



The Public Utilities
Commission of Ohio

Ohio Wireless Enhanced 9-1-1 H.B. 361 Implementation Status

November 1, 2006



The Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215

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The Public Utilities Commission of Ohio

Monitoring marketplaces and enforcing rules to assure safe, adequate, and reliable utility services.

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Members of the Ohio General Assembly,

It is my pleasure to provide you with a status report regarding wireless enhanced 9-1-1 (E9-1-1) and update you on the tremendous progress that has been made in implementing wireless E9-1-1 service in Ohio.

As you may recall, House Bill 361 (HB 361), as passed by the 125th General Assembly, created a funding mechanism for establishing wireless E9-1-1 service in Ohio, which is completed in two phases. Phase I service provides the tower information and caller's contact number to an emergency services dispatcher. Phase II displays both the Phase I information and the latitude/longitude of the caller's location. HB 361 sets forth a monthly surcharge of 32 cents to be assessed to each wireless phone number belonging to an Ohio subscriber, which is then remitted to approved counties to assist in implementing this life-saving service.

HB 361 also requires the Ohio 9-1-1 coordinator to provide the General Assembly with a report regarding the implementation progress of wireless E9-1-1 and a recommendation of any change in the amount of the monthly surcharge. As of the writing of this report, 52 counties have been approved to receive funding. Since October 1, 2005, the 9-1-1 Service Program has collected \$25.6 million from the 32 cent monthly surcharge, \$16 million has been distributed as of the end of October. Eight counties have implemented Phase II service and another 15 have completed Phase I service and are moving into Phase II service.

On July 31, 2006, the Wireless 9-1-1 Advisory Board issued a survey to all 88 counties to determine the total estimated implementation costs for each county. The results show that the amount of the wireless surcharge will adequately and appropriately fund implementation on an aggregate basis. Therefore, I recommend that the surcharge remain at 32 cents. Issues were identified with regard to how the collected funds are distributed. Counties with populations less than 50,000, 45 percent of the state, could experience severe shortfalls in funding under the current allocation structure. The results also showed that larger counties' implementation costs do not increase in proportion to the amount of funds received. As a result, counties with more than 750,000 in population will collect funds in excess of their implementation costs. Considering these findings, I recommend exploring the possibility of changing the allocation formula to establish a better balance between the costs a county incurs with the funding it receives. Changing the wireless E9-1-1 allocation formula would require a change in Ohio law.

Thank you for your attention to this important public safety issue. Should you have any questions, please do not hesitate to contact me at (614) 644-8950.

Shawn S. Smith
Ohio 9-1-1 Coordinator

Wireless E9-1-1 Highlights

- Since October 1, 2005 the 9-1-1 Service Program has collected \$25.6 million from more than 50 wireless carriers operating in Ohio. Of these funds, the 9-1-1 Service Program has distributed \$16 million as of the end of October.
- Fifty-two counties have completed the wireless amendment to their countywide 9-1-1 plan and have been approved to receive disbursements from the Wireless 9-1-1 Government Assistance Fund. A majority of these counties estimate that Phase II service will be implemented by mid-2007.
- Of the 88 counties in Ohio, eight counties have completed Phase II service. Six of these counties are currently receiving funding and another 15 counties have fully implemented Phase I wireless service. According to estimates provided by the approved counties, 43 counties will complete Phase II service by the end of June 2007.
- Under the current funding structure, the amount disbursed to each county is determined by the ratio of wireless telephone numbers with billing addresses in the county to wireless telephone numbers within the state. HB 361 stipulated a \$25,000 minimum disbursement to each county annually, regardless of the number of local billing addresses. There is no cap on the amount any county may receive.
- Wireless E9-1-1 implementation costs incurred by large counties accrue at a much slower rate than the funds being received. As a result, larger counties receive funding in excess of implementation costs, leaving smaller counties (45 percent of the state) with little incentive to implement or sustain a wireless E9-1-1 system.
- Ohio's 32 cent monthly wireless E9-1-1 surcharge is the currently the fourth lowest in the country.
- The amount of the monthly surcharge is appropriate at this time to cover the establishment of wireless E9-1-1 across Ohio. No change in the amount is recommended. However, counties in Ohio with a population of less than 50,000 will experience financial difficulty in implementing wireless E9-1-1 under the current allocation formula.
- The wireless E9-1-1 allocation formula must be reviewed and changed to enable more counties to implement wireless E9-1-1 by adequately disbursing funds to cover the costs of the upgrades. Legislative action would be required for any changes to the current county allocations.

Background

Bill Summary

House Bill 361 (HB 361), as passed by the 125th Ohio General Assembly, became law on May 1, 2005, and creates a funding mechanism for establishing wireless enhanced 9-1-1 (E9-1-1) service in Ohio. Wireless E9-1-1 is a valuable service that saves lives by providing the location information and callback number of those individuals in emergency situations to police, fire, and medical personnel. With the growing popularity of wireless phones, lawmakers realized the vital need to ensure that the same E9-1-1 capabilities available to landline phone users also applied to wireless phone users. Since a traditional wireline phone may not be available in emergency situations, this service is especially critical in providing Ohioans with a quick, efficient, and perhaps life-saving emergency response.

Wireless E9-1-1 service is implemented in two phases. Phase I provides an emergency services dispatcher with the wireless tower information and caller's contact number. Phase II displays both the Phase I information and the latitude/longitude of the caller location. To fund the necessary 9-1-1 system upgrades, wireless phone customers in Ohio pay a 32 cent monthly surcharge on each wireless phone line. This charge began appearing on subscribers' bills on August 1, 2005, and will sunset December 31, 2008. Counties may apply to the Public Utilities Commission of Ohio (PUCO) to receive funding from the Wireless 9-1-1 Government Assistance Fund to pay for upgrading 9-1-1 answering systems, equipment, and the training of staff. To date, the PUCO has approved wireless E9-1-1 funding for 52 counties in Ohio.

How the Funding Mechanism Works

HB 361 authorized a 32 cent monthly surcharge on each wireless phone line in Ohio, exempt from state or local taxation, to be remitted to the Ohio 9-1-1 coordinator, located at the PUCO. This remittance is to occur no later than the last day of each month effective October 1, 2005. The funds are then deposited into the Wireless 9-1-1 Administrative Fund, managed by the Treasurer of State, and distributed, according to the allocation formula described in the Ohio Revised Code (ORC) 4931.61 (B), to each county that has adopted a final wireless E9-1-1 plan. Monthly disbursements for counties that have not adopted a final plan will be retained in the fund until December 31, 2008.

Each year, no later than January 25, the 9-1-1 coordinator is to estimate each county's fund allocation and certify this amount to the county auditor. The amount disbursed to each county is determined by the ratio of wireless telephone numbers with billing addresses in the county to wireless telephone numbers with billing addresses in the state.

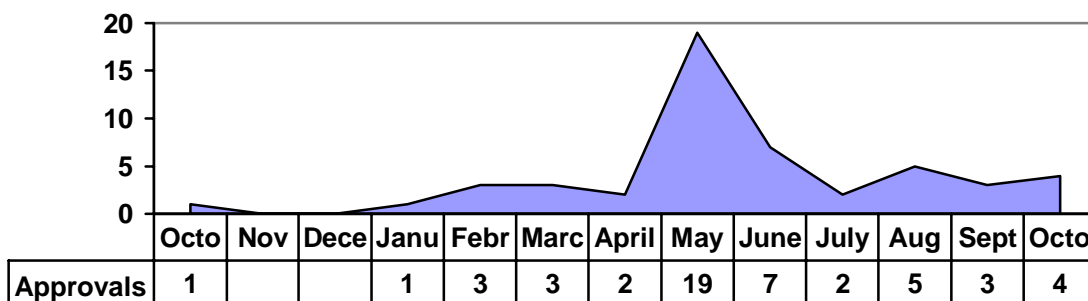
In order to begin receiving disbursements from the Wireless 9-1-1 Government Assistance Fund, a county is required to amend its final countywide 9-1-1 plan for the provision of wireless E9-1-1 service, in accordance with ORC 4931.40 through 4931.70. These sections previously required a county to establish a 9-1-1 planning committee, a 9-1-1 advisory committee, hold public meetings, and obtain acts by resolution to approve or deny the amended

plan by the respective board of county commissioners, municipal legislative authorities, and township authorities.

This approval process was modified by Senate Bill 9 of the 126th General Assembly. Therefore, as of April 14, 2005, any county seeking to amend its countywide 9-1-1 plan to include wireless implementation is no longer required to hold public meetings or seek approval by municipal and township authorities. A county's plan will now be considered amended, with respect to wireless E9-1-1, solely by the approval of the planning committee. The membership of the committee is defined under ORC 4931.42 and includes the president of the board of county commissioners, the chief executive officer of the most populous municipal corporation, and the chief executive officer of the second largest corporation or township. Counties with a population of more than 175,000 require two additional members. This change in law streamlined the process thereby increasing the number of wireless E9-1-1 funding requests.

Adoption of the revised plan permits the Ohio 9-1-1 coordinator to begin monthly disbursements from the Wireless 9-1-1 Government Assistance Fund to a county treasurer in accordance with the county's allocation formula. Each county that has not adopted a final wireless E9-1-1 plan will have its allocations set aside for the first three years of the legislation (through December 31, 2008). Should notification of an amended final plan be made to the 9-1-1 coordinator before the end of the third year, the escrowed dollars will then be disbursed to the county.

**Number of County Wireless E9-1-1 Plans
Approved per Month**



How Counties Utilize Funding

Upon receipt of a wireless E9-1-1 disbursement, a county must allocate the funding, in accordance with its final 9-1-1 plan, to any subdivisions in the county that pay the costs of a Public Safety Answering Point (PSAP) providing wireless E9-1-1 service. The disbursement is to be used to cover the costs of necessary wireless E9-1-1 equipment, tariffed wireless 9-1-1 service, and for training of the staff covering wireless 9-1-1 calls. Effective August 1, 2006, the disbursed funds can be used by a county, which has certified to the 9-1-1 Coordinator that it has previously paid equipment and training costs, to cover any personnel costs of a PSAP providing wireless E9-1-1 service. However, counties have been reminded that the funding mechanism

associated with the wireless 9-1-1 fund is of a limited nature. Upon expiration of the 32 cent monthly surcharge and exhaustion of the wireless E9-1-1 fund in 2009, allocations will cease, providing no further funding for personnel costs.

9-1-1 Officer, Council, and Advisory Board

HB 361 also created the position of Ohio 9-1-1 coordinator, an 11 member 9-1-1 Council, and a six member Wireless 9-1-1 Advisory Board. The coordinator is appointed by the chairman of the PUCO and is charged with administering the Wireless 9-1-1 Government Assistance Fund, administering ORC 4931.30 through 4931.70, and other duties assigned by the PUCO chairman. Members of both the council and board are appointed by the governor. The 9-1-1 Council is assigned with arbitrating and establishing nondiscriminatory, competitively neutral and uniform technical and operational 9-1-1 standards and conducting research and making recommendations and reports regarding any wireline and wireless 9-1-1 issue. The Wireless 9-1-1 Advisory Board is responsible for making a recommendation to the coordinator regarding the amount of the wireless 9-1-1 charge to be included in the 9-1-1 coordinator's report to the General Assembly and making recommendations to the PUCO and the coordinator regarding any 9-1-1 administrative rules to be adopted under ORC 4931.67.

On June 14, 2006 the Ohio 9-1-1 Council passed Operating Standard 06-01. This document was adapted from the national standard defined by the National Emergency Number Association. It establishes guidelines and provides guidance to emergency call takers for the processing of a wireless E9-1-1 call.

There are currently two vacant seats on the 9-1-1 Council and one vacancy on the Wireless 9-1-1 Advisory Board. Members of both these bodies include:

Ohio 9-1-1 Council

Bill Hinkle - Hamilton County (Chair)
Ken Borrer - Franklin County
Douglas Goergen - Cingular
Richard Hager - AT&T
John Honabarger - Honabarger and Assoc.
Yvonne Lesicko - Cincinnati Bell
Serena Range - Cuyahoga County
Nancy Serafino - EMBARQ
Shawn S. Smith - State of Ohio 9-1-1 Coordinator

Wireless 9-1-1 Advisory Board

Mike King - Miami County (Chair)
Lynne Feller - Wayne County
Douglas Goergen - Cingular
Bo Keck - Muskingum County
Serena Range - Cuyahoga County

Progress to Date

Since October 1, 2005, the 9-1-1 Service Program has collected \$25.6 million from more than 50 wireless carriers operating in Ohio. Of these funds, the 9-1-1 Service Program has distributed \$16 million as of the end of October. On February 23, 2006 the 9-1-1 Council unanimously approved the use of the State Treasury Asset Reserve of Ohio (Star Ohio) as an investment option. Star Ohio is a low risk, highly liquid investment option for the escrowed funds. The State Treasurer acts as STAR Ohio's investment advisor and administrator, and Carnegie Capital Management Company of Cleveland, acts as the fund's co-administrator. To date, this fund has earned the Wireless 9-1-1 Government Assistance Fund more than \$135,000 in dividends. All earnings from this investment are distributed to the counties with invested funds.

Funding Approvals

The 9-1-1 coordinator's office has worked diligently to ensure that the parties able to take advantage of the wireless E9-1-1 funds are aware of the provisions of HB 361. Over the past year, numerous meetings and presentations have been held with groups including county administrators, the County Commissioners' Association of Ohio, the County Auditors' Association of Ohio, the County Treasurers' Association of Ohio, the Ohio chapter of the National Emergency Numbering Association, the Ohio chapter of the Association of Public-Safety Communication Officials, and industry representatives, among others.

Fifty-two counties have completed the wireless amendment to their countywide 9-1-1 plan and have been approved to receive disbursements from the Wireless 9-1-1 Government Assistance Fund. A majority of these counties estimate that they will be complete with Phase II implementation by mid-2007. To ensure adequate progress is being made, each of these counties have been ordered by the PUCO to file a quarterly progress report with the 9-1-1 coordinator's office until such time as they have completed Phase II deployment. Within these reports, the counties must supply information regarding progress in implementing wireless E9-1-1, disbursements from the Wireless 9-1-1 Government Assistance Fund, technological/equipment improvements, as well as provide an estimated implementation date.

Completed Counties

Of the 88 counties in Ohio, eight counties have completed Phase II implementation. Six of these counties are currently receiving funding and another 15 counties have fully implemented Phase I wireless service. According to estimates provided by the approved counties, 43 counties in Ohio will have completed Phase II implementation by the end of June 2007.

Tariffs

In 1999, the Federal Communications Commission (FCC) issued the E9-1-1 Second Memorandum Opinion and Order (94-102), which detailed the implementation of wireless E9-1-1 service. In 2001, this order was interpreted in a letter by Thomas J. Sugrue, Chief of the FCC's Wireless Telecommunications Bureau. This correspondence, commonly known as the "King County Letter", explains which parties are responsible for the costs of upgrading an existing wireline 9-1-1 system to employ wireless E9-1-1 services. The FCC defined the input to the 9-1-1 selective router as the demarcation point for determining cost responsibility. As a result of this interpretation, PSAPs are responsible for upgrades to the selective router and the selective router interface, as well as trunking upgrades both from the 9-1-1 selective router to the PSAP and from the PSAP to the Automatic Location Identification Database.

Additional complexities exist in transmitting the data associated with a wireless call versus a wireline call. In order for a wireline carrier to transmit the information associated with wireless E9-1-1, the carrier must make certain upgrades to the 9-1-1 system and take on additional maintenance costs. These upgrades and related costs are incremental to the offering of wireline E9-1-1 and are not recovered through the wireline surcharge authorized under ORC 4931.47.

The PUCO approved wireless 9-1-1 tariffs for AT&T, Cincinnati Bell, EMBARQ, and Verizon. These tariffs permit the wireline carriers to recover incremental costs associated with the routing of wireless E9-1-1 calls to the appropriate PSAP. These costs cover the transmission of the appropriate caller location information and mobile directory number for call back information. As part of the approval process, each of these companies was required to provide the PUCO staff with a cost study examining the proposed charges. In addition to funding wireless E9-1-1 implementation and training costs, the funds remitted to a county from the surcharge may be used to pay for fees associated with the local wireline company's tariff.

9-1-1 Administrative Rules

On July 26, 2006, PUCO staff released draft administrative rules pertaining to 9-1-1 service in case number 06-915-TP-ORD. These rules contain provisions related to HB 361, SB 9, and the overall reliability of the 9-1-1 system. Both initial and reply comments have been filed by interested parties. Upon action by the PUCO, and after the conclusion of any rehearings, the approved rules will be forwarded to the Joint Committee on Agency Rule Review (JCARR).

Allocations

Each county is allocated a portion of the monthly wireless surcharge collections based upon a ratio of the number of wireless subscribers with billing addresses in the county to the total number of billing addresses in the state. In October 2005, letters were sent to wireless carriers in Ohio requesting the number of customers with billing addresses in each Ohio county. The results showed that more than 6.5 million wireless subscribers hold billing addresses in Ohio.

The data gathered from the carriers was used to calculate the estimated annual allocation each county would receive throughout 2006. In accordance with ORC 4931.64(A), each county auditor was notified in January 2006 of his/her county's estimated individual share of the fund. On October 4, 2006, a new request was sent to the wireless carriers for the most recent customer count updates. Upon collection, new county allocation percentages will be calculated and notices to the county auditors of the new allocation estimates will be distributed.

Use of the Funds

Wireless 9-1-1 Advisory Board Survey

On July 31, 2006, a comprehensive survey was sent to each county in Ohio. This survey, compiled by the Ohio Wireless 9-1-1 Advisory Board, was designed to gather data regarding each county's 9-1-1 status, funding situation, estimated costs of implementing wireless E9-1-1, and use of any disbursements from the Wireless 9-1-1 Government Assistance Fund. The 9-1-1 Service Program received responses from 85 of the 88 counties. The information gathered from these surveys was used to determine how the 32 cent monthly surcharge was used and to formulate a recommendation regarding any change in the amount of the surcharge.

County Expenditures

Fifty-two counties have been approved to receive funding from the Wireless 9-1-1 Government Assistance Fund. Of these, 20 counties have reported expending the funds they received. The other 32 counties have either just received their first disbursement or are escrowing the disbursements until they obtain a funding level which allows them to begin covering the costs they will incur. Again, each county approved to receive funding is required by a PUCO order to provide the 9-1-1 coordinator with a quarterly report regarding implementation. The PUCO remains diligent in ensuring counties are moving forward with their efforts appropriately. The following table demonstrates the average cost each county will incur by cost center. The costs have been classified into population tiers to better show the relationship between a county's size and the initial costs it will incur.

Average Cost Estimates by County Population Tiers

	Tier I	Tier II	Tier III	Tier IV	Tier V	Tier VI ¹
Computer Upgrades	\$47,000	\$81,000	\$114,000	\$182,000	\$450,000	\$1,310,000
Mapping Installation	\$78,000	\$84,00	\$116,000	\$127,000	\$179,000	\$230,000
Mapping Maintenance	\$5,000	\$7,000	\$8,000	\$18,000	\$29,000	\$40,000
Training	NA	\$6,000	\$8,000	\$8,000	\$9,000	\$169,000

In general, counties are first utilizing their funds for equipment and software upgrades in order to process information being provided by the wireless E9-1-1 calls. Without these upgrades, the data transmitted to the call taker would not display on the screen properly and could not be used to find the caller. The costs associated with completing these upgrades vary according to the type and age of the equipment. Estimates obtained from the advisory board survey indicate upgrades range anywhere from a low of \$47,000 to a high of nearly \$2 million.

Another large expense associated with implementing wireless E9-1-1 is mapping. Phase II service provides the call taker with the geographical coordinates of the wireless caller. These coordinates are virtually useless by themselves. The data must be input into some type of mapping system to plot the caller's location. There are a number of private companies supplying mapping systems, each with their own individual features. Many counties have obtained quotes for installation of these mapping systems. The quotes range from as little as \$5,000 for smaller counties to as much as \$350,000 for the larger ones. Future maintenance of the systems will be vital to updating the maps as streets, address numbering, and geographical features change. Maintenance contract estimates range from \$5,000 to \$40,000.

¹ Population Totals (2000 Census)

Tier I < 20,000	Tier IV 100,001- 300,000
Tier II 20,001- 50,000	Tier V 300,001- 750,000
Tier III 50,001- 100,000	Tier VI > 750,000

For counties that may not have enough funds available to purchase a customized mapping system, other options exist. The Ohio Geographically Referenced Information Program, housed within the Ohio Office of Information Technology offers funding to counties through the Location Based Response System (LBRS). This initiative is designed to develop street centerlined data, which will provide emergency responders with the “locations of people, places, and things” through various data layers. Both disaster planning and emergency response efforts will benefit from the LBRS. By participating and seeking out the funding, counties may reduce redundant mapping projects while ensuring that Ohio’s citizens do not pay for multiple mapping initiatives.

Additionally, many free internet-based services are available. These may be accessed by a call taker, who then hand enters the X-Y coordinates. While these types of services are popularly believed to be less accurate and less reliable, the general proximity of the call may still be obtained.

ORC 4931.65 permits PSAPs to utilize disbursements from the fund to cover costs associated with training 9-1-1 call takers in answering wireless calls, managing the information provided, and utilizing new computer systems to process the wireless information. Estimates for these costs could range between \$6,000 and \$250,000 per county.

The final major cost category affecting a county implementing wireless E9-1-1 is the fees charged by the county’s host 9-1-1 wireline carrier. As previously discussed in this report, tariffs have been approved by the PUCO for AT&T, Cincinnati Bell, EMBARQ, and Verizon. Through these tariffs, the carriers are permitted to recover costs associated with upgrades and additional maintenance of the wireline 9-1-1 system related to transmitting wireless E9-1-1 calls and enhanced data. However, charges do not take effect until the county begins taking Phase I or Phase II calls. As with the other costs associated with establishing wireless E9-1-1, tariffed charges also vary from county to county. The results of the advisory board survey show that a majority of the counties have not yet obtained quotes regarding the fee amount they will be charged.

In addition to the tariffed service itself, some counties may elect to install additional trunks. Dedicating additional trunks to wireless E9-1-1 calls allows the PSAP to ensure that the 9-1-1 system is not overloaded by multiple wireless calls being made in response to the same incident. Wireless calls are routed separately from wireline calls, decreasing the occurrence of a wireline 9-1-1 caller experiencing a busy signal. A county that adds additional trunks will experience additional charges, as the cost for these trunks is not recoverable under the wireline surcharge permitted by ORC 4931.47.

Personnel Costs

HB 361 permitted counties to begin utilizing disbursements for PSAP personnel costs after August 1, 2006. Prior to taking advantage of this provision, an individual county must complete a certification process with the 9-1-1 coordinator. Within this process, the county must first show all other costs associated with establishing wireless E9-1-1 have been expended and that Phase II implementation is complete. Language defining this certification process is included in the draft administrative rules, currently being reviewed by the PUCO. To date, no governmental entities have requested to utilize wireless E9-1-1 funds to cover personnel costs.

Funding Recommendation

The funding recommendations contained herein are based upon a survey distributed by the Wireless 9-1-1 Advisory Board to each of the Ohio counties on July 31, 2006. Among other items, this survey asked for information regarding costs each county will expect to incur in the major cost categories associated with implementing wireless E9-1-1. Responses to this survey were strong, with 85 of the 88 counties replying. In analyzing the data, the survey estimates were stratified by county population to better match a county's funding level with its costs estimates.

In analyzing the figures, all major cost components were included, with the exception of personnel costs. This type of cost was excluded for several reasons. First, only a quarter of the counties surveyed provided estimates of the additional personnel costs associated with wireless E9-1-1. Second, a majority of the counties in Ohio are already taking basic wireless 9-1-1, also known as Phase O. In doing so, each of these PSAPs are already taking the same number of calls as when they will transfer to wireless E9-1-1, and are already absorbing the personnel costs of taking wireless E9-1-1 calls. The only difference the PSAPs will experience will be the added data they receive. While this added data may require additional time to process, no studies have been provided to substantiate the costing level this will impose. Lastly, while it is true that the number of wireless calls being made to 9-1-1 centers continues to increase each year, this report focuses on the immediate implementation of wireless E9-1-1 per ORC 4931.70 and does not take into account costs to be experienced in the future. It is important to note that many of the counties across Ohio are experiencing increasing levels of incoming wireless calls. As these levels continue to rise, increases in staffing may be needed.

Any county that implements wireless E9-1-1 service will incur ongoing costs. These include, but are not limited to, wireline tariffs, mapping updates and maintenance, training, and personnel costs. Taking into account the purpose of this report and the sunset of the 32 cent monthly surcharge in 2008, my review of recurring cost estimates supplied by the counties only include a period of one year. Under the current statutory language, the recurring costs a county experiences going forward after the sunset would have to be recovered through any remaining balance from the Wireless 9-1-1 Government Assistance Fund or through some other outside funding source.

Monthly Surcharge Amount

The monthly surcharge to implement wireless E9-1-1 is set at 32 cents per wireless phone number. According to an August 15, 2006 study by the National Association of State 9-1-1 Administrators, 48 states currently have some type of charge funding state wireless 9-1-1 systems. This national study found that surcharges structured similar to Ohio's range from 28 cents to \$1. Ohio's 32 cent surcharge is currently the fourth lowest in the country.

Based upon revenue generated from the monthly surcharge and cost estimates provided by the counties, changing the amount of the monthly surcharge is not recommended. According to the Wireless 9-1-1 Advisory Board Survey, it will cost an estimated \$40 to \$50 million for all counties in Ohio to purchase the appropriate equipment, upgrade existing systems, and train current staff. This figure does not include personnel costs, recurring fees, continued training, maintenance, and other "fringe" costs that may be associated with implementation. It also makes assumptions regarding counties that have not obtained complete cost quotes. Bear in mind this figure will only assist in establishing the wireless E9-1-1 system and will not provide funding for implementation costs which were not included in the advisory board survey, or for recurring costs in the future.

Throughout the life of the 32 cent monthly surcharge, it is estimated that a total of \$74 million will be collected. This total amount will be needed to cover recurring costs, such as tariff fees, maintenance, training, and staffing, which are vital to ensuring an efficient and effective wireless E9-1-1 system. Again, the amount of the surcharge is appropriate at this time to cover the establishment of wireless E9-1-1 across Ohio.

Current Funding Structure

Under the current funding structure, the amount disbursed to each county is determined by the ratio of wireless telephone numbers with billing addresses in the county to wireless telephone numbers with billing addresses in the state. HB 361 stipulated a \$25,000 minimum disbursement to each county annually, regardless of the costs incurred. There is no cap on the amount any county may receive. Currently five counties are eligible to receive the established \$25,000 minimum. Any county failing to amend its 9-1-1 plan and request release of the wireless monies by December 31, 2008 will lose its escrowed funds. These escrowed dollars will be distributed between counties who have sought out their share of the fund.

The Wireless 9-1-1 Advisory Board Survey results show allocation issues among the counties. As previously explained, counties in Ohio with a population of less than 50,000 will experience difficulty in implementing wireless E9-1-1 under the current allocation structure. The survey data has demonstrated that as a county's population size increases, implementation costs also increase. In addition, as a county's population increases, the amount of revenues collected by the county from the Wireless 9-1-1 Government Assistance Fund (under the current allocation structure) increases at a much higher rate than the cost of implementation. Therefore, the cost incurred by large counties accrues at a much slower rate than the funds being received. As a result, larger counties receive funding in excess of their implementation costs, while smaller

counties (45 percent of the state) have little incentive to implement a wireless E9-1-1 system that they may be unable to financially sustain.

While not all counties within the lower two tiers will experience dramatic shortages, each will experience difficulties in establishing a viable wireless E9-1-1 system. In addition, should one of these counties implement wireless service, no additional funding would exist to cover the ongoing costs of the system. The ability to establish, maintain, and operate the service may be highly questionable for the lower two tier counties.

On the other side of the funding coin are counties with more than 300,000 in population. Only 9 percent of the state falls into these two tiers. According to the estimated costs reported, counties within these tiers will collect funds in excess of their costs.

Average Implementation Figures under the Current Funding Structure

	Tier I	Tier II	Tier III	Tier IV	Tier V	Tier VI ²
Estimated Average Initial Cost to Implement per County	\$183,209	\$235,032	\$298,000	\$436,338	\$1,749,000	\$2,119,000

Conclusion

The 9-1-1 Service Program has made great strides regarding the statewide implementation of wireless E9-1-1. To date, 59 percent of Ohio's counties have been approved to receive funding from the Wireless 9-1-1 Government Assistance Fund. According to estimates provided, 43 counties will complete Phase II implementation by the end of June 2007. The 9-1-1 Service Program will begin an aggressive outreach program in the spring 2007 to ensure all Ohio's counties are aware of the opportunities presented by HB 361.

Upon analyzing estimates supplied by county and local government officials, a change in the amount of the wireless monthly surcharge is not recommended at this time. This is because the current 32 cent monthly surcharge will produce sufficient funding, on an aggregate level, to effectively implement wireless E9-1-1 across the state.

² * Population Totals (2000 Census)

Tier I < 20,000	Tier IV 100,001- 300,000
Tier II 20,001- 50,000	Tier V 300,001- 750,000
Tier III 50,001- 100,000	Tier VI > 750,000

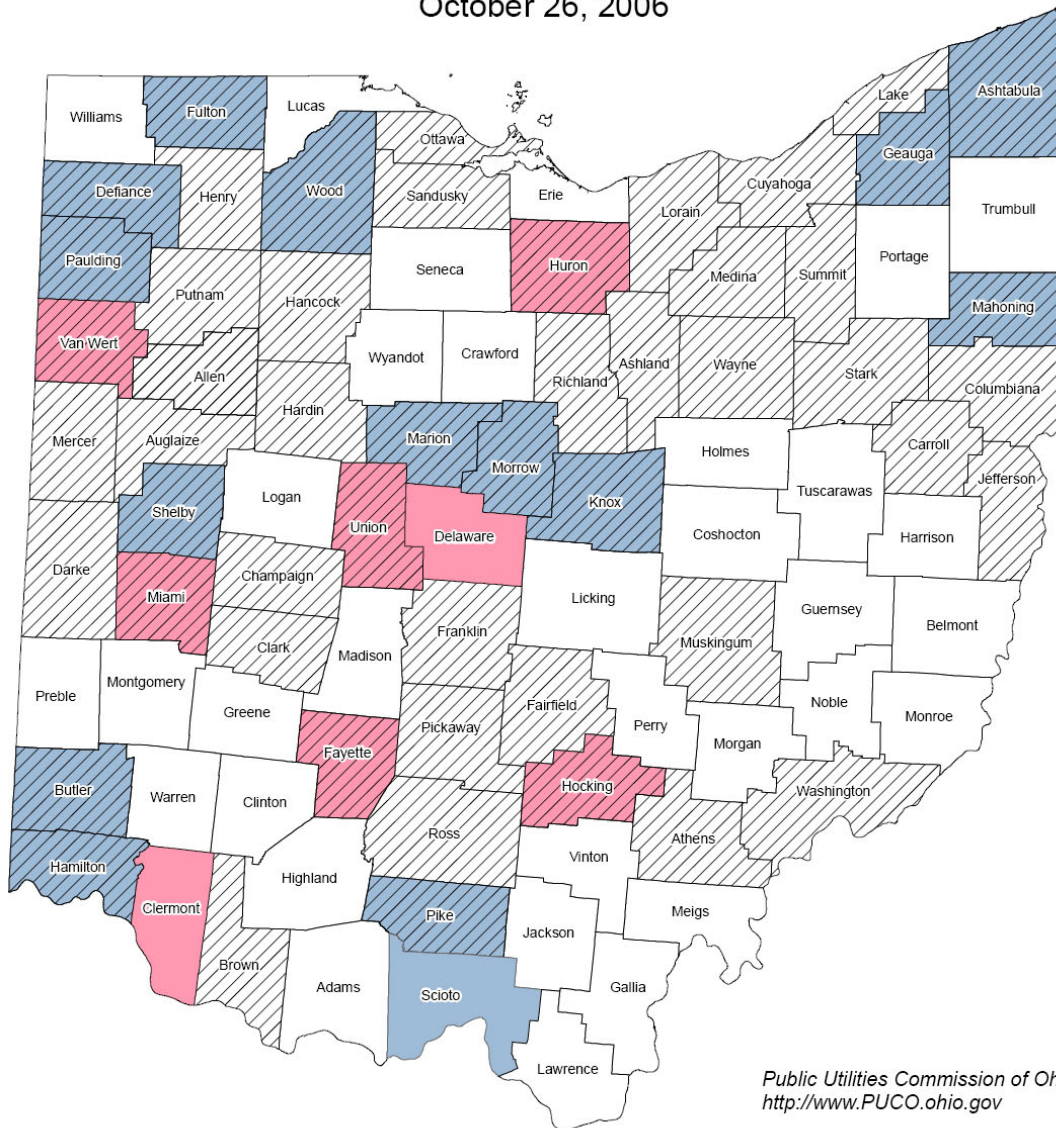
It has become apparent through compiling these estimates that changes need to be made regarding the allocation of the monthly surcharge. Many of the smaller counties in Ohio will experience funding shortfalls under the current allocation. At the same time, the largest counties experience economies of scale with regard to their implementation costs. As a result, their expenses do not increase in proportion to the level of funding they receive and are left with collections in excess of their anticipated costs.

Further review of the allocation formula is needed to facilitate a legislative change and better assign funding in relation to cost incurred per county. Any law change should not unnecessarily increase the amount of the surcharge. Simply increasing the amount of the monthly surcharge under the current allocation structure will exacerbate the situation by funneling the increase to the larger counties. Instead, increasing the \$25,000 minimum allocation amount to a level that will adequately fund the smaller counties, while placing a cap on the amount any county may receive per year should be considered. This shift in funds will ensure equitable and adequate funding treatment in relation to the sliding scale of costs, while not placing additional financial burdens upon Ohio citizens. The Ohio 9-1-1 Council and Ohio 9-1-1 Wireless Advisory Board must jointly review these matters further and submit a recommendation to the legislature.


Appendix A- Wireless E9-1-1 Implementation Map

Ohio Wireless Enhanced 9-1-1

October 26, 2006



Public Utilities Commission of Ohio
<http://www.PUCO.ohio.gov>

 Counties Approved for Wireless Enhanced 9-1-1 Funding
 Phase I Implemented
 Phase II Implemented

Appendix B- Allocation/Disbursement Report

County Name	Number of Wireless Numbers	% of Total Number of Phones	Date Approved	Phase II Estimated Implement Date	Phase II Status	Estimated Annual Allocation	Disbursements Received to Date
Adams	10,110	0.154864%				\$36,450.34	\$0.00
Allen	56,551	0.866242%	05-16-06	03-31-07	Ongoing	\$203,887.54	\$199,767.36
Ashland	26,475	0.405541%	10-25-06	09-30-07	Ongoing	\$95,452.29	\$0.00
Ashtabula	44,107	0.675626%	02-01-06	11-30-06	Ongoing	\$159,022.26	\$155,228.17
Athens	22,270	0.341129%	09-06-06	04-06-07		\$80,291.69	\$78,450.04
Auglaize	20,026	0.306756%	08-09-06	12-31-06	Ongoing	\$72,201.23	\$72,751.25
Belmont	30,192	0.462477%				\$108,853.47	\$0.00
Brown	18,315	0.280547%	05-03-06	05-03-07	Ongoing	\$66,032.44	\$62,804.26
Butler	214,613	3.287416%	05-31-06	12-31-06	Ongoing	\$773,760.27	\$754,872.76
Carroll	9,274	0.142058%	09-13-06	01-31-09	Ongoing	\$33,436.24	\$34,095.33
Champaign	20,052	0.307154%	06-28-06	03-31-07	Ongoing	\$72,294.97	\$70,809.72
Clark	81,520	1.248714%	05-31-06	11-30-06	Ongoing	\$293,910.14	\$287,784.82
Clermont	108,670	1.664594%				\$391,796.06	\$0.00
Clinton	25,160	0.385398%				\$90,711.23	\$0.00
Columbiana	48,293	0.739746%	04-10-06	06-30-08	Ongoing	\$174,114.36	\$170,699.15
Coshocton	13,847	0.212107%				\$49,923.62	\$0.00
Crawford	20,558	0.314905%				\$74,119.29	\$0.00
Cuyahoga	827,620	12.677385%	06-14-06	03-31-07	Ongoing	\$2,983,880.16	\$2,940,853.17
Darke	24,823	0.380236%	05-16-06	12-31-07	Ongoing	\$89,496.21	\$87,343.71
Defiance	18,689	0.286276%	10-19-05	02-01-07	Ongoing	\$67,380.85	\$56,861.73
Delaware	88,832	1.360718%				\$320,272.64	\$0.00
Erie	45,843	0.702218%				\$165,281.19	\$0.00
Fairfield	68,317	1.046472%	05-03-06	11-03-06	Ongoing	\$246,308.38	\$241,458.23
Fayette	14,428	0.221006%	05-03-06		Complete	\$52,018.35	\$49,880.29
Franklin	751,298	11.508294%	06-14-06	03-31-07	Ongoing	\$2,708,710.76	\$2,666,270.38
Fulton	24,059	0.368533%	08-16-06	03-31-07	Ongoing	\$86,741.71	\$86,454.70
Gallia	12,191	0.186740%				\$43,953.12	\$0.00
Geauga	53,359	0.817347%	04-10-06	10-01-06	Ongoing	\$192,379.19	\$187,848.97
Greene	91,380	1.399748%				\$329,459.13	\$0.00
Guernsey	17,158	0.262824%				\$61,861.02	\$0.00
Hamilton	614,277	9.409422%	05-16-06	11-30-06	Ongoing	\$2,214,698.72	\$2,166,392.10
Hancock	38,892	0.595743%	10-04-06	06-01-07	Ongoing	\$140,220.23	\$138,855.16
Hardin	13,433	0.205765%	05-31-06	12-31-06	Ongoing	\$48,431.00	\$47,373.19
Harrison	5,067	0.077616%				\$25,000.00	\$0.00
Henry	14,627	0.224055%	05-03-06	06-01-07	Ongoing	\$52,735.81	\$51,991.85
Highland	17,650	0.270361%				\$63,634.86	\$0.00
Hocking	9,905	0.151724%	05-03-06		Complete	\$35,711.24	\$35,096.97
Holmes	15,271	0.233919%				\$55,057.68	\$0.00
Huron	26,980	0.413276%	02-06-06		Complete	\$97,273.01	\$97,653.91
Jackson	14,162	0.216932%				\$51,059.32	\$0.00
Jefferson	33,020	0.505796%	05-31-06	02-12-07	Ongoing	\$119,049.47	\$114,470.18
Knox	30,115	0.461298%	05-31-06	01-01-07	Ongoing	\$108,575.86	\$105,747.25
Lake	128,967	1.975501%	03-29-06	04-01-07	Ongoing	\$464,974.35	\$457,839.05
Lawrence	15,083	0.231040%				\$54,379.87	\$0.00
Licking	89,860	1.376465%				\$323,978.97	\$0.00
Logan	24,469	0.374813%				\$88,219.91	\$0.00

County Name	Number of Wireless Numbers	% of Total Number of Phones	Date Approved	Phase II Estimated Implement Date	Phase II Status	Estimated Annual Allocation	Disbursements Received to Date
Lorain	153,285	2.348001%	06-28-06	03-31-07	Ongoing	\$552,649.85	\$543,711.49
Lucas	292,749	4.484294%				\$1,055,469.82	\$0.00
Madison	19,868	0.304336%				\$71,631.58	\$0.00
Mahoning	176,587	2.704939%	07-12-06	03-31-07	Ongoing	\$636,662.29	\$612,585.61
Marion	31,605	0.484122%	05-03-06	02-01-07	Ongoing	\$113,947.87	\$111,229.06
Medina	99,564	1.525110%	06-14-06	06-01-07	Ongoing	\$358,965.52	\$351,893.30
Meigs	8,315	0.127368%				\$29,978.69	\$0.00
Mercer	19,011	0.291208%	03-29-06	12-31-07	Ongoing	\$68,541.78	\$66,465.21
Miami	58,783	0.900431%	07-12-06		Complete	\$211,934.74	\$207,362.11
Monroe	4,349	0.066617%				\$25,000.00	\$0.00
Montgomery	302,416	4.632372%				\$1,090,322.98	\$0.00
Morrow	4,144	0.063477%	05-31-06	04-01-07	Ongoing	\$25,000.00	\$56,489.77
Morgan	16,015	0.245316%				\$57,740.07	\$0.00
Muskingum	39,772	0.609223%	10-11-06	01-31-07	Ongoing	\$143,392.96	\$142,064.33
Noble	3,692	0.056554%				\$25,000.00	\$0.00
Ottawa	23,532	0.360460%	09-20-06	05-01-07	Ongoing	\$84,841.68	\$84,295.44
Paulding	7,256	0.111147%	05-03-06	09-30-06	Ongoing	\$26,160.60	\$28,539.24
Perry	11,815	0.180981%				\$42,597.50	\$0.00
Pickaway	22,744	0.348390%	08-09-06	04-01-07	Ongoing	\$82,000.64	\$81,601.24
Pike	10,189	0.156074%	06-28-06	09-30-07	Ongoing	\$36,735.16	\$35,983.07
Portage	83,891	1.285032%				\$302,458.48	\$0.00
Preble	20,347	0.311673%				\$73,358.56	\$0.00
Putnam	18,378	0.281512%	06-28-06	09-30-07	Ongoing	\$66,259.58	\$65,267.34
Richland	49,302	0.755202%	08-09-06	12-31-07	Ongoing	\$177,752.18	\$180,879.36
Ross	33,633	0.515186%	02-22-06	12-31-06	Ongoing	\$121,259.57	\$116,817.01
Sandusky	28,432	0.435518%	10-04-06	07-01-07	Ongoing	\$102,508.01	\$101,392.75
Scioto	27,502	0.421272%				\$99,155.01	\$0.00
Seneca	26,984	0.413338%				\$97,287.43	\$0.00
Shelby	26,895	0.411974%	05-31-06	12-31-06	Ongoing	\$96,966.55	\$93,934.47
Stark	199,895	3.061968%	10-25-06	11-24-06	Ongoing	\$720,696.36	\$0.00
Summit	314,333	4.814916%	05-31-06	05-31-07	Ongoing	\$1,133,288.23	\$1,114,328.41
Trumbull	109,166	1.672192%				\$393,584.33	\$0.00
Tuscarawas	40,471	0.619930%				\$145,913.12	\$0.00
Union	29,799	0.456458%	08-09-06		Complete	\$107,436.56	\$105,318.45
Van Wert	12,867	0.197095%	01-18-06		Complete	\$46,390.36	\$45,202.12
Vinton	4,205	0.064412%				\$25,000.00	\$0.00
Warren	111,737	1.711574%				\$402,853.75	\$0.00
Washington	28,362	0.434446%	05-03-06	06-30-07	Ongoing	\$102,255.64	\$98,768.73
Wayne	57,751	0.884623%	03-29-06	03-31-07	Ongoing	\$208,213.99	\$203,208.07
Williams	16,368	0.250723%				\$59,012.77	\$0.00
Wood	71,351	1.092946%	10-04-06	01-04-07	Ongoing	\$257,247.09	\$255,029.78
Wyandot	11,150	0.170794%				\$40,199.93	\$0.00