

THE COUNTY WIDE 9-1-1 PLAN
COUNTY OF CUYAHOGA, OHIO

INITIAL PLAN

ADOPTED BY:

THE 9-1-1 PLANNING COMMITTEE

MARCH 24, 1986

REVISED PLAN

ADOPTED BY:

THE 9-1-1 PLANNING COMMITTEE

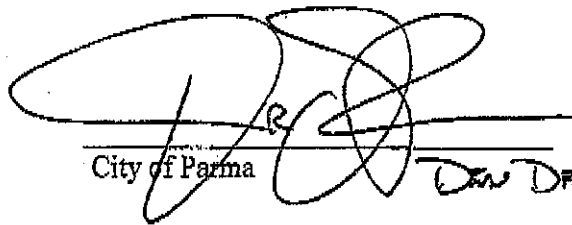
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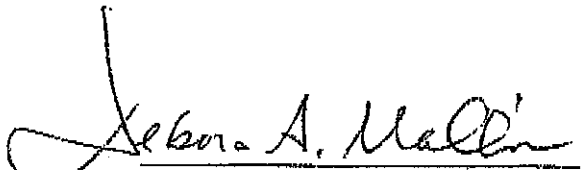
Original: March 24, 1986
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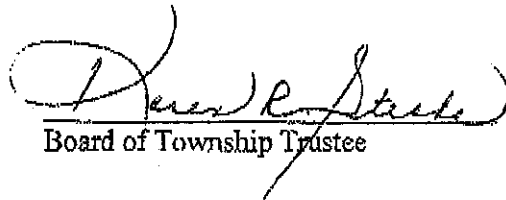
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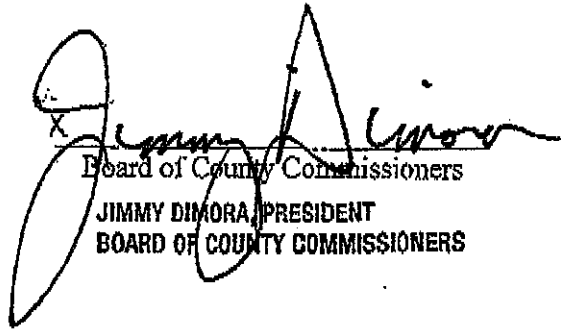
This document titled "The County Wide 9-1-1 plan: County of Cuyahoga, Ohio" is adopted by the 9-1-1 Planning Committee pursuant to the requirements specified in Section 4931.43 (C) of the Ohio Revised Code:


City of Cleveland


City of Parma *Don DePina*


Municipal Corporations


Board of Township Trustees


Board of County Commissioners
JIMMY DIMORA, PRESIDENT
BOARD OF COUNTY COMMISSIONERS

May 10, 2006
Date

ADOPTION

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May 10, 2006
Date

9-1-1 Planning Committee

Pursuant to Section 4931.43 (A) of the Ohio Revised Code, the County of Cuyahoga 9-1-1 Planning Committee was established effective, July 1, 1985 by the Board of County Commissioners Resolution No. 523321 and as amended by the Board of County Commissioners Resolution No. 526327.

On May 10, 2006 the 9-1-1 Planning Committee convened to approve the revised Cuyahoga County 9-1-1 Plan as required by ORC 4931.40 through 4931.50 in order to approve configuration for processing 9-1-1 cellular/wireless calls in Cuyahoga County.

MEMBERS:

NAME	REPRESENTING
Commissioner Jimmy Dimora	Board of County Commissioners
The Honorable Dean DePiero	City of Parma
The Honorable Debra Mallin	Municipal Mayor
The Honorable Frank Jackson	City of Cleveland
Trustee Karen Straka	Olmsted Township Trustee

STAFF:

Murray A. Withrow
Serena Range
Lucia Polito

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PURPOSE AND SCOPE

This revised document has been prepared pursuant to the requirements specified in Sections 4931.40 through 4931.50 of the Ohio Revised Code. Its purpose is to provide the Board of County Commissioners and the legislative authorities of the County of Cuyahoga's municipal corporations and townships with the required written description of the County 9-1-1 Plan, prepared by the 9-1-1 Planning Committee for the County-Wide implementation of the 9-1-1 System. The initial 9-1-1 Plan was adopted on March 24, 1986 and the Revised 9-1-1 Plan was adopted on May 10, 2006.

9-1-1 FINAL PLAN APPROVAL REQUIREMENTS

The initial County 9-1-1 Plan was adopted in accordance with Section 4931.44 of the Ohio Revised Code on March 24, 1986.

In accordance with Senate Bill 9 and Section 4139.45 of the Ohio Revised Code this 9-1-1 Revised Plan was placed in effect upon receiving approval by the 9-1-1 Planning Committee. The composition of this committee is as follows:

- 1) Board of County Commissioners President
- 2) Mayor City of Cleveland or Designee
- 3) Mayor City of Parma or Designee
- 4) Mayor appointed by the Mayors and City Managers Association
- 5) Township Trustee appointed by the Mayors and City Managers Association

1.0 - EXECUTIVE SUMMARY

This section summarizes the initial 9-1-1 System that was implemented in 1986 for the County of Cuyahoga, the costs associated with implementing and operating this 9-1-1 System and the costs associated with equipping an operating the Public Safety Answering Points providing these Public Safety Answering Points are equipped to utilize the Automated Number Identification and Automated Location Identification features of the enhanced 9-1-1 System. In addition, this section provides information on the approval and implementation of the County 9-1-1 System.

1.1 - THE 9-1-1 SYSTEM

All territories in the County of Cuyahoga receive Enhanced 9-1-1 Services.

Under 9-1-1, an individual in the County of Cuyahoga in need of police, fire and/or emergency medical services will only have to dial 9-1-1 in order to obtain these services. Under the Enhanced 9-1-1 System, all 9-1-1 calls originating in a defined geographic area or Public Safety Answering Point (PSAP) territory will automatically be routed to the appropriate PSAP. The County of Cuyahoga has been divided into forty-seven such PSAP Territories. In addition, the Enhanced 9-1-1 System will display at the Primary PSAP, if appropriately equipped, the telephone number (Automatic Number Identification) and address (Automatic Location Identification) from which the 9-1-1 call is originating.

1.2 - COSTS

The costs of the 9-1-1 System relate to the installation and ongoing maintenance of the 9-1-1 Network and its Data Management System and to the PSAP Equipment. When this plan was initially approved the estimated cost of installing the 9-1-1 Network and establishing its Data Management System was \$3,650,218. The annual cost of maintaining the 9-1-1 Network and its Data Management system was estimated to be \$938,856 in 1986. The State of Ohio gave the Ohio Bell Telephone Company a tax credit for the installation cost of the 9-1-1 Network and its Data Management System was and continues to be charged to the telephone subscribers in the county of Cuyahoga. Each telephone subscriber pays \$.12 per line per month.

The PSAP equipment cost is directly dependent on what equipment is installed at the PSAPs. The manner in which the PSAPs are equipped will determine which Enhanced 9-1-1 features will be available at the PSAPs. The municipal corporations and the townships are responsible for all costs associated with PSAP equipment and will be sole authority as to how each PSAP is equipped.

2.0 – ENHANCED 9-1-1 DESCRIPTION

2.1 – PUBLIC SAFETY ANSWERING POINT

Public Safety Answering Point or “PSAP” is the location to which a 9-1-1 call is routed for answering. The following paragraphs identify and define the various types of PSAP’s and define the term “PSAP Territory”.

PRIMARY PSAP

The Primary PSAP is the PSAP to which a 9-1-1 call is initially routed for answering, a primary PSAP must be staffed 24 hours per day and 7 days per week. There is a “Night Service” option under which all calls will automatically be transferred to the PSAP’s Alternate. There can only be one Primary PSAP per PSAP Territory. Refer to Appendix A for a list of the proposed Primary PSAPs.

SECONDARY PSAP

The PSAP to which the Primary PSAP may transfer 9-1-1 calls. A Secondary PSAP may be a Primary PSAP in a different PSAP Territory, and may serve as a Secondary PSAP for a number of Primary PSAPs. Appendix B identifies the Secondary PSAPs.

ALTERNATE PSAP

The PSAP to which 9-1-1 calls are routed when the lines are busy or there is an equipment failure at the Primary PSAP. Every Primary PSAP must have an Alternate PSAP which must be staffed 24 hours per day and 7 days per week.

An Alternate PSAP may be a Secondary PSAP in the same PSAP Territory or a Primary or Secondary PSAP in a different PSAP Territory. Refer to Appendix A for a listing of the proposed Alternate PSAPs. Refer to Subsection 2.3 for additional information on the Alternate Routing feature.

DEFAULT PSAP

The PSAP which the 9-1-1 calls is routed when the Enhanced 9-1-1 System cannot determine the PSAP Territory in which the 9-1-1 calls is originating and thus, the Primary PSAP to which the 9-1-1 calls should be routed. The CECOMS CENTER PSAP shall serve as the Default PSAP for the entire County.

Upon approval of the Cuyahoga County 9-1-1 Revised Plan at the conclusion of one year from the date legislation takes effect and after all technical and training costs have been paid, funds from the Wireless Government Assistance Fund may be used for personnel costs for the CECOMS Center this funding is permissible provided it is necessary for wireless 9-1-1 call processing, coordination and administration and after completing a certification process administered by the 9-1-1 Coordinator.

At such time if the Wireless 9-1-1 Government Assistance Fund ceases to exist or no longer provides funding, and the Cuyahoga County wireless 9-1-1 fund is no longer capable of financially supporting wireless 9-1-1 in Cuyahoga County, the Cuyahoga County 9-1-1 Advisory Committee will make a recommendation to the 9-1-1 Planning Committee.

PSAP TERRITORY

The geographic area from which all 9-1-1 calls are routed to the same Primary PSAP. Refer to Section Four for a list of the proposed PSAP Territories and the communities included in each.

2.2 - PSAP EQUIPMENT

The equipment installed at the PSAP determines the Enhanced 9-1-1 features (see Subsection 2.3) that will be available to the individual answering the 9-1-1 call. At a minimum no equipment other than a regular telephone is needed. To take advantage of all the Enhanced 9-1-1 features, the PSAP will need both ANI and ALI Equipment. In addition, a printer may be installed at a PSAP to provide a hard-copy record of the 9-1-1 call activity. The following paragraphs describe the Enhanced 9-1-1 equipment.

ANI EQUIPMENT

The ANI equipment is needed for the 9-1-1 System to display at the PSAP the telephone number from which the 9-1-1 call is being made, and for the alternate Routing Call Transfer, Forced Discount, Call Hold, Call Return and Hard Copy Record features (see Subsection 2.3)

The minimum ANI equipment for a PSAP is the ANI controller, the ANI Transfer/Display Unit, and a regular telephone instrument on which the call is actually answered. In addition, an ANI Auxiliary Controller and ANI Additional Trunk Equipment may be required pending on the number of incoming trunk lines and the number of ANI Transfer/Display Units at the PSAP.

ALI EQUIPMENT

The ALI Equipment is needed in order for the 9-1-1 System to display at the PSAP address from which the 9-1-1 calls is originating.

The ANI equipment is a prerequisite for the ALI equipment which at a minimum would consist of all ALI Controller and the ALI Display Unit. In addition, ALI Miscellaneous wiring is needed for each ALI Display Unit. Also, and ALI Auxiliary Controller may be needed depending on the number if ALI Display Units at the PSAP.

For those communities considering a computer-assisted dispatch (CAD) system, the ALI Display Unit and the ALI Miscellaneous Wiring is displaced by the CAD System's Visual display terminal.

PRINTER

It is possible to connect a computer printer to the ANI Controller to provide a hard copy record of the 9-1-1 call activity (see Subsection 2.3). The level and volume of 9-1-1 call activity at the PSAP will determine the print speed required on the hard-copy printer.

With just the ANI equipment, the printer will print the number from which the 9-1-1 call is made, the date of the 9-1-1 call, and the times if the call ring, call answer, call transfer and/or call termination. With the ANI and ALI equipment, the printer will print on demand the address from which the call is being made.

TRUNK LINES

A community may reduce the number of present trunk lines they have for incoming emergency calls. However, a community must maintain at least one seven digit telephone number and the related trunk lines.

2.3 - FEATURES

The enhanced 9-1-1 features routes the 9-1-1 call to the Primary PSAP for the PSAP Territory in which the 9-1-1 is originated. This feature will be provided to all communities independent of how their PRIMARY PSAP is equipped.

SELECTIVE ROUTING

This feature automatically routes the 9-1-1 call to the Primary PSAP for the PSAP Territory in which the 9-1-1 is originated. This feature will be provided to all communities independent of how their PRIMARY PSAP is equipped.

NOTE: The Enhanced 9-1-1 System will supplement and not supersede the capabilities of a community's present telephone system.

AUTOMATIC NUMBER IDENTIFICATIONS (ANI)

This feature displays the telephone number from which the 9-1-1 call is being made on the ANI Transfer/Display Unit at a PSAP.

AUTOMATIC LOCATION IDENTIFICATION (ALI)

This feature displays the telephone number, address, type of telephone (residential, business, pay) from which the 9-1-1 call is being made, and the police, fire and emergency medical service providers for this address on the ALI Display Unit at a PSAP.

ALTERNATE ROUTING

If the 9-1-1 lines are busy at the Primary PSAP, this feature will automatically route the 9-1-1 call to the 7-digit telephone number at the Primary PSAP.

If there is an equipment or line failure at the Primary PSAP, this feature can route the 9-1-1 call to the Alternate PSAP defined for the Primary PSAP.

DEFAULT ROUTING

When the 9-1-1 System cannot determine the PSAP Territory from which a 9-1-1 call is originating and, thus, the Primary PSAP to which the 9-1-1 call is to be routed, this feature will automatically route the 9-1-1 call, to the Default PSAP for answering. The Default PSAP will answer the 9-1-1 call, determine the nature and location of the emergency and would contact via telephone or radio the appropriate dispatch center for the dispatching of the appropriate emergency unit. The CECOMS CENTER PSAP shall serve as the county-wide Default PSAP.

CALL TRANSFER

When the Primary PSAP is not responsible for dispatching the appropriate emergency units, this feature of the ANI Transfer/Display Unit is used to transfer via "one-button-transfer" the 9-1-1 calls to the PSAP or the Telephone at the appropriate dispatch location. The ANI Transfer/Display Unit has a capacity of 8 pre-programmed "one-button-transfers". When the 9-1-1 call is transferred, the primary PSAP operator can stay on the line or hang up.

If the Primary PSAP does not have an ANI Transfer/Display Unit, it will be necessary for the PSAP Operator to transfer the 9-1-1 call via the regular telephone system or radio, or

to take the information from the 9-1-1 calls of possible and transmit it in some manner to the appropriate dispatch center.

CALL RETURN

If a Primary PSAP with an ANI Transfer/Display Unit routes a 9-1-1 call to an incorrect Secondary PSAP which is also equipped with an ANI Transfer/Display Unit, the operator at the Secondary PSAP can return to call to the Primary PSAP or to another programmed PSAP via "one-button transfer".

If the PSAP incorrectly receiving a 9-1-1 call does not have an ANI Transfer/Display Unit, then the operator must transfer the call to the appropriate PSAP via the regular telephone equipment.

CALL HOLD

The operator at a PSAP can place a 9-1-1 caller on "hold". The telephone number and address displays will reappear on the display units at the PSAP when the 9-1-1 caller is taken off "hold" if the 9-1-1 caller has not hung up on the telephone.

FORCED DISCONNECT

This feature of the ANI Transfer/Display Unit permits the PSAP operator to clear a 9-1-1 line into the PSAP whenever necessary to prevent an individual(s) from tying up the 9-1-1 lines. It should be noted that the misuse of the 9-1-1 system is a felony.

HARD-COPY RECORD

This feature permits the production of a hard-copy record of the 9-1-1 call activity, if the PSAP has at least the ANI equipment. Refer to subsection 2.2 for additional information on this feature's capabilities.

3.0 - COSTS

The cost of implementing and operating the 9-1-1 System relates to the 9-1-1 Network and its Data Management System, and to the equipment installed at the Public Safety Answering Points (PSAPs). This section defines these costs and indicates the entity responsible for them. It should be noted that Am. Sub. H.B. No. 491 specifies who is responsible for the various cost elements.

3.1 - NETWORK

The 9-1-1 System will require the installation of a separate trunk line network in the County and the installation of additional trunk lines at the PSAP. Also, if sufficient line capacity is not available on the present telephone sets at the PSAP, larger telephone sets will be installed. Additional trunk lines and telephone sets installed after the 9-1-1 implementation are also included in these costs.

The Data Management System is Ohio Bell's computer system which determines the telephone number from which a 9-1-1 calls is being made and the Primary PSAP to which the 9-1-1 calls it to be routed, and which links the telephone number or the address and the emergency service providers for the address. The database will be updated daily to assure the 9-1-1 System's Selective Routing, Automatic Number Identifications and Automatic Location Identification features provide accurate information.

The one-time cost of installing the 9-1-1 Network and establishing the Data Management System's database in 1986 was estimated to be \$3,650,218. The State of Ohio will pay this cost via a tax credit to the Ohio Bell Telephone Company. The estimated annual cost of maintaining the 9-1-1 Network and the Data Management System's database was \$938,856. All telephone subscribers in the County of Cuyahoga will equally contribute to this ongoing cost at the rate of \$.12 per line per month.

3.2 PUBLIC SAFETY ANSWERING POINT

The Public Safety Answering Points (PSAP) costs are primarily related to the equipment installed and maintained at the Primary, Secondary and default PSAP. Subsection 2.2 describes the various PSAP equipment and Section Four is based on the data obtained from the questionnaires completed by the communities, comments received on the "9-1-1 Implementation Proposal", and is based on the PSAP having all of the Enhanced 9-1-1 features.

The installation and monthly lease costs provided in Section Four are for the lease of the ANI and ALI equipment from the Ohio Bell Telephone Company pursuant to the then present P.U.C.O. tariff for this equipment. Included in this lease cost is the maintenance of the equipment.

The ANI and ALI equipment may be purchased, but not from the Ohio Bell Telephone Company. The estimated purchase price of a minimum ANI/ALI equipment configuration was \$200,000-250,000 plus approximately \$600 per month for maintenance. The lease of this same minimum configuration is \$18,526 in one-time installation charge and \$895 per month.

In regard to the printer, the installation cost quote in Section Four is for the purchase of a low-speed printer from a local computer store. The cost would be greater than \$400 if a higher speed printer is needed.

Based on the equipment proposal presented in Section Four, the county-wide costs of equipping and maintaining the PSAP are as follows:

<u>PSAP TYPE</u>	<u>INSTALLATION</u>	<u>MONTHLY LEASE</u>
Primary	\$ 964,783	\$45,766
Default	20,612	978
Secondary	<u>190,159</u>	<u>9,065</u>
TOTAL	\$1,175,554	\$55,809

4.0 - WIRELESS ENHANCED 9-1-1 PSAP

4.1 - ESTABLISHMENT OF SERVICE

In accordance with sections 4931.40 through 4931.70 of the Ohio Revised Code, Cuyahoga County will implement wireless enhanced 9-1-1 utilizing current FCC, PUCO and/or the Ohio 9-1-1 Council requirements as soon as reasonably possible after receipt of the first disbursement from the Wireless 9-1-1 Government Assistance Fund.

Enhanced wireless 9-1-1 service will initially be implemented in 2 phases. Once the process has begun and adequate funds become available, the Cuyahoga County 9-1-1 Committee will assist with the coordination and implementation of Phase I and Phase II.

Phase I - Each wireless service provider will be notified to the desired activation date that Cuyahoga County is requesting Phase I service. Each wireless service provider that operates in Cuyahoga County will be identified, the service provider towers and coverage area located, and call routing assignments will be determined based on tower location and sector. CECOMS and PSAP's will have the capability to receive the wireless caller callback number and tower location information under Phase I.

Phase II - Each wireless service provider will be notified to the desired activation date that Cuyahoga County is requesting Phase II service. With Phase II 9-1-1 service the PSAP's will have the capability to receive the wireless calls callback number, the tower address, and the caller's longitude and latitude coordinates based on most current accuracy level required by FCC regulation.

As of 09/19/05 the Wireless Carriers operating in Cuyahoga County are: T-Mobile, Verison Wireless, Sprint-Nextel, Cingular, Alltel, Sprint PCS, Centinial, Cincinnati Bell, Cleveland Unlimited, Cricket Communications.

Wireless service providers that establish new wireless telephone service within Cuyahoga County must make written notification to the Cuyahoga County 9-1-1 Coordinator and 9-1-1 Committee. Once Phase I and/or Phase II service has been implemented, the wireless service provider shall notify the Cuyahoga County 9-1-1 Coordinator and 9-1-1 Committee of additions or changes to their network.

4.2 – WIRELESS ENHANCED 9-1-1 NETWORK

The CECOMS Center will receive wireless enhanced 9-1-1 calls for Cuyahoga County. As provided for in the Cuyahoga County 9-1-1 Plan, the CECOMS Center will respond to the wireless calls by directly transferring and/or relaying the call or information to the appropriate jurisdictional emergency provider.

CECOMS will have the capability to transfer 9-1-1 wireless calls and associated information related to the call. Cuyahoga County (CECOMS) will provide a means to the county to utilize data through mapping software.

4.3 – WIRELESS 9-1-1 COSTS

The CECOMS Center will function as the central 9-1-1 wireless answering point and will be responsible for associated costs and funding in serving as the central 9-1-1 wireless answering point.

CECOMS will obtain additional trunking for the routing of wireless calls from the host local exchange company (SBC). All other connections to the telephone network will be in accordance with the Cuyahoga County 9-1-1 plan.

Emergency 9-1-1 calls originating from cellular telephones will be routed to CECOMS according to the cellular service provider tower location.

All misdirected 9-1-1 calls received by the CECOMS Center will be routed or information relayed to the appropriate agency.

There are additional costs associated with moving to Phase II wireless enhanced 9-1-1. These costs include both non-recurring and recurring fees to the 9-1-1 host telephone company – SBC. The County with the funding provided will absorb these costs for CECOMS.

With the provisioning of calls location by latitude and longitude the PSAP should have the capability of mapping the location data. Based on the current technical capabilities at each PSAP, the costs associated with mapping will vary. Through the LBRS (Location

Based Response System) project and county GIS (Geographic Information System), centerline data and base maps of Cuyahoga County are being developed for this purpose.

4.4 - WIRELESS 9-1-1 FUNDING

Ohio Revised Code Section 4931.63 establishes the Wireless 9-1-1 Government Assistance Fund, and Section 4931.65 establishes the purposes for which these funds may be utilized. Cuyahoga County 9-1-1 will utilize those funds in accordance with the O.R.C. and the Revised Final Plan.

The SBC tariff for provisioning wireless Phase I and Phase II service to Cuyahoga County will include a one-time fee and a monthly charge for Phase I and a one time fee and a monthly charge for Phase II. Cuyahoga County will pay these tariffs from the funds received through disbursements from the Wireless 9-1-1 Government Assistance Fund.