

SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based only on the provisions contained in the legislation as of the latest date listed below.)

BILL: SB 178

SPONSOR: Senate Committee on Comprehensive Planning, Local and Military Affairs

SUBJECT: The Wireless Emergency Communications Act

DATE: January 5, 1999

REVISED: 1/15/99 _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Cooper</u>	<u>Yeatman</u>	<u>CA</u>	<u>Fav/1 amendment</u>
2.	<u>Hayes</u>	<u>Hadi</u>	<u>FP</u>	<u>Favorable</u>
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____

I. Summary:

This bill creates the "Wireless Emergency Communications Act." The bill authorizes the state to levy a monthly fee of 50 cents on certain wireless subscribers to fund Enhanced 911 services. A Wireless 911 Board is created to administer the fund and adjust the allocation of proceeds from the fee or to reduce the fee. Penalties are also provided in the bill for any person who misuses the wireless 911 system.

This bill creates the following section of the Florida Statutes: s. 365.172.

II. Present Situation:

In October 1998, the Senate Committee on Comprehensive Planning, Local and Military Affairs completed a review of the Federal Communications Commission's (FCC) required improvements to the states' 911 emergency telephone systems. Committee staff made the following findings:

- The increase in the number of wireless communication is significantly impacting 911 services;
- Wireline calls in many rural counties and wireless calls throughout the state do not have access to Enhanced 911 (E911) services, which allows for automatic number and location identification services;
- The FCC may require 911 service providers and wireless communication companies to make policy changes and resulting technology upgrades to provide E911 services for all wireless phone calls made to 911 systems;
- There are potentially significant capital and operating costs to implement the FCC's requirements;
- Current revenues for financing 911 services are inadequate to fund the implementation of these new requirements;
- The wireless industry, representatives for the county 911 coordinators and county commissions, and state officials with oversight responsibilities for 911 systems have agreed upon a statutory solution; and

- At least 28 other states have imposed a 911 fee on wireless subscribers to fund the FCC required upgrades.

In response, committee staff recommended that the Legislature enact the Florida Wireless Emergency Communications Act, which:

- Establishes a 50 cent monthly fee on each wireless service subscriber in this state; fee proceeds will be used to fund the capital and operating costs incurred by wireless providers and county 911 systems in developing and maintaining an E911 system;
- Creates the Florida Wireless 911 Advisory Board to administer the fee and oversee the proposed Wireless Emergency Telephone System Trust Fund; and
- Requires the board to submit a report to the Governor and Legislature that outlines trust fund expenditures and recommends, if necessary, adjustments to the levy or distribution of the fee.

Current 911 System

The Florida Emergency Telephone Act, pursuant to s. 365.171, F.S., establishes and implements a statewide emergency telephone number system, administered through the counties, to provide citizens with rapid direct access to public safety agencies by dialing the telephone number “911.” Use of this system reduces the response time to situations requiring law enforcement, fire, medical, rescue and other emergency services.

Most counties have implemented “Enhanced” 911 systems (E911), which provides dispatchers with automatic “callback” number and location identification services for wireline phone calls. However, many rural counties have not implemented E911 because they lack the resources to purchase and operate such systems.

While basic 911 services are available for wireless communications, E911 services are unavailable for wireless systems because the technology to send and receive the information has not been implemented or has not been developed.

County 911 systems are funded by a monthly fee of up to 50 cents per subscriber on local wireline exchanges. Most counties also use general revenue to subsidize 911 systems operating and capital costs. In some cases, State General Revenue has been allocated to select under-funded rural 911 systems. The statutes do not authorize the imposition of the fee upon wireless communications subscribers.

Wireless 911 Calls

The use of wireless communication significantly impacts 911 services. Industry and local government sources estimate that:

- At least 25% of 911 calls are made from wireless telephones;
- 911 dispatchers across the nation are getting about 50,000 911 calls every day from among 42 million wireless customers;
- County 911 officials note that wireless calls can take 2.5 times longer to process than E911 calls; and
- The Cellular Telecommunications Industry Association (CITA) reports that 67% of wireless subscribers report safety reasons as a primary reason for buying cellular service.

The use of wireless communication services is growing:

- ❑ Industry sources estimate that in 1998 there are approximately 4 million subscribers in Florida, with 30,000 new wireless subscribers added nationwide every day;
- ❑ A recent survey found that 16% of responding cellular customers are currently using their wireless phones as a replacement for a land line or instead of a second telephone line.
- ❑ The Department of Management Services (DMS) report estimates that by 2004, more than 50% of all telephone numbers will likely be assigned to wireless telephones.

DMS officials with oversight responsibilities for the 911 system are concerned that the relative decline in wirelines will result in less 911 surcharge revenues, thus jeopardizing the financing of an expanding system.

This projected financial strain is exacerbated by new Federal Communications Commission (FCC) requirements to provide E911 services to wireless communications subscribers. In developing these new requirements, the FCC reasoned that the increase in use of wireless communications and the public's safety expectations compel the FCC to impose this mandate on wireless providers and 911 Public Service Answering Points (PSAPs).

Memorandum Opinion and Order FCC 97-402

In June 1996, the Federal Communications Commission (FCC) adopted a rule requiring wireless carriers - which includes cellular, broadband Personal Communications Service (PCS), and similar Special Mobile Radios (SMRs) - to implement 911 and Enhanced 911 (E911) services. In December 1997, the FCC amended the rule, which specifies the following:

- ❑ By October 1, 1997, wireless carriers must process and transmit to an appropriate PSAP all 911 calls from wireless handsets, without regard to validation procedures and regardless of code identification.
- ❑ By October 1, 1997, carriers must also be capable of transmitting 911 calls made by persons with disabilities, *e.g.*, through use of text telephone equipment (TT), or telecommunications devices for the deaf (TDD). However, the FCC temporarily suspended enforcement of the requirement until October 1, 1998, for digital systems, subject to a notification requirement.
- ❑ **Phase I:** By October 1, 1997, carriers must have initiated actions necessary to relay a caller's Automatic Number Identification (ANI) and the location of the cell site receiving a 911 call. These capabilities are designed to allow the PSAP to call back the phone placing the 911 call if disconnected, and help identify the approximate location of the caller.
- ❑ **Phase II:** By October 1, 2002, carriers are required to have the capability to identify the latitude and longitude of the mobile units making 911 calls within a radius of no more than 125 meters, using Root Mean Square calculations (which roughly equate to success rates of approximately 67 percent).
- ❑ Phase I and II upgrades are required only if the carrier receives a request for such services from a PSAP capable of receiving and using the service, and only if a **cost recovery mechanism** relating to the provision of such services is in place.
- ❑ Wireless providers have six months after the request from the PSAP to implement requested changes.

The Status of Phase I and II Technology

Industry and County 911 Coordinators report that the technology to implement Phase I of the FCC's requirement is generally available. According to a recent survey of county 911 coordinators, twelve counties have installed Phase I equipment and are ready to receive ANI and cell tower identification information from wireless providers. Twenty-three other counties have at least 1 PSAP Phase I ready.

As for Phase II, new technologies are being developed and field-tested at this time:

- The wireless industry is conducting field-tests of "time difference of arrival" technology, which measures the time for the cellular signal to be received at multiple cell towers, thereby estimating the relative distance and direction of the signal from each tower.
- In Denver, Colorado 911 providers are testing Global Positioning Satellite (GPS) technology in cell phones. It is reported that a computer chip enabling this technology can be installed for \$5 - \$8 per phone.
- Celltrax Inc. of Melbourne, Florida is piloting a "time difference of arrival" project which operates independently from the wireless providers. This technology would allow a single state-wide E911 Phase II service through a single contractor, thereby standardizing the transmission of information to PSAPs and simplifying the coordination of service. The field test results are scheduled to be available in 1999.

California, Texas, New Jersey, Oregon, and Vermont may be currently pursuing "single contractor" Phase II solutions.

Estimating Implementation and Operating Costs

Both the wireless industry and local PSAPs will incur implementation costs for Phase I and II. The FCC estimates a nation-wide cost of \$5 - 10 billion nationwide. Individual costs for wireless providers or PSAPs may differ significantly. Statewide costs projections are difficult to obtain for a number of reasons:

- The wireless industry and PSAPs use a variety of different systems;
- Some PSAPs will have higher upgrading costs because they must address the "Y2K" problem or must expand to 10+ digit dialing; these upgrades are necessary to accommodate the FCC requirements;
- Service delivery standards have not been developed; and
- New technologies for Phase II are being developed and field-tested at this time.

Costs to Counties

To implement Phase I, each PSAP will need 10 digit dialing capacity, a dedicated trunk for wireless 911 calls, and upgraded call handling equipment. To implement Phase II, each PSAP will need an integrated geographic mapping system and related equipment to receive location information. Some counties have already purchased and implemented Phase I technologies. All PSAPs will incur the operating and maintenance costs of these technologies.

We surveyed the 67 County 911 Coordinators to identify the present funding status and projected costs to implement Phase I and II of the FCC's requirements. Fifty-one counties responded to the survey, for a seventy-six percent response rate. According to our survey:

- 23 counties have at least 1 PSAP that is now Phase I capable;
- All PSAPs in Collier, Duval, Lake, Orange, and Osceola counties have implemented Phase I technology, spending an estimated \$1.5 million; and
- 28 counties representing 61% of the state population project it will cost \$ 11.2 million to obtain the technology necessary to implement Phase I, and \$ 2.8 million annually to operate these systems.

Reliable estimates of the cost to implement Phase II are unavailable.

Current Status of 911 Funding

Our survey also asked County 911 Coordinators to provide present budget information pertaining to their 911 systems. The survey reveals that:

- Many expenses for the county 911 systems may not be included in the county's 911 budget (such as call-takers salaries and benefits, and facilities expenses);
- Many counties have recently invested significant capital to upgrade their 911 systems with Phase I technology;
- 39 of the 51 responding counties levy the maximum 911 fee currently authorized by s. 365.171, F.S.; and
- Less populated counties have higher per capita operating costs than the other counties.

Costs to the Wireless Industry

911 calls from cellular phones can be transmitted to the PSAPs in one of two ways: by the wireless provider or by an entity contracted to forward all 911 calls from selected towers in the state.

Cost estimates for the first option are incomplete. AT&T Wireless estimates it will cost their companies 25 cents per month per customer to implement and operate Phase I systems. Industry sources report that a wireless provider in Colorado provides these services for an estimated 18.5 cents per month per customer. As for Phase II, one county reports that their local wireless provider estimates that it will cost \$50,000 per cell tower face for location technologies.

Cost estimates for transmission of all 911 calls by a single contractor across the state are unavailable.

At least twenty-eight other states have imposed fees on wireless services to fund upgrades in E911 services.

III. Effect of Proposed Changes:

This bill would create the Wireless Emergency Communications Act.

The bill includes findings which justify the creation of the act. Intent language is included to specify that a reasonable fee would be levied to fund an emergency 911 system, thus providing wireless telephone users with rapid direct access to public service agencies. Key terms are defined.

The Department of Management Services is required to oversee the administration of the fee authorized by this act.

The bill creates the Wireless 911 Board to administer the fee imposed by the act. The board will be composed of seven members, to include the director of the statewide emergency telephone number 911 system, or his or her designee, who will serve as chair of the board and permanent member. The other six members will be appointed by the Governor and must include three county 911 coordinators recommended by the Florida Association of Counties and three members from the wireless telecommunications industry. These six members will be appointed for staggered four year terms.

The Wireless 911 Board

The board is required to:

- administer the 911 fee;
- implement, maintain, and oversee the Wireless Emergency Telephone System Fund;
- review and oversee the disbursement of revenues deposited in the fund;
- review documents submitted by wireless providers; these documents include fee collection and implementation expense projections;
- review and approve or reject applications for expense recovery;
- hire and retain employees to perform administrative functions for the board;
- enter into contracts for board purposes;
- establish an interest-bearing account for E911 fees, secure appropriate information and reports from providers, and perform all of the functions that would be performed by an independent accounting firm prior to completing request for proposals process required under this act;
- represent the board's interests in legal proceedings;
- adopt, use, and alter a common corporate seal;
- elect or appoint officers and agents as required;
- adopt rules to implement the act; and
- "(D)o all acts and things necessary or convenient to carry out the powers granted in this" act.

Board members must serve without compensation, except for per diem and travel expenses.

Reporting Requirements

By February 28 of each year, the board must prepare a report for submission by DMS to the Governor, President of the Senate, and Speaker of the House which shows the revenues collected and disbursed by the board in the preceding calendar year. The report must also summarize the status of implementation of E911 service statewide.

By February 29, 2001, the board must prepare a report for submission by DMS to the Governor, President of the Senate, and Speaker of the House which:

- shows the total E911 revenues collected by each wireless provider, the total expenses incurred by each provider to implement E911 services, and the total revenues deposited in the trust fund as of 12/1/00.
- recommends whether the fee amount or allocation percentages should be adjusted to comply with the FCC's requirements; and

- addresses any other issues related to the provision of wireless E911 services.

The bill requires the board to issue a request for proposal (RFP) to retain an independent accounting firm to perform administrative and accounting tasks for the board. The board must establish a committee, which must include the chairman and two other members of the board, to review the responses to the RFP and recommend one firm to the full board for final selection.

The Wireless 911 Fee

The bill requires each wireless provider to collect a monthly fee, beginning August 1, 1999, of fifty cents on each service subscriber with a billing address in this state. The fee is assessed to “ensure full recovery” for providers and counties of the costs associated with developing and maintaining an E911 system. After July 1, 2001, the board is authorized to adjust the allocation percentages or reduce the fifty cent fee, or both. (After wireless providers retain an administrative fee of 1% of the fees they collect, the remaining collections would be distributed as follows: 44% to counties, 54% to wireless providers, and 2% to rural counties for facilities and service enhancements.) Any new allocation percentages or reduced fee may not be adjusted for 2 years.

The bill prohibits the imposition of state and local taxes against the fee and prohibits local governments from levying any additional fee on wireless providers or subscribers for the provision of E911 services.

Management of Funds

Each wireless provider is required to collect the monthly fee from wireless subscribers. The fee may be listed as a separate entry on each bill. The provider is required to remit fees only if it is paid by the subscriber. Partial payments are applied first to the payment due the provider for the provision of services. Providers are not obligated to take legal action to recover unpaid E911 fees.

Providers are authorized to retain one percent of collections as reimbursement for administrative costs.

Providers are required to remit fees collected within 60 days after the end of the month in which the fee was billed, together with a monthly report of the number of bill addresses or wireless subscribers in each county. Quarterly remitting of fees and submission of reports is authorized by waiver of the board.

Provision of Services

The provider is not required to provide E911 services until:

- requested by the county 911 coordinator and the affected answering point is capable of receiving and using the data elements associated with the service;
- funds are available to reimburse the provider for the provision of the service;
- the local exchange carrier is able to support the E911 system; and
- the board has scheduled the implementation of the service in the provider’s service area.

These requirements are consistent with the FCC’s order.

Misuse of Wireless 911 System

Use of the wireless 911 system is restricted to emergency communications by the public. Knowingly using the system for other purposes constitutes a first degree misdemeanor, punishable under s. 775.082 or s. 775, 083, F.S. Continued misuse of the system constitutes a third degree felony, punishable under s. 775.082, s. 775.083, or s. 775, 084, F.S.

Non Preemption Clause

The bill clarifies that nothing in this act alters any state law that otherwise regulate providers of telecommunications services.

The bill would take effect on July 1, 1999.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

Preliminary estimates of wireless 911 fee revenues are as follows:

50 Cent Monthly Fee: Projected Revenues

<i>Fiscal Year</i>	<i>Est. # of Subscribers (millions)</i>	<i>Est. Revenues* (ER)</i>	<i>Admin. Charge 1% of ER</i>	<i>All Counties' 44% of (ER - 1%)</i>	<i>Small Counties 2% of (ER - 1%)</i>	<i>Industry (Ind.) [54% of (ER - 1%)]- 2%</i>	<i>Board Admin. 2% of Ind.</i>
--------------------	---	----------------------------	-------------------------------	---------------------------------------	---------------------------------------	---	--------------------------------

99-00**	4.2	\$18.9m	\$0.19m	\$ 8.23m	\$0.37m	\$ 9.90m	\$0.20m
00-01	5.1	\$22.9m	0.23m	9.97m	0.45m	11.99m	0.24m
01-02	6.0	\$36.0m	0.36m	15.68m	0.71m	18.86m	0.38m
02-03	6.9	\$41.4m	0.41m	18.03m	0.82m	21.69m	0.44m
03-04	7.9	\$47.4m	0.47m	20.64m	0.94m	24.83m	0.50m
04-05	8.8	\$52.8m	0.53m	23.00m	1.06m	27.66m	0.56m

* # of subscribers x \$0.50 x 12 months
 ** # of subscribers x \$0.50 x 9 months

Source: CTIA & Senate Committee on Comprehensive Planning, Military & Local Affairs

B. Private Sector Impact:

Upon implementation of the act, all wireless communications subscribers will be required to pay \$0.50 per month to the wireless provider to pay for implementation of E911 services for wireless telephones.

C. Government Sector Impact:

PSAPs will receive 44% of the Wireless 911 Fee revenues. These revenues are to be used to upgrade equipment and fund operations for wireless E911 telephone services.

VI. Technical Deficiencies:

None.

VII. Related Issues:

As noted in the Present Situation, counties have the authority to levy a 911 fee of up to 50 cents per month on land line telephones. Currently, 54 counties levy the maximum 50 cents per month, 6 counties levy between 45 - 49 cents per month, and 7 counties levy under 45 cents per month.

Imposition of a statewide uniform fee for wireless 911 services, rather than authority for a county levy, is recommended for a number of reasons:

- it provides a predictable revenue stream to fund implementation of the FCC’s requirements;
- it ensures coordinated statewide implementation;
- it reflects the mobile nature of the technology; wireless users paying for E911 service in one county are assured E911 service as they travel throughout the state;

- it insures that all persons benefiting from the enhanced service participate in the implementation costs;
- it maintains a competitively neutral impact on all wireless providers;
- the allocation structure insures that the less populated counties will have the resources to implement the changes; and
- it minimizes administrative costs for providers.

VIII. Amendments:

#1 by Comprehensive Planning, Local and Military Affairs:

Requires at least one of the appointed county 911 coordinator members of the Wireless 911 Board be from a county with a population of 75,000 or less.

This Senate staff analysis does not reflect the intent or official position of the bill's sponsor or the Florida Senate.
