP, and new technologies [as recognized by state and federal regulations]).
- 4) County 9-1-1 Plans will need to be updated to reflect:
 - a. VoIP
 - b. Receipt of new distribution
 - c. Current configurations of 911 systems
- 5) Surcharges on phone bills:
 - a. 9-1-1 surcharges for Tiers One and Two must be listed separately on each bill.
 - b. Providers can recover their costs of providing 9-1-1 service not covered by the common network costs in Tier One. Providers may put the cost on a separate line item on their bill. (Further details in *Optional Technical Surcharge* outlined below).

Optional Technical Collection:

Under the two-tiered system each provider is responsible for their own 9-1-1 cost recovery. Communications providers would have an option to collect their cost of connecting to the 9-1-1 network:

1. Statutory recognition of government mandated 9-1-1 network costs (above common 9-1-1 network costs).
2. Provider-specific recovery methods (i.e., surcharge or roll into price of service) are the provider's option.

Prepaid on Two-Tiered System:

Prepaid communications services would be required to participate in the funding of 9-1-1 by being assessed a monthly surcharge that is calculated by adding the statewide surcharge plus the average of the local surcharges, *weighted by population*, and divided by 83. It would be distributed using the formula for the statewide (Tier One) surcharge.

Additional Specifics to Prepaid:

1. The first year would be calculated using the average current landline operational surcharge as imposed statewide at time of enactment.
2. It would be adjusted annually (at the same time other adjustments are made) based on reported changes in the state.
3. It should be able to lower statewide surcharge once the impact of prepaid is evaluated.
4. 2% billing and collection can also be retained by prepaid.
5. There are *four potential* collection methods for prepaid:
 - a. One statewide surcharge for each \$50 of new revenue (ARPU) each month, or
 - b. One statewide surcharge or each active number with Michigan NPA/NXX.
 - c. Option for a statewide surcharge that is collected at the retail level (possibly minutes based).
 - d. A method that is mutually agreed upon by the prepaid provider and the ETSC.

**Emergency Telephone Service Committee
P.A. 249 of 2006 Report
Recommendation on Issue 2:

9-1-1 Personnel Training**

Training Issue Overview:

Currently there are no minimum training standards for 9-1-1 dispatchers (telecommunicators) in the state of Michigan. Each PSAP is responsible for its own training levels, programs, and documentation for its telecommunicators.

On March 2005 the ETSC passed a resolution supporting the pursuit of minimum training standards for 9-1-1 dispatchers in Michigan. The chair of the Dispatcher Training Subcommittee named a work group³ to research and make a recommendation through the ETSC's channels on minimum dispatcher training standards. The process of that work group has been time-intensive and involved reviewing the training requirements of other states⁴, performing a base task analysis of 9-1-1 telecommunicators' duties, identifying the skills necessary to perform those duties, and identifying the training needed to develop those skills.

P.A. 78 of 1999 created a statewide 9-1-1 dispatcher training fund through a one and a half-cent distribution of the wireless 9-1-1 surcharge. Since that fund distribution began in 2001 over 4.6 million dollars has been distributed to Michigan PSAPs. The ETSC has established a strong record of conscientious oversight of the training funds including the distribution and application process, allowable and disallowed fund use, recommendations to MCOLES on the certification of courses, and PSAP accountability. The 2004 creation of the State 9-1-1 Administrator's Office has further enhanced the ETSC's administration of the wireless training funds.

However, even with the availability of training funds, a program that encourages fund use, and a broad list of approved courses, it became evident through the 2006 application process that the wireless funds were not being used by a number of PSAPs in Michigan⁵. Furthermore, voluntary reporting to the State 9-1-1 Office on training policies indicate that there are inconsistencies across the state in regard to PSAP training policies and programs.

Prior to the recommendations required by P.A. 244 of 2006 in regard to the training of 9-1-1 personnel, the ETSC recognized the importance of 9-1-1 training and is firm in its position of the need for minimum training standards for 9-1-1 telecommunicators. To that end, the development of 9-1-1 telecommunicator training standards is in progress. Furthermore, the ETSC recognizes that program development, an implementation plan, funding, and administrative support must all be in place prior to the mandate of statewide 9-1-1 telecommunicator training standards. Based on those premises, the following legislative recommendations are being made:

³ The work group, which is still active, consists of two dispatchers, two dispatch supervisors, two dispatch managers, the chair of the Dispatcher Training Subcommittee, and the State 9-1-1 Administrator.

⁴ Based on inquiries made to other states, 14 states reported some type of minimum training requirement for dispatchers.

⁵ More than 90 PSAPs (accounting for 48% of the state's 9-1-1 telecommunicators) have spent their ETSC training funds with regularity (many supplement their internal training programs with additional funds from other sources). However, in 2006 51 PSAPs (accounting for 45% of the state's 9-1-1 telecommunicators) did not qualify for training funds as they still had unspent training funds remaining from the 2003, and in some cases 2002, distribution(s).

ETSC Legislative Recommendation on 9-1-1 Personnel Training:

1) The ETSC should be granted the rule promulgation necessary to:

- a. Approve training courses funded through the statewide 9-1-1 (Tier One) surcharge
- b. Develop, implement, and administer 9-1-1 dispatcher training standards, including:
 - i. Training curriculum for new dispatchers
 - ii. Requirements for continuing training of established dispatchers
 - iii. Reporting requirements of PSAPs regarding fund use and training of 9-1-1 personnel

2) The future funding needs to include resources for the State 9-1-1 Office to track and administer the 9-1-1 telecommunicator training program and the distribution of training funds. The calculations recommended in the Tier One funding mechanism recommendation are outlined in pages 3 - 4 of this report.

**Emergency Telephone Service Committee
P.A. 249 of 2006 Report
Recommendation on Issue 3:

ETSC Rule Making Authority**

Rule Making Authority Issue Overview:

Sec. 413. (1) of P.A. 249 of 2006 states in part that, "...the state 9-1-1 director shall issue a report to the legislature and the governor no later than December 1, 2006, providing . . . and recommendations, if any, for the establishment of standards for the training *and response time of 9-1-1 personnel.*" (emphasis added).

The "response of 9-1-1 personnel" can take on a number of forms. These include the time it takes the 9-1-1 telecommunicator to answer and properly classify the call, the time it takes from the call being answered and classified to the time a service unit is dispatched, and the time from the call being answered, classified, and a service unit dispatched to the time that service unit arrives. Many factors can effect the response time of a 9-1-1 call. These factors include the level of emergency activity (both in the 9-1-1 center and out in the service jurisdiction) occurring at the time of the call, the priority level of the call (i.e., a life-threatening call receiving priority over a non- life threatening call).

What the ETSC believes is a core component in consistency in the response to 9-1-1 calls is the *development of and adherence to* policies, procedures, and protocols that established by the PSAP and its jurisdiction. Currently the Certification Subcommittee of the ETSC serves to ensure that requirements and deadlines defined in the 9-1-1 statute are met, which includes compliance reviews of counties to ensure that expenditures of 9-1-1 funds to meet the criteria established by the ETSC. As the ETSC Certification Subcommittee receives inquiries from PSAPs, certifies counties for wireless funds and conducts compliance reviews across the state, it is apparent that there are many PSAPs and counties that consistently adhere to "best practices" while others do not. This creates disparities in PSAP operations and county reporting throughout the state. These disparities include:

- a. Lack of written policies/ standard operating procedures (SOPs)
- b. Failure to consistently follow industry standards
- c. Lack of documented training programs
- d. Back-up systems/emergency procedures
- e. Incomplete and untimely reporting

While the ETSC can make recommendations in regard to best practices and policies, the ETSC's authority to enforce those actions are limited under the current statute. Rather than a recommendation addressing the issue as narrowly as call response time, the ETSC has adopted the following recommendation that it believes will improve 9-1-1 operations on a broader scale throughout the state. It must be mentioned that the ETSC understands that this will be an expanded role of the ETSC and this change will be an evolving process. This ETSC process would be very similar to the rule making utilized by Michigan Commission on Law Enforcement Standards (MCOLES) or the Criminal Justice Information System (CJIS) Policy Council.

ETSC Legislative Recommendation on Rule Making Authority:

The ETSC should be granted the rule promulgation authority necessary to set and enforce identified standards for PSAP operations and county certification for receipt of 9-1-1 funds:

- a. The ETSC's standards and certification will be developed through the ETSC's collaborative process similar to the system established for the certification of counties for the receipt of wireless funds.
- b. The receipt of 9-1-1 funding shall be tied to compliance with identified standards.

**Emergency Telephone Service Committee
P.A. 249 of 2006 Report
Recommendation on Issue 4:**

**Preservation of CMRS Funds for
IP-Based 9-1-1**

Preservation of CMRS Funds for IP-Based 9-1-1 Issue Overview:

Continuing the position set in its 2004 position paper, the ETSC believes that funds collected for 9-1-1 should be preserved for that purpose. The recommendation for use of the CMRS fund in regard to an IP-based 9-1-1 system is in keeping with that position. As technology rapidly changes, Michigan's 9-1-1 current landline-based 9-1-1 faces fast-approaching challenges. The current landline network, while reliable and effective, will be limited in its ability to process the growing volume of technologies such as VoIP, wireless TTYs, and text messaging calls. Replacement of the existing 9-1-1 system will need to be done in order to effectively adapt to the changes facing public safety communications. An IP-based 9-1-1 network will provide redundancy, security, interoperability, and flexibility that will be paramount to maintaining a robust and reliable 9-1-1 system in Michigan, and provide options and functions to meet these demands⁶.

In order to implement Phase II cellular phone calls (which provides location information for 9-1-1 operators) P.A. 78 of 1999 created a surcharge on wireless phones. A portion of that surcharge was designated for cost recovery to offset the costs of implementing this technology. This is referred to as the CMRS (Commercial Mobile Radio System) Fund. Since its inception in 2000, the surcharge has generated \$77 million for that fund. Of that, \$50 million has been paid out to wireless providers for cost recovery, \$3.1 million has been paid out to landline service providers for wireless 9-1-1, and P.A. 244 of 2003 and P.A. 960 of 2006 respectively, allocated \$12 and \$15 million of the fund to debt retirement for Michigan Public Safety Communications System. After the final invoices for 2005 cost recovery are paid, the ETSC projects there will be approximately \$18 million remaining in the CMRS fund.

In 2006 the ETSC's Legislative Action Subcommittee established a work group to begin exploring IP-based 9-1-1 options for Michigan. The work group consists of members from the technology providers, and public and private 9-1-1 stakeholders in the 9-1-1 system⁷. This work group made preliminary inquiries into IP-based 9-1-1 systems and has developed objectives for a feasibility study.

ETSC Legislative Recommendation on the Preservation of CMRS Funds for IP-Based 9-1-1:

- 1) That the amount of \$500,000 be legislatively designated from the CMRS fund for an independent feasibility study of an IP-based 9-1-1 system in Michigan.**

The study would include:

- a. Recommendations on an IP-911 network that is redundant, secure, and provides 9-1-1 network services to Michigan PSAPs and communications providers.
- b. Projections of costs for the proposed IP-911 network's implementation and maintenance.
- c. Recommendations on additional and/or continued funding for the implementation, operation, and maintenance of an IP-911 network, if additional costs are anticipated.
- d. A migration plan for the current 9-1-1 network and PSAPs in Michigan.

⁶ Further information on IP-911 networks can be found through the National Emergency Number Association at: http://www.nena.org/media/files/ng_final_copy_lo-rez.pdf; the FCC's Network and Reliability Council (NRC) at: http://www.nrc.org/meetings/docs/meeting_20040923/NRIC%20VII%20Focus%20Group%201B%20Report_Sept.%20v10%20_120304_.pdf; and the U.S. Dept. of Transportation at: <http://www.its.dot.gov/ng911/index.htm>.

⁷ Members of the IP-911 work group include representatives from wireless carriers, 9-1-1 service provider companies, Michigan Department of Information Technology, a 9-1-1 database provider, and others. A complete list of members is available via request through the ETSC at: mspetsc@michigan.gov.

2) That the amount of \$10 million be legislatively designated and preserved from the CMRS fund for an initial capital outlay for an IP-based 9-1-1 system in Michigan:

- a. Pending the outcome of the feasibility study, the designated funds would be preserved and not subject to other uses.
- b. A final report and recommendation from the ETSC would be forthcoming within two-and-a-half years of the preservation of the capital outlay funds.

**Emergency Telephone Service Committee
P.A. 249 of 2006 Report
Recommendation on Issue 5:**

**Multi-Line Telephone System 9-1-1
Location Information**

Multi-Line Telephone Systems Delivery Issue Overview:

Presently, when a 9-1-1 call is dialed from a facility with a multi-line telephone system (MLTS) the location information that typically appears on the 9-1-1 operator's screen does not display the caller's actual location. The automatic location identification (ALI) the 9-1-1 operator will see is the address of the MLTS's switch equipment or a primary building on the MLTS. Since MLTS is utilized for schools, manufacturing plants, universities, and hospitals, the lack of specific information can cost valuable time in locating the caller's precise location.

Providers of MLTS are not required to provide specific location information for 9-1-1 calls. The lack of location information is recognized as a public safety priority by the ETSC and the Association of Public-Safety Communications Officials (APCO)⁸.

ETSC Legislative Recommendation on Multi-Line Telephone System 9-1-1 Location Information:

Location information for 9-1-1 calls made on MLTS should be legislatively mandated.

MLTS requirements should:

1. Require caller information on 9-1-1 calls that provides the building and floor of the caller or an adequate alternative internal method to provide location information for public safety responders.
2. Establish provisions in regard to square footage of buildings and multi-building facilities.
3. Establish a phased-in time period of 84 months for compliance.
4. Be applicable to all MLTS phone systems, regardless of the system technology (i.e. IP-based, fixed-line, or wireless).

⁸ Additional background information on MLTS and APCO's position is available through APCO's white paper at: <http://www.apcointl.org/about/pbx/Whitepaper.pdf#search=%22Multi%20line%20telephone%22>.

**Emergency Telephone Service Committee
P.A. 249 of 2006 Report
Recommendation on Issue 6:**

**Administrative Findings for Limited
Changes in 9-1-1 Service Plans**

9-1-1 Service Plan Amendment and Administrative Findings Issue Overview:

Under P.A. 32 of 1986 (as amended) a county must enact a county-wide 9-1-1 plan to implement an enhanced 9-1-1 system. Under the statute, county 9-1-1 service plans are minimally required to contain technical, operational, managerial, and fiscal considerations⁹. If changes are made to the plan it must be opened and amended. The process of 9-1-1 plan opening and amending, while well-reasoned, is time-consuming and can be costly to counties. As a result, plans are updated intermittently and often include only the amendments relating to the particular matter for which the plan was opened (i.e., inclusion of wireless 9-1-1 service into the plan). This means that often no further housekeeping on plans is performed, thereby resulting in 9-1-1 plans that still have equipment, processes, and other considerations in the plan that are no longer in place.

The utilization of administrative findings to amend 9-1-1 service plans by resolution of county commissions could help to relieve the cumbersome process of full 9-1-1 plan openings. Administrative findings would be addendums to the 9-1-1 service plan and be conducted in a manner that maintains public action by commissioners. Administrative findings would apply only to pre-identified (dynamic) components of the 9-1-1 service plan.

The ETSC recognizes that the following recommendation will require the development of a model 9-1-1 service plan for counties and, with continued funding of the State 9-1-1 Office as outlined in the Tier One funding mechanism on pages 3 - 4 of this report, will be prepared to provide assistance to counties for support in implementing a new plan system.

ETSC Legislative Recommendation on Administrative Findings for Limited Changes to 9-1-1 Service Plans:

Limited changes to county 9-1-1 service plans can be made through administrative findings:

- 1) Administrative findings be recognized as addendums to county 9-1-1 plans:
 - a. Made by resolution of county commission
 - b. Essential elements of the service plan would be subject to change through administrative findings

- 2) Administrative findings would include:
 - a. Changes in PSAP premise equipment such as:
 - i. Computer Aided Dispatch (CAD) systems
 - ii. Call processing equipment
 - iii. Computer mapping
 - b. Changes in public safety departments, including:
 - i. Law enforcement agencies
 - ii. Fire departments
 - iii. Emergency medical services
 - c. Changes in the amount of any 9-1-1 surcharges collected by the county

⁹ MCL 484.1303 (2) (a) - (d) lists further detail on the technical, operational, managerial, and fiscal considerations of county 9-1-1 service plans.

Michigan Emergency Telephone Service Committee (ETSC) Position Paper 2004

9-1-1 is recognized by citizens nationwide as the number to call for emergency assistance. However, 9-1-1 is more than just a telephone number. It is a multi-dimensional system composed of wireline telephone providers, wireless communication carriers, a complex network of routers, switches and databases, and emergency dispatch/communications centers.

In an environment of rapidly growing technology, Michigan's 9-1-1 systems face both present and approaching challenges. The public's expectation of being able to access 9-1-1 will continue throughout forthcoming changes. It is essential to convey that these challenges effect the vital development, maintenance, and operation of Michigan's 9-1-1 service.

To meet these challenges Michigan's 9-1-1 systems need support that can only be facilitated through legislative changes that keeps pace with developing technology.

Background

Michigan's 9-1-1 service is enabled and governed by P.A. 32 of 1986 and its subsequent amendments (the *Emergency Telephone Service Enabling Act*). This Act defines the technical and managerial aspects of the 9-1-1 system, and provides funding in the form of surcharge that supports the network backbone and provides a capital and operational funding mechanism for public safety answering points (PSAPs).

Presently, 81 Michigan counties have enhanced 9-1-1 (E9-1-1) in which address and call-back numbers are supplied to the PSAP. Another county will be bringing E9-1-1 on line in early 2005. All the counties in Michigan are 9-1-1 Wireless Phase I compliant. Phase I compliance is the ability to receive wireless and process wireless 9-1-1 calls with call-back numbers and cell tower sectors. Currently, more than one-half of all Michigan counties receive Wireless Phase II 9-1-1 calls, which include the latitude and longitude locators of the call. All the remaining counties are actively pursuing the implementation of Phase II wireless 9-1-1.

9-1-1 Network

There are presently an estimated 4,707,232 wireless subscribers in Michigan. In 2003, landline telephone companies delivered over 7.3 million 9-1-1 calls to PSAPs. 4.2 million of those calls originated from wireless telephones. The 9-1-1 system comprised of PSAPs, wireless networks, and wireline networks has served to preserve property and protect lives. Wireless providers, landline telephone companies, and PSAPs have been working together to address implementation issues to continue to improve delivery of Michigan's 9-1-1.

Legislative Changes Supported by the ETSC

Newer methods of accessing telecommunications through other devices and methods are rapidly affecting the 9-1-1 system. For instance, Voice over Internet Protocol (VoIP) telephone systems, computers, vehicle systems that can "report" their own crashes, and hand-held devices that can access 9-1-1 are now available. It is expected that these new technologies will have far greater impact on 9-1-1 than the implementation of simple wireless connectivity. In short, the 9-1-1 system as it exists faces restrictions in fund collection because the current legislation does not address modern technology that has not previously existed.

While working with the local PSAP community, landline providers, and wireless providers, the ETSC has identified several essential concepts critical to the continued success of the 9-1-1 system. The ETSC believes that these key concepts need to be addressed when legislation addressing the state's 9-1-1 system is reviewed.

1. **Evaluation of the mechanisms that fund Michigan's 9-1-1 systems.**

Legislation that secures equitable and stable funding of Michigan's 9-1-1 systems needs to be actively pursued. At the present time, a funding disparity exists in the 9-1-1 system. 9-1-1 surcharges paid through telecommunication providers for Michigan's 9-1-1 systems are inconsistent at both the network level and operational level. This inconsistency is not the product of one single cause, but rather a combination of emerging technology, broader access to 9-1-1, and a funding system that is based on traditional landline technology surcharges.

This combination results in Michigan's 9-1-1 system costs being paid by certain users, while others bear little or no weight of the burden. For example, some combined wireline technical and 9-1-1 operational surcharges in Michigan are in excess of \$3 a month, while there are pre-paid wireless calling devices and VoIP systems that are not subject to any 9-1-1 surcharges.

The widespread replacement of traditional wireline telephones with wireless phones, VoIP, and other emerging technology has caused a flattened or reduced source of funding for many 9-1-1 PSAPs and network providers. Some counties and network providers have made the difficult decision to raise their wireline surcharges in order to offset funding losses created by the declining number of consumers that may be assessed a surcharge.

Currently, both the wireless and wireline surcharge funding mechanisms, although disparate, have become either in whole, or in part, the means by which many of Michigan's PSAPs are able to deliver 9-1-1 services. While there is no "quick fix," the ETSC believes that the answer is not to raise existing surcharges nor is it to create new surcharges on new technology. The ETSC also recognizes that it is not feasible to eliminate the landline surcharges in the immediate future.

In the face of an ever-changing telecommunications industry and many emerging technologies, the ETSC believes it is critical that Michigan act in a timely and collaborative manner to actively pursue changes to the current 9-1-1 funding mechanism in order to create a stable funding mechanism that does not put the public's 9-1-1 system at risk.

The ETSC recommends that Michigan Legislature act in a timely and collaborative manner to actively pursue 9-1-1 funding mechanisms that are reliable and equitable across technology lines.

2. **9-1-1 funding should be preserved for 9-1-1 systems and 9-1-1 centers.**

New legislation should contain language that preserves 9-1-1 funds for the use of 9-1-1 systems and keeps existing provisions for the allocations of 9-1-1 funds under the domain of individual 9-1-1 plans.

9-1-1 revenues, at all levels, should be dedicated funding that cannot be utilized for any other reason than 9-1-1 services. Counties and municipal PSAPs must use their funds for 9-1-1 purposes. The diversion of these funds to other uses threatens the integrity of the 9-1-1 funding system. Additionally, using state 9-1-1 money to pay for non-9-1-1 uses may jeopardize potential federal 9-1-1 funds Michigan could receive. The state has already reallocated \$12 million of the wireless 9-1-1 fund in 2004 for bond payment. Pending federal legislation may channel up to \$500 million dollars to states for 9-1-1 systems. However, to be eligible for these funds, states are prohibited from diverting wireless 9-1-1 phone fees for other purposes. This diversion prohibition may be retroactive to October 1, 2003.

Diverting 9-1-1 funds places both local and state 9-1-1 operations and the future delivery of services in jeopardy.

The ETSC recommends that any revision of the Act protect these revenues for the purpose for which they are collected.

3. **The sunset clause in new 9-1-1 legislation should have a “buffer” period for PSAP funding and network cost recovery.**

Inclusion of a "sunset clause" in legislation is an effective tool for monitoring progress and effectiveness. However, such a clause can inadvertently place local 9-1-1 programs and networks at a funding risk. 9-1-1 elections are time-consuming, costly, and, as demonstrated by failed proposals throughout the state, can be difficult to pass. Traditionally this legislation is reviewed just prior to its sunset. When this occurs the “window of opportunity” of election dates for local governments can be missed even though the sunset has not expired. Just as PSAPs need to know that their funding will be protected in the event a sunset date is not met, telephone companies also need to fund their networks to deliver 9-1-1.

The ETSC recommends legislative language that affords a 12-month "buffer" or "grace period" that allows surcharge collection and remittance to continue beyond the sunset of the Act so that PSAPs and network providers can research and implement other funding sources.

Conclusion

In conclusion, the public deserves to have its continued expectation of being able to call 9-1-1. Over 20,000 times a day Michigan citizens pick up a phone and dial 9-1-1 to access police, fire, or emergency medical services. Michigan's 9-1-1 systems may be diminished and possibly lost if they do not get the support they need operationally, technically, and financially and a stable and equitable funding source is not found.

Overview of Counties' 9-1-1 Funding**4% - Landline Operational Surcharge Funding:**

These counties and service districts also utilize general fund and/or millage to fund 9-1-1:

Arenac	Conf/Western Wayne	Grand Traverse	Presque Isle
Alger	Detroit Emerg	Ingham	Sanilac
Branch	Downriver	Jackson	Schoolcraft
Calhoun	Delta	Monroe	St. Clair
Charlevoix	Dickinson	Muskegon	Van Buren
Cheboygan	Emmet	Oakland	Washtenaw
Clare	Gladwin	Ogemaw	Wexford
Conf/ Eastern Wayne	Gogebic	Oscoda	

16% - Landline Operational Surcharge Funded:

Allegan	Gratiot	Isabella	Osceola
Genesee	Hillsdale	Mecosta	Otsego

4/16% Landline Operational Surcharge Funded:

Alcona	Houghton	Leelanau	Montmorency
Alpena	Huron	Lenawee	Newaygo
Antrim	Ionia	Livingston	Oceana
Benzie	Iosco	Luce	Ontonagon
Cass	Iron	Mackinac	Saginaw
Chippewa	Kalkaska	Mason	Shiawassee
Clinton	Lake	Menominee	Tuscola
Crawford	Lapeer	Montcalm	

Counties with No Landline Operational Surcharge Funding**Counties with millage primary funding source:**

Barry	Eaton	Midland	St Joseph
Bay	Manistee	Ottawa	
Berrien *	Marquette	Roscommon	

Counties with general fund as primary funding source:

Kent	Kalamazoo	Macomb	Missaukee
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Counties with E9-1-1 funded with wireless monies only:

Baraga	Keweenaw
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* On October 12, 2006, the Berrien County Board of Commissioners voted to utilize the 4% landline operational surcharge. The process to establish collection is underway.

Acronyms/Definitions

Attachment C

- 9-1-1** A three-digit telephone number to facilitate the reporting of an emergency requiring response by a public safety agency.
- 9-1-1 Network** – Literally, the dedicated circuits, and switching components used to transport voice from the originating central office, PBX, or other equivalent point to the 9-1-1 controller unit at the PSAP.
- 9-1-1 Service** – The delivery of 9-1-1 dialed calls from the originating switch to the PSAP call taker, with associated delivery of ANI and ALI data.
- 9-1-1 System** – The set of network, database and CPE components required to provide 9-1-1 service.
- ALI** **Automatic Location Identification** – The automatic display at the PSAP of the caller's telephone number, the address/location of the telephone and supplementary emergency services information.
- ANI** **Automatic Number Identification** – Telephone number associated with the access line from which a call originates.
- Analog** – As applied to 9-1-1, call transport using signaling involving a physical change, such as voltage or frequency. Analog trunking using multi-frequency tones (MF).
- APCO** **Association of Public Safety Communications Officials** – The Association of Public Safety Communications Officials – International, Inc. is a not-for-profit professional organization dedicated to the enhancement of public safety communications. APCO exists to serve the people who manage, operate, maintain and supply the communications systems.
- AR** **Alternate Routing** – A standard feature provided to allow E9-1-1 calls to be routed to a designated alternate location if **(1)** all E9-1-1 exchange lines to the primary PSAP are busy, or **(2)** the primary PSAP is closed down for a period of time (night service).
- ACN** **Automatic Collision Notification** – A service provided by vendors such as OnStar and ATX that allows sensors in vehicles to automatically initiate a call to a central answering point upon specific levels of vehicle impact, air bag deployment, etc.
- Basic 9-1-1** – An emergency telephone system, which automatically connects 9-1-1 callers to a designated answering point. Call routing is determined by originating central office only. Basic 9-1-1 may or may not support ANI and/or ALI.
- CAS** **Call Associated Signaling**
- CTIA** **Cellular Telecommunications and Internet Association** – The Cellular Telecommunications and Internet Association is the international organization that represents all elements of wireless communication – cellular, personal communication services, enhanced specialized mobile radio, and mobile satellite services – serving the interests of service providers, manufacturers, and others.
- CMRS** **Commercial Mobile Radio Service** – Includes all of the following:
- 1) A wireless 2-way communication device, including a radio telephone used in cellular telephone service or personal communication service.
 - 2) A functional equivalent of a radio telephone communications line used in cellular telephone service or personal communication service.
 - 3) A network radio access line.
- CMRS Connection** – Each number assigned to a CMRS customer.

Company Identifier (Company ID) – A 3 to 5 character identifier chosen by the Local Exchange Carrier that distinguishes the entity providing dial tone to the end user. The Company Identifier is maintained by NENA in a nationally accessible database.

Consolidated Dispatch – A countywide or regional emergency dispatch service that provides dispatch service for 75% or more of the law enforcement, fire fighting, emergency medical service, and other emergency service agencies within the geographical area of a 9-1-1 service district or serves 75% or more of the population within a 9-1-1 service district.

Data Base – An organized collection of information, typically stored in computer systems, comprised of fields, records (data) and indexes. In 9-1-1, such databases include master street address guide (MSAG), telephone number/emergency service number (ESN), and telephone customer records.

Database Service Provider – A service supplier who maintains and supplies or contracts to maintain and supply an ALI database or a MSAG.

Dedicated Trunk – A telephone circuit used for a single purpose such as transmission of 9-1-1 calls.

DR Default Routing – The capability to route a 9-1-1 call to a designated (default) PSAP when the incoming 9-1-1 call cannot be selectively routed due to an ANI failure or other cause.

EMS Emergency Medical Service – The emergency medical response group established under the Emergency Medical Systems Act of 1972.

ESN Emergency Service Number – A number defining the primary PSAP and up to 5 secondary PSAPs serving a particular telephone number. It is used in conjunction with the selective routing feature of E9-1-1 service.

ESZ Emergency Service Zone – The designation assigned by a county to each street name and address range that identifies which emergency response service is responsible for responding to an exchange access facility's premises.

Emergency Telephone Charge – Emergency telephone operation charge and emergency telephone technical charge.

Emergency Telephone District – The area in which 9-1-1 service is provided or is planned to be provided to service users under a 9-1-1 system implemented under this act. Also referred to as "9-1-1 service district."

Emergency Telephone District Board – The governing body created by the board of commissioners of the county or counties with authority over an emergency telephone district.

Emergency Telephone Operation Charge – A charge for non network technical equipment and other costs directly related to the dispatch facility and the operation of 1 or more PSAPs including, but not limited to, the costs of dispatch personnel and radio equipment necessary to provide 2-way communication between PSAPs and a public safety agency. Emergency telephone operation charge does not include non-PSAP related costs such as response vehicles and other personnel.

ETSC Emergency Telephone Service Committee – A committee created within the department of state police to develop statewide standards and model system considerations and make other recommendations for emergency telephone services.

Emergency Telephone Technical Charge – A charge for the network start-up costs, customer notification costs, billing costs including an allowance for uncollectibles for technical and operation charges, and network nonrecurring and recurring installation, maintenance, service, and equipment charges of a service supplier providing 9-1-1 service under this act.

- E9-1-1 Enhanced 9-1-1** – An emergency telephone system which includes network switching, database and CPE elements capable of providing Selective Routing, Selective Transfer, Fixed Transfer, ANI and ALI.
- Final 9-1-1 Service Plan** – A tentative 9-1-1 service plan that has been modified only to reflect necessary changes resulting from any exclusions of public agencies from the 9-1-1 service district of the tentative 9-1-1 service plan under section 306 and any failure of public safety agencies to be designated as PSAPs or secondary PSAPs under section 307.
- HCAS Hybrid CAS** – a combination of CAS (Call Associated Signaling) and NCAS (Non Call Associated Signaling).
- Hypertext Link** – A way to connect two Internet resources via a simple word or phrase on which a user can click to start the connection, and easily access cross-references.
- ISDN Integrated Services Digital Network** – A digital interface providing multiple channels for simultaneous functions between the network and CPE.
- Internet Protocol Telephony** – Blending of voice, data, and video using Internet Protocol for each, across the Internet or other existing IP-based LANs and WANs, effectively collapsing three previously separate networks into one.
- LEC Local Exchange Carrier** – A Telecommunications Carrier (TC) under the state/local Public Utilities Act that provide local exchange telecommunications services. Also know as Incumbent Local Exchange Carriers (ILECs), Alternate Local Exchange Carriers (ALECs), Competitive Local Exchange Carriers (CLECs), Competitive Access Providers (CAPs), and Local Service Providers (LSPs)
- LNP Local Number Portability** – A process by which a telephone number may be reassigned from one Local Exchange Carrier to another.
- MSAG Master Street Address Guide** – A perpetual database that contains information continuously provided by a service district that defines the geographic area of the service district and includes an alphabetical list of street names, the range of address numbers on each street, the names of each community in the service district, the emergency service zone of each service user, and the primary service answering point identification codes.
- NASNA National Association of State Nine One One Administrators** – The National Association of State Nine One One Administrators is a not-for-profit corporation of full time state 9-1-1 coordinators whose primary responsibility is to administer 9-1-1 programs in their respective states. NASNA members review public policy issues, federal regulations, technology issues and funding mechanisms that impact 9-1-1 delivery.
- NENA National Emergency Number Association** – The National Emergency Number Association is a not-for-profit corporation established in 1982 to further the goal of “One Nation—One Number.” NENA is a networking source and promotes research, planning and training. NENA strives to educate, set standards and provide certification programs, legislative representation and technical assistance for implementing and managing 9-1-1 systems.
- NCAS Non Call Associated Signaling**
- PBX Private Branch Exchange** – A smaller version of the phone company central switching office, usually privately owned by a non-telephone business. A PBX connects to the larger telephone network for external call handling, and usually requires dialing an access digit such as 9 or 8 to make an external call.
- Phase I Wireless E9-1-1 Service** – dispatch center receives call back number of the wireless phone used to dial 9-1-1 and the location of the cell site used to handle the call.
- Phase II Wireless E9-1-1 Service** – dispatch center receives specific location information of the wireless caller dialing 9-1-1, within parameters set by the Federal Communications Commission.
- Primary PSAP** – A PSAP to which 9-1-1 calls are routed directly from the 9-1-1 Control Office. (See PSAP below.)

Public Safety Agency – An entity that provides fire fighting, law enforcement, emergency medical, or other emergency service.

PSAP Public Safety Answering Point – A facility equipped and staffed to receive 9-1-1 calls. A Primary PSAP receives the calls directly. If the call is relayed or transferred, the next receiving PSAP is designated a Secondary PSAP.

Redundancy – Duplication of components, running in parallel, to increase reliability.

Relay Method – A PSAP notes pertinent information and relays it by telephone, radio, or private line to the appropriate public safety agency or other provider of emergency services that has an available emergency service unit located closest to the request for emergency service for dispatch of an emergency service unit.

Secondary PSAP Answering Point – A communications facility of a public safety agency or private safety entity that receives 9-1-1 calls by the transfer method only and generally serves as a centralized location for a particular type of emergency call.

SR Selective Routing – The routing of a 9-1-1 call to the proper PSAP based upon the location of the caller.

Service Provider – An entity providing one or more of the following 9-1-1 elements: network, CPE, or database service.

Service Supplier – A person providing a telephone service or a CMRS to a service user in this state.

Service User – An exchange access facility or CMRS service customer of a service supplier within a 9-1-1 system.

SS7 CCS7 Signaling System 7 (SS7)/Common Channel Signaling (CCS7) – An inter-office signaling network separate from the voice path network, utilizing high-speed data transmission to accomplish call processing. (The Public Switched Telephone Network is in the process of upgrading from MF Signaling to SS7.)

Switch – Telephone company facility where subscriber lines or interswitch trunks are joined to switching equipment for connecting subscribers to each other, locally or long distance.

Tariff – The rate approved by the Public Service Commission for 9-1-1 service provided by a particular service supplier. Tariff does not include a rate of a commercial mobile radio service by a particular supplier.

Telecommunicator – As used in 9-1-1, a person who is trained and employed in public safety telecommunications. The term applies to call takers, dispatchers, radio operators, data terminal operators or any combination of such functions in a PSAP.

Tentative 9-1-1 Service Plan – A plan prepared by 1 or more counties for implementing a 9-1-1 system in a specified 9-1-1 service district.

Transfer Method – A PSAP transfer the 9-1-1 call directly to the appropriate public safety agency or other provider of emergency service that has an available emergency service unit located closest to the request for emergency service for dispatch of an emergency service unit.

Trunk – Typically, a communication path between central office switches, or between the 9-1-1 Control Office and the PSAP.

Universal Emergency Number Service – Public telephone service that provides service users with the ability to reach a public safety answering point by dialing the digits “9-1-1.” Also referred to as “9-1-1 Service.”

Universal Emergency Number Service System – A system for providing 9-1-1 service under P.A. 80 of 1999. Also referred to as “9-1-1 System.”

Voice over Internet Protocol (VoIP) – A phone call that is transmitted over a data network.

Wireless – A phone system that operates locally without wires, using radio links for call transport.

Wireless Emergency Service Order – The order of the Federal Communications Commission. FCC docket No. 94-102, adopted June 12, 1996, with an effective date of October 1, 1996.

Wireless Phase I – Required by FCC Report and Order 96-264 pursuant to Notice of Proposed Rulemaking (NPRM) 94-102. The delivery of a wireless 9-1-1 call with callback number and identification of the cell-sector from which the call originated. Call routing is determined by cell-sector. (Target date April 1998.)

Wireless Phase II – Required by FCC Report and Order 96-264 pursuant to Notice of Proposed Rulemaking (NPRM) 94-102. The delivery of a wireless 9-1-1 call with Phase I requirements plus location of the caller within 100 meters 67% of the time for network-based caller location systems and within 50 meters 67% of the time for handset-based location systems. (Target start date October 2001.)

Wireless Telecommunications – The family of Telecommunications services under the heading of Commercial Mobile Radio Service. Includes Cellular, Personal Communications Services (PCS), Mobile Satellite Services (MSS) and Enhanced Specialized Mobile Radio (ESMR).

Wireline – The transmission of speech or data using wired connections.