

West Virginia 9-1-1 Addressing Handbook

*First Edition
April 2003*



West Virginia Statewide Addressing and Mapping Board

Making the Safety of West Virginians Our #1 Priority - One Address at a Time.

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EXECUTIVE SUMMARY

The State Legislature created the West Virginia Statewide Addressing and Mapping Board (WVSAMB or the Board) in 2001 to enable city-type addressing in rural areas of the state for 9-1-1 service. A city-type address, such as 250 Mountain Road, clearly identifies where a telephone is physically located when dialing 9-1-1. Current rural postal addresses do not provide this location information.

The WVSAMB is providing long-needed assistance to counties, and where necessary, to municipalities, for the creation of city-type addresses where none currently exist. The WVSAMB has hired a statewide addressing and mapping project manager and a statewide mapping contractor, and is in the process of hiring an addressing contractor. This contractor will work with county and municipal officials to achieve the Legislature's goal of establishing city-type addresses for the prompt and accurate dispatch of emergency services. By creating these addresses, county officials will ensure that their citizens receive the full benefit of 9-1-1 service by having emergency response agencies know precisely where help is needed. Lives and property of citizens in your community will be saved.

For those counties and municipalities with existing city-type addresses, the WVSAMB is providing assistance to help review those addresses to ensure they meet the *West Virginia 9-1-1 Addressing Standards*. This review will help identify existing city-type addresses that are confusing to emergency dispatchers and responders and provide a method for change. However, the WVSAMB respects the past accomplishments of counties and municipalities that already have city-type addresses. Current city-type addresses should not change unless it is necessary or advisable for the prompt and accurate dispatch of emergency services to protect human life and property or the maintenance of general community security. In addition, any proposed address change should be submitted to the proper county or municipal authorities for approval.

To encourage all counties and municipalities to participate in this effort, the WVSAMB is providing this handbook, a standard addressing process, training, and the support of a statewide addressing contractor. This edition of the handbook provides detailed information on the 9-1-1 addressing process and the critical role that counties and municipalities must play in beginning the process. A later edition will provide additional information for working with the WVSAMB addressing contractor, who will provide extensive support at no cost to local governments to complete the addressing process.

The WVSAMB invites all counties and municipalities to participate in this statewide 9-1-1 addressing project, support for which is only available for a limited time. (A sample letter that can be used to confirm a county's or municipality's participation in the statewide addressing project is included in this handbook. Confirmation letters should be sent to the WVSAMB by July 1, 2003.) By participating, county and municipal officials will ensure that all citizens of West Virginia receive the full benefit of 9-1-1 service. The lives and property of your fellow citizens may well depend on your decision to participate in this important project.

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1.0 INTRODUCTION AND NOTE ON THE FIRST EDITION

The West Virginia Statewide Addressing and Mapping Board (WVSAMB or the Board) developed the *West Virginia 9-1-1 Addressing Handbook* to provide information to counties, municipalities, and citizens on the statewide 9-1-1 addressing project that began in late 2002. This handbook is designed to:

1. Explain the importance of creating city-type addresses for 9-1-1 service;
2. Acquaint counties and municipalities with the West Virginia statewide 9-1-1 addressing project and its benefits for West Virginia citizens;
3. Provide a series of steps for counties to start the process of creating city-type addresses where none exist; and
4. Provide a series of steps for counties and municipalities with existing city-type addresses to review those addresses and their addressing standards to determine how well they meet *West Virginia 9-1-1 Addressing Standards*.

Note on the First Edition

The West Virginia Statewide Addressing and Mapping Board released the First Edition of the *West Virginia 9-1-1 Addressing Handbook* in April 2003 at the beginning of statewide addressing efforts. This edition is intended to provide sufficient information to local governments for starting their 9-1-1 addressing efforts. The Board will be hiring a statewide address contractor later in 2003 to assist local governments with completing the process. Once this contractor is hired, a Second Edition of this handbook will be released and contain the information needed to complete local addressing efforts.

2.0 WEST VIRGINIA STATEWIDE ADDRESSING AND MAPPING BOARD

In 1999 several West Virginia 9-1-1 directors met with the state's congressional delegation to discuss a statewide mapping and addressing project for Enhanced 9-1-1 service. While municipalities and a few other areas of West Virginia already had the city-type addressing essential for Enhanced 9-1-1 service, large areas of the state did not. A committee was subsequently formed to study how to develop this project. At the same time, Verizon agreed to include funding for statewide mapping and addressing in its new Incentive Regulation Plan with the West Virginia Public Service Commission.

A year later, the West Virginia Enhanced 9-1-1 Council introduced legislation, with the assistance of Verizon, to create the West Virginia Statewide Addressing and Mapping Board (WVSAMB), which was established by passage of Senate Bill 460 in 2001. Under this bill, the mission of the WVSAMB is to provide city-type addresses for the large rural areas of the state to insure that these areas are accorded access to the same level of prompt and accurate emergency service as urban areas. At the same time, the previous efforts of those counties and municipalities that had made progress in achieving city-type addressing were to be respected. In its efforts, the WVSAMB is employing the latest digital mapping, global positioning, and geographic information systems technologies to complete this ambitious project.

Starting in 2002, the WVSAMB embarked on a series of initial activities that included:

- Hiring a project manager to assist the Board with the design of the overall addressing and mapping process, the development of addressing and mapping standards, and the monitoring of the mapping and addressing contractors (hired in September 2002);
- Hiring a mapping contractor to create the mapping layers necessary to support addressing (hired in February 2003); and

- Hiring an addressing contractor to work with counties and municipalities to complete 9-1-1 addressing and build the necessary 9-1-1 databases (anticipated hiring Fall 2003).

The WVSAMB is composed of eleven members, appointed by the governor, representing the Public Service Commission, State Geological and Economic Survey, Department of Military Affairs and Public Safety, Division of Highways, county commissioners, county assessors, municipalities, directors of 9-1-1 systems from counties with a population of thirty thousand or less, directors of 9-1-1 systems from counties with a population of greater than thirty thousand, local exchange telephone companies, and the public at large.

The WVSAMB holds regular meetings that are open to the public, and public participation and input on its activities are welcomed. For more information about the WVSAMB and its activities, please visit its web site at *www.addressingwv.org* or call 304-558-4218.

3.0 WVSAMB MEMBERS

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4.0 OVERVIEW OF WEST VIRGINIA 9-1-1 ADDRESSING PROCESS

Enhanced 9-1-1 service is an improved emergency communication system that automatically displays the address of a caller at an emergency call answering center. If a caller is hysterical, becomes unconscious, or is forced to hang up, the answering center will know where to send help. This is also true if the caller does not speak English or is unfamiliar with his or her location, such as an out-of-state visitor, or even a resident, such as a babysitter.

To provide the location of a caller, a telephone number must be linked to a city-type address that clearly identifies the location of that telephone. While the statutory authority to create addresses lies with counties and municipalities, the WVSAMB is providing assistance to support local addressing efforts. This assistance consists of this handbook, standards, training, and extensive support provided by a statewide addressing contractor hired by the WVSAMB.

The primary goal of 9-1-1 addressing is to link each telephone number to a city-type address that clearly identifies where a telephone is physically located. For the purposes of this project a “city-type address” means a unique address for a structure using a building number and street name. City-type addresses are based on an address system, which means that they usually appear in a consistent numeric sequence along a street and reflect parity conventions (that is, odd numbers all appear on one side of the street and even numbers on the other). If number assignment is based on a standard numbering interval, then the “city-type address” will also logically provide a distance location from the beginning point of the road.

9-1-1 addressing requires the creation of a city-type address for any property that currently has a telephone, might have one installed, or might be occupied by someone using a cellular phone. Ideally, there should be one address per property that can be used for all purposes, ex. 9-1-1 service, mail delivery, commercial delivery services (UPS, FedEx, etc.), and utility companies.

Having more than one address can potentially confuse a building's occupants when confirming a location in an emergency. It might also confuse those responding to the emergency.

Residents with rural delivery mailing addresses (RR or HC boxes), in most cases, will be able to use their new 9-1-1 addresses for mail delivery by the US Postal Service. Residents who use a Post Office box for mail delivery will continue to do so and will also have a city-type address for 9-1-1 service and emergency response.

Some of the benefits of implementing 9-1-1 addresses include:

- A property number and road name will be displayed on a computer screen at a call answering center when dialing 9-1-1 in an emergency, thus providing the greatest benefit from Enhanced 9-1-1 service.
- Because a 9-1-1 address identifies the physical location of a caller on a road, law enforcement, fire, and emergency medical service personnel are able to locate the caller much easier and quicker in an emergency, saving precious time and often lives.
- When a 9-1-1 address is used as a mailing address, the US Postal Service will no longer have to change rural route mailing addresses when adjusting carrier routes.
- Utility company personnel will be able to better locate a structure in case of trouble.
- Home and business owners will receive quicker and more reliable deliveries by UPS, FedEx, and other delivery services, because those services require a street address for deliveries.

The general steps in the West Virginia 9-1-1 addressing process will require local governments to:

- 1. Commit to the addressing project and assign an Addressing Coordinator to lead local addressing efforts.**
- 2. Adopt addressing standards and enact an addressing ordinance incorporating these standards.**
- 3. Coordinate local addressing efforts with neighboring communities or counties.**
- 4. Name all roads and eliminate conflicting road names.**
- 5. Work with the WVSAMB Addressing Contractor to assign attributes to digital road files and to create and link 9-1-1 addresses to all properties.**
- 6. Complete rural address conversion with the US Postal Service, if necessary.**
- 7. Confer with local emergency response agencies to identify Emergency Service Zones.**
- 8. Work with Verizon and other local telephone companies to assign new addresses to telephones and to create the necessary 9-1-1 databases.**
- 9. Maintain addressing and mapping data.**

Completion of the above steps may take approximately two to three years of consistent local government effort, at which time maintenance activities will begin. During this time, local governments will need to commit staff time to complete all the required tasks, which will necessitate the allocation of existing, and possibly temporary resources. While WVSAMB Addressing Contractor support is provided at no cost, it does require local governments to comply with WVSAMB rules and standards and to complete the tasks identified by the WVSAMB for this statewide mapping and addressing project.

Counties and municipalities are under no obligation to request addressing assistance from the WVSAMB. If they accept this support, however, they will be expected to carefully follow and complete the steps outlined in this handbook and those in the Second Edition. A county or municipality that chooses to hire a private contractor for its addressing efforts should require that the contractor follow the identified steps to insure compatibility with 9-1-1 addressing standards, 9-1-1 database requirements, and US Postal Service address conversion requirements.

Some West Virginia counties and municipalities have used contractors to perform all or part of the work needed to develop new addresses. These local governments should review their established addressing systems and addresses to evaluate how well they meet the West Virginia 9-1-1 Addressing Standards adopted by the WVSAMB and found in the handbook beginning on page 59. In addition, they will be asked to provide a list of the names and intersection address ranges for all street and roads in their jurisdictions.

5.0 FREQUENTLY ASKED QUESTIONS

1. What is 9-1-1?

9-1-1 is a single telephone number that provides one number to call in an emergency. It saves a caller from having to locate the correct phone number for law enforcement, fire, or emergency medical services when time is of the essence.

2. What is basic 9-1-1 service?

Basic 9-1-1 service is provided by telephone equipment that routes an emergency call to an emergency call answering center. Specially trained personnel at the center then contact the appropriate law enforcement agency, fire department, or emergency medical services to respond to the call.

3. What are the drawbacks to basic 9-1-1 service?

With either basic 9-1-1 service or other seven-digit emergency telephone numbers, dispatchers depend solely on a caller being able to verbally provide his or her location. Sometimes callers are hysterical, become unconscious, or are forced to hang up. Other callers, such as out-of-state visitors, may not speak English or are unfamiliar with their location. In these cases, basic 9-1-1 service is of little help to the caller or dispatcher.

4. What is the difference between basic and Enhanced 9-1-1 service?

Enhanced 9-1-1 service automatically displays a caller's address on a computer screen at a call answering center. Also displayed is the caller's telephone number that can be automatically re-dialed if the line is disconnected.

5. Are there additional differences?

Enhanced 9-1-1 service uses a caller's address, not telephone exchange, to direct a call to the appropriate call answering center. This contrasts with basic 9-1-1 service, which may route the call to an answering center not capable of dispatching emergency assistance to the caller's location.

6. Is Enhanced 9-1-1 service available in all counties?

Enhanced 9-1-1 service is available, or in the process of becoming available, in all West Virginia counties. City-type addresses have not been established for all telephones, however.

7. Can cellular phones take advantage of Enhanced 9-1-1 service?

While cellular phone users can dial 9-1-1 for emergencies, the location of an emergency caller using a cellular phone cannot be determined by the 9-1-1 system. Technical efforts are currently underway nationally to automatically provide the location of a cellular phone caller during an emergency.

8. What is the connection between addresses and Enhanced 9-1-1 service?

To gain the full benefits of Enhanced 9-1-1 service, each telephone number must be linked to a city-type address. This will allow a 9-1-1 caller's location to be identified automatically at an emergency call answering center.

9. What is a city-type address?

A city-type address is a unique address that clearly identifies where a property is physically located. Examples of city-type addresses include 911 Country Road or 45 Pine Street.

10. What do city-type addresses mean to my community?

Creating city-type addresses requires naming all roads, including private roads, with unique names and assigning numbers consistently to all properties. Once the local government assigns road names and property numbers, the new city-type addresses can be used for 9-1-1 service. They will also be used, in most cases, for mail delivery in place of rural route (RR) or highway contract (HC) box numbers.

11. How do city-type addresses work with Enhanced 9-1-1 service?

A city-type address is matched with a telephone number and entered into a 9-1-1 database. When a caller dials 9-1-1, the caller's telephone number and city-type address automatically appear on a call answering center's computer screen.

12. Who has the authority to create city-type addresses?

Each West Virginia county has the legal authority to create city-type addresses by naming roads and numbering properties. This authority has been granted or confirmed by the Legislature under W. Va. Code Articles 7-1-3 and 24E-1-1, et seq. Under W. Va. Code Articles 8-12-5 and 24E-1-1, West Virginia municipalities also have the legal authority to create city-type addresses by naming streets and alleys and numbering properties. Counties and municipalities have the authority to cooperate in naming and addressing, both generally under W. Va. Code Articles 7-3-1i and 8-23-1, et seq., and specifically with the West Virginia Mapping and Addressing Project under Article 24E-1-1, et. seq. and the Board's regulations.

13. Who should be involved with the local addressing efforts?

Beyond the Addressing Coordinator designated by the local government, others recommended to be involved with addressing efforts include county or municipal staff, planners, tax assessors, members of law enforcement, fire or emergency medical service agencies, county commissioners, public works staff, county clerks, members of the local historical society, volunteer civic organizations, local citizens, and utility companies.

14. Why should counties or communities create city-type addresses?

Creating city-type addresses is a responsible act of local government. It allows residents to take full advantage of Enhanced 9-1-1 service by having a city-type address, as opposed to no address or a partial address, displayed at the call answering center during an emergency.

15. Why can't current rural postal addresses be used?

A rural postal address does not physically locate a property on a road in a consistent manner. Therefore, if such an address is used, a 9-1-1 caller's location will not be clearly identified for dispatchers or emergency responders. The caller would then have to verbally explain her or his location, if able to do so, possibly delaying the arrival of help.

16. What if my community already has city-type addresses?

The WVSAMB recognizes that some West Virginia municipalities and counties already use city-type addresses. In this instance, those jurisdictions should review their addresses to determine how well they meet West Virginia 9-1-1 Addressing Standards. This handbook contains guidelines for conducting such a review. In some cases, some existing city-type addresses may change because they cause confusion during emergency dispatch.

17. How does my county or municipality start the addressing process?

This edition of the handbook contains a list of tasks for starting the process of creating city-type addresses. The Second Edition of this handbook will be issued for completing the addressing process, supported by assistance from the WVSAMB Addressing Contractor.

18. Is this the only thing my community will do for addressing?

Once city-type addresses are created, local governments will be asked to link the new addresses to all telephone subscribers. They will also be asked to provide additional information required for the 9-1-1 databases. Once the addressing process is complete, local governments will need to maintain and update 9-1-1 database information as needed.

19. What addressing support is being provided?

The WVSAMB is providing handbooks, standards, training, and addressing contractor support to counties and municipalities. This support is available at no cost. Further specifics for contractor assistance will be found in the Second Edition of this handbook. There is no direct financial support from the WVSAMB for local addressing efforts, however.

20. What is the cost to my community?

Staff time or volunteer labor is necessary to undertake and complete the 9-1-1 addressing process. A direct cost will also be incurred if a local government decides to purchase and install new or additional road signs on its own.

21. Will the US Postal Service use the new addresses for mail delivery?

Yes, in most cases. Though primarily created for Enhanced 9-1-1 service, city-type addresses will also be used by the US Postal Service, wherever possible, for rural mail delivery. Please note that those residents and businesses using Post Office boxes will continue to do so for mail delivery and also have a city-type address for 9-1-1 service.

22. What are other benefits of creating city-type addresses for 9-1-1?

Adopting city-type addresses provide consistent standardized addresses that will be part of a statewide system. Continuity of addressing will be maintained across jurisdictional borders and lead to improved emergency response time. They also lead to a decrease in misdirected or abandoned 9-1-1 calls.

23. What other benefits will come from the statewide 9-1-1 addressing and mapping project?

Because the 9-1-1 addressing project also involves statewide mapping and the development of digital files, local governments will benefit from potential improvements to:

- Emergency preparedness and planning.
- Flood plain mapping.
- A reduction in the threat of litigation.
- Rural health care delivery services.
- Land use planning and parcel mapping.
- School bus routing.
- Water and sewer infrastructure planning.
- Utilities (i.e., “Call Before You Dig”).
- Crime pattern analysis.
- Voting precinct mapping.
- Economic development.

24. Can a local government use an independent contractor for 9-1-1 addressing?

Yes. In this case, however, the county will be responsible for all associated costs and for following West Virginia 9-1-1 Addressing Standards and all other requirements of the 9-1-1 addressing process established by the WVSAMB.

6.0 ROLES AND RESPONSIBILITIES IN 9-1-1 ADDRESSING

The following pages provide specific information regarding the roles and responsibilities of various entities for starting the West Virginia 9-1-1 addressing process. Detailed information is provided for the following entities:

- West Virginia Statewide Addressing and Mapping Board (WVSAMB)
- WVSAMB Contractors
- Counties without City-Type Addresses
- Municipalities and Counties with Existing City-Type Addresses
- US Postal Service
- Verizon and Independent Telephone Companies

Further information will be provided in the Second Edition of this handbook for completing the 9-1-1 addressing process once the WVSAMB statewide addressing contractor has been hired and the final process defined. The lack of this final information should not deter a responsible party from proceeding to accomplish its initial tasks, however.

6.1 WEST VIRGINIA STATEWIDE ADDRESSING AND MAPPING BOARD

The West Virginia Statewide Addressing and Mapping Board (WVSAMB) was created by state statute to provide city-type addressing for the large rural areas of the state. This project will ensure that these areas are accorded access to the same level of prompt and accurate dispatch of emergency services as urban areas. The WVSAMB is employing the latest digital mapping, global positioning, and geographic information system technologies to complete this ambitious project.

The specific responsibilities of the WVSAMB are to:

- Adhere to Chapter 24E, Article 1 of the W.Va. Code.
- Develop the statewide addressing and mapping system.
- Establish addressing rules, standards, and an addressing process.
- Provide an addressing handbook with model ordinances.
- Hire a project manager.

- Hire mapping and addressing contractors to be supervised by the project manager.
- Support counties and municipalities with their 9-1-1 addressing process.
- Encourage the review of and changes to existing city-type addresses to eliminate problems with emergency response.
- Outline and facilitate development of a long-term data maintenance system.

For additional information about the WVSAMB and its responsibilities, please visit its web site at www.addressingwv.org or call 304-558-4218.

The WVSAMB is responsible for selecting and hiring three private contractors for this project. These contractors will complete key tasks and assist the Board and local governments with statewide addressing efforts.

6.1.1 WVSAMB Project Manager

- Design the addressing and mapping system.
- Determine operational, technical, budgetary, and support requirements.
- Assist with development of rules, standards, policies, and procedures.
- Supervise the mapping and addressing contractors.
- Standardize formats for mapping and addressing databases.

6.1.2 WVSAMB Mapping Contractor

- Complete and validate statewide mapping.
- Insure that data products meet specifications established by the WVSAMB for mapping accuracy and quality of output.
- Provide aerial photography, road centerlines, addressable points, and other mapping layers to facilitate statewide addressing by local governments and the WVSAMB Addressing Contractor.

6.1.3 WVSAMB Addressing Contractor

- Complete and validate statewide addressing requirements for 9-1-1 database needs.
- Insure that all addressing data meet specifications established by the WVSAMB for addressing accuracy and quality.
- Work closely with counties and municipalities to establish city-type addresses for all habitable structures and for postal address conversion.

- Provide support for intersection address range development, telephone – address matching, and 9-1-1 database development.
- Populate the initial 9-1-1 databases.

6.2 COUNTIES WITHOUT CITY-TYPE ADDRESSES

The following is a series of steps for counties without city-type addresses to start the 9-1-1 addressing process. Completion of these steps will prepare the county for working with the WVSAMB Addressing Contractor. This contractor will assist the county with completing the 9-1-1 addressing and database development process. The steps necessary to complete the process will be outlined in the Second Edition of this handbook, which will be issued in late 2003.

6.2.1 Provide a written commitment to the WVSAMB by July 1, 2003.

A letter of invitation will be sent by the WVSAMB to all counties in March 2003 to request participation in the statewide 9-1-1 addressing project. If interested in participating, a county should send a reply from its county commissioners to the WVSAMB by July 1, 2003. This reply should confirm the county's willingness to participate in the statewide 9-1-1 addressing process, which requires adherence to WVSAMB rules and addressing standards and to work in a timely fashion with the WVSAMB Addressing Contractor to complete identified tasks. Further information on the tasks required is provided in this handbook. The letter should also identify and provide contact information for an Addressing Coordinator whose responsibilities are outlined below. A sample letter of participation is found in Appendix D on page 74.

6.2.2 Appoint an Addressing Coordinator.

The Addressing Coordinator will be responsible for coordinating all county addressing efforts and county staff associated with the project, and for working closely with the WVSAMB Addressing Contractor to complete identified tasks. The Addressing Coordinator must either have the authority to make decisions on a county's behalf or be able to quickly obtain official approval from the county commission. The Addressing Coordinator, who may be an existing staff person, will need to enlist support from a wide variety of people, including county staff and

commissioners, assessors, planners, county clerks, county 9-1-1 agency personnel, members of law enforcement, fire, and emergency medical service agencies, volunteer civic organizations, members of local historical societies, utility companies, the general public, and others.

Some of the initial tasks the Addressing Coordinator will be responsible for include those below, which are described in more detail in the following pages:

- Answer citizen questions about addressing.
- Lead the adoption of 9-1-1 addressing standards and an addressing ordinance.
- Identify all roads to be included in the county emergency road network.
- Identify any of these roads that lack names or have road name conflicts.
- Lead the road naming or re-naming process.
- Coordinate the activities of all Municipal Addressing Coordinators within the county with the WVSAMB Addressing Contractor.

Later responsibilities of the Addressing Coordinator will be described more fully in the Second Edition of this handbook and include working with the WVSAMB Addressing Contractor to:

- Link new to old addresses from county tax records and for telephone subscribers.
- Identify Emergency Service Zone(s).
- Approve the Master Street Address Guide (MSAG).
- Complete an address conversion package for the US Postal Service.

Once addresses have been assigned, the Addressing Coordinator, or other county staff, will need to:

- Notify residents and businesses of their new addresses.
- Resolve discrepancies that arise with any addressing information in the 9-1-1 databases.
- Set up and manage a system for maintaining address and mapping data.
- Monitor local development activities for the creation of new roads and subdivisions to assign new addresses.
- Determine and issue new property numbers.

6.2.3 Identify all roads in the county emergency road network.

Using a road list and maps from the WV Division of Highways (DOH) or other sources, identify all roads, public and private, to be covered by emergency services. It is recommended that any navigable road be included if it has two or more permanent structures served by emergency services. This includes fire roads or any roads with seasonal camps, commercial buildings, or any structure that may have a telephone installed.

Include roads that have structures without telephones. Why? Because emergency responders often need to find a building whose occupant has called from another property. Also, with cellular phones increasing in use and plans underway to provide location information for cellular phones dialing 9-1-1, all year-round or seasonally occupied structures should be considered for addressing, regardless of their current telephone situation.

A long driveway with only one house should also be considered for addressing, regardless of length, if the potential exists to erect additional houses or other structures along that driveway. This may avoid the possible re-addressing of the structure later. Please note that private roads named by a county do not automatically become a publicly maintained way. Likewise, mail delivery on private roads that are named by the county will not automatically occur.

Once all roads have been identified, the Addressing Coordinator should compile an alphabetical list of all existing road names. This will assist in the naming of roads without names to avoid duplicates. It will also help identify any current or proposed road names that may duplicate or be similar-sounding to existing road names.

6.2.4 Adopt 9-1-1 addressing standards.

Addressing standards insure that all roads are clearly named and properties are numbered consistently. To fulfill its obligation under state statutes, the WVSAMB adopted the *West Virginia 9-1-1 Addressing Standards* in late 2002. These standards provide a guide for counties to use in establishing city-type addresses within their jurisdictions where no such addresses exist. In areas

where city-type addresses do exist, these standards can be used to evaluate the quality and consistency of addresses and provide a basis for needed change.

The *West Virginia 9-1-1 Addressing Standards* cover the following issues:

- **Road naming.** All roads should have a unique name. Eliminate duplicate or similar-sounding road names and multiple names on the same road. Why? If certain road names are currently causing confusion during the dispatch of emergency services, they will continue to be a problem, because Enhanced 9-1-1 service only displays the caller's address on a screen at a call answering center. It does not change the dispatching of the address information over a radio, where background noise, radio static, and people working under stress sometimes lead to miscommunication and human error.

Numbered roads, such as a state route or a fire road, should also be named to avoid using numbers in both the property address and the road name. This will avoid a situation such as "25 State Route 15" being misheard as "15 State Route 25" when confirming the location of an emergency.

Please see the full list of road naming standards in Appendix C1 beginning on page 60. For standard road name suffixes, please see Appendix C4 on pages 69 and 70.

- **Beginning point.** This designates the point, location, or direction from which numbers begin to ascend on a road. Please see the options for choosing a beginning point on page 63. Whichever option is chosen should be consistently applied throughout the county or community. Consider such factors as existing numbering directions (if any), the numbering pattern on roads shared with neighboring communities or counties, and the direction from which emergency services respond.
- **Odd and even sides.** This determines which side of the road will be assigned odd numbers and which will be assigned even numbers, as numbers ascend from the beginning point. The West Virginia 9-1-1 Addressing Standards state that odd numbers should be assigned to structures on the left side of the road and even numbers to the right, as numbers ascend from the beginning point. If part of a county or community has been previously numbered in the opposite fashion, however, then consider maintaining that standard for consistency.

- **Numbering interval.** This is the standard interval in feet used to assign consecutive property numbers along a road, regardless of whether or not a structure is at every interval. The standard numbering interval in the West Virginia 9-1-1 Addressing Standards is 10.56 feet, which provides 1000 numbers per mile (500 odd numbers and 500 even numbers).
Using the above interval provides a means for emergency responders to quickly calculate the location of an emergency caller. For example, the address 2346 Oakwood Road is approximately 2.3 miles down the road on the right. The use of a standard interval for assigning property numbers also provides sufficient room to assign unused numbers to future structures built between existing ones.
- **Property numbering.** These standards establish how numbers are assigned for houses, apartments, businesses, circular streets, condominiums, cul-de-sacs, corner lots, duplexes, mobile home parks, shopping malls, and other special situations. Please see Appendix C2 beginning on page 63 for a comprehensive list of property numbering standards and recommendations.
- **Number posting.** This standard applies to how numbers should be affixed to all properties to insure visibility during an emergency response. Please see Appendix C3 on page 68 for further information.
- **Road signage.** If a county chooses to erect its own road signs, it should, at a minimum, follow existing standards set by the WV Division of Highways. Their standards are incorporated into the West Virginia 9-1-1 Addressing Standards found in Appendix C5 beginning on page 71.

6.2.5 Enact an addressing ordinance.

Enacting an addressing ordinance provides several advantages: 1) the statutory authority for county addressing will be stated, 2) addressing standards (numbering direction, numbering interval, odd/even sides, road naming, etc.) will be clearly stated, and 3) the process for assigning new road names and property numbers will be identified.

West Virginia counties have the legal authority to create city-type addresses by naming roads and numbering properties. This authority has been granted or confirmed by the Legislature under W. Va. Code Articles 7-1-3 and

24E-1-1, et seq. Under W. Va. Code Articles 8-12-5 and 24E-1-1, West Virginia municipalities also have the legal authority to create city-type addresses by naming streets and alleys and numbering properties. Counties and municipalities have the authority to cooperate in naming and addressing, both generally under W. Va. Code Articles 7-3-1i and 8-23-1, et seq., and specifically with the West Virginia Mapping and Addressing Project under Article 24E-1-1, et seq. and the Board's regulations. Counties and municipalities should work together, and with the Board, to ensure that their legal authority is exercised consistently, and in cooperation with each other.

9-1-1 is mostly handled at the county level in West Virginia. Also, the areas of the state that do not have city-type addresses are mainly outside municipal boundaries. Therefore, counties generally must take the lead in assigning city-type addresses in rural areas of the state. The active and positive cooperation of municipalities, however, remains key to the success of the goal of quick and effective emergency services dispatch through the use of city-type addresses.

Some municipalities may wish to enact their own stand-alone addressing ordinance. Those municipalities should be careful that their ordinance is consistent with the addressing ordinance of the county in which they are located. Other municipalities may wish merely to pass an ordinance confirming that they will cooperate with the county.

A county or stand-alone municipal addressing ordinance should not only include the standards and process to be followed for naming or renaming roads and assigning property numbers in a consistent manner, but also identify the person(s) responsible for address assignment. Please see Appendix E on page 75 for a model county addressing ordinance. A copy is also available as a computer file by calling the WVSAMB at 304-558-4218 or downloading a copy from its web site at *www.addressingwv.org*.

Counties should use the public hearing usually associated with ordinance adoption to educate residents about the 9-1-1 addressing process and the need to establish city-type addresses. This hearing may also provide an opportunity to

discuss the naming of unnamed roads and the renaming of conflicting road names and to solicit potential new road names.

6.2.6 Notify residents of the 9-1-1 addressing process.

Counties should inform their residents about the need to create city-type addresses for Enhanced 9-1-1 service. Beyond the public hearing for an ordinance, other methods to inform residents include letters, newsletters, public notices, or local public access channels. Seasonal residents who live elsewhere part of the year and out-of-state property owners should also be informed with a letter. Please see Appendix H on page 96 for a sample letter that can be used to inform all property owners and residents of 9-1-1 addressing efforts. When informing residents about addressing efforts, some jurisdictions have used the opportunity to recruit volunteers to assist with their efforts.

Generally, the better residents understand the reason for 9-1-1 addressing (increased public safety) and the more they have an opportunity to offer input, the less resistance will be encountered at public meetings. While the creation of city-type addresses has many advantages for a community, there are genuine reasons for resistance. Those reasons listed below and any others should be openly discussed and considered in the planning process.

- Business owners typically feel a close identification of their activities with their address and are reluctant to change. They also will have to pay to acquaint the public with their new address, such as having signs repainted or new stationery printed.
- For citizens, a change of address will mean that their personal checks must be reprinted and their addresses on work records, credit cards, and magazine subscriptions must change. They must also notify relatives, friends, and businesses.
- Historical societies or older members of the community may dislike changes in historic names.
- Finally, there will be some objections simply because it is a change.

Whatever the objection, please remind people that they achieve the greatest benefit from Enhanced 9-1-1 service when a phone number is linked to a unique

city-type address that clearly identifies where a caller in need of emergency assistance is located.

6.2.7 Review and/or update current tax database mailing addresses.

A county should review the mailing addresses of property owners in its tax database to determine that these addresses are the ones currently used by the US Postal Service. Sometimes, counties do not always receive notification of adjustments to mail delivery on rural routes (RR) or highway contract (HC) routes and the resulting changes to route or box numbers. Maintaining current mailing addresses at the beginning of the 9-1-1 addressing process will reduce additional work later when needing to link new to old addresses.

Completion of this step will require obtaining a list of postal customer addresses (referred to as “edit sheets”) from the US Postal Service. To obtain a set of edit sheets for the appropriate ZIP codes in your county, please first request a Letter of Confidentiality from the Addressing Management Systems (AMS) office of the US Postal Service. Contact information for your regional AMS office is found in Appendix I on page 97.

This Letter of Confidentiality must then be returned with a separate letter of request for the edits sheets. This letter must be signed by the president of the county commission and contain the following information:

1. A statement that the county is starting the statewide addressing project and will be working with the WVSAMB Addressing contractor.
2. A list of ZIP codes for the edit sheets desired. (A separate list can be attached to the letter listing specific five-digit ZIP codes or requesting all the ZIP codes within three-digit ZIP areas.)
3. The type of files wanted, either paper copy or computer, which will be provided in ASCII text or comma separated value (CSV) format.
4. The name and address of the person to whom the edit sheets will be sent. In most cases, this will be the designated Addressing Coordinator.

Both letters must be mailed to the US Postal Service AMS office from which the Letter of Confidentiality was obtained.

6.2.8 Contact adjacent counties and municipalities within your county.

The county should contact adjacent counties and municipalities within the county to learn of any existing city-type addresses and standards used to create those addresses. Also discussed should be the consistent naming and numbering of “shared” roads to eliminate any possible confusion. Examples of shared roads include roads that travel from one county or community into another, those that run into and then back out of a neighboring county or community, or those which follow a jurisdictional boundary.

Discussion of shared roads is particularly important when communities are served by the same emergency service providers or dispatching services. In this situation, adjacent jurisdictions should discuss with each other the avoidance of potential duplicate road names and address ranges being created in both jurisdictions.

Suggestions for naming and numbering shared roads include:

- If neighboring jurisdictions agree to keep the same name of a road running between the communities, the numbering should be consecutive, starting in one community and ending in the other. This will avoid duplicate property numbers in close proximity on a same-named road.
- For same-named roads spanning many communities, such as a state route, it may not be practical to use consecutive numbering starting in one community and ending in another many miles away. In this case, it may be better to number consecutively through three or four communities and then start the numbering over again. This will prevent high property numbers from being created and separate duplicate numbers by a large geographical distance. An Emergency Service Zone coverage boundary might be used to determine such a number break.
- If neighboring communities cannot agree on the same name, each community’s road segment should have a separate name and be numbered separately. It is strongly recommended that numbers on that road not ascend towards each other, since this could result in similar property numbers in close proximity near a border, despite dissimilar road names.

- If names of non-contiguous streets are duplicated within a community or ZIP code, the numbering cannot overlap (e.g., 1-500 Main Street in Anytown and 1-600 Main Street in North Anytown). This is also an issue when mail delivery in one community is performed by a Post Office in another town. In such cases, every effort should be made to avoid using the same road names. If this is not possible, every effort should be made to avoid duplicate property numbers to avoid postal delivery address problems.

Early discussion of adjacent addressing issues will avoid problems later. For the name and telephone number of the Addressing Coordinator in an adjacent county or municipality, please contact the WVSAMB at 304-558-4218.

6.2.9 Review road names for duplicate or similar-sounding names. Promote and approve changes.

The naming or re-naming of roads is frequently the biggest political challenge in the addressing process. Many people are reluctant to have their road names changed for a variety of reasons, not the least of which is simple resistance to change. Counties can lessen resistance by educating residents on the need for changing confusing road names and by asking affected residents to suggest new road names. In the final analysis, approval of road names by the process established in the addressing ordinance does constitute the legal procedure to name roads, public and private.

For a comprehensive list of road naming standards and guidelines, please see Appendix C1 on page 60.

If a road must be named or re-named, allow the residents on public roads and the owners of private roads, including those who live out of state, the opportunity to suggest a new name. This will lessen opposition to the change when it comes time for seeking road name approval. Also solicit suggestions from the local historical society or longtime residents.

There should be no duplication of road names. Duplicate names (e.g., Pine Road and Pine Lane) or similar-sounding names (e.g., Beach and Peach, Lynwood and Linwood, Morgan Road and Morgan Hill Road, etc.) often create confusion

during emergency situations. Using an alphabetical list helps identify existing road name duplications and avoid duplications when new names are proposed.

If certain road names are currently causing confusion during the dispatch of emergency services, they will continue to be a problem. Why? Because Enhanced 9-1-1 service only displays the caller's address on a screen at a call answering center. It does not change the dispatching of the address over a radio, where background noise, radio static, and people working under stress sometimes lead to miscommunication and error. County dispatch personnel may be able to cite several examples of this.

The US Postal Service may ask a county to eliminate a duplicate road name if one of its communities completely shares the same ZIP code with another community. If not possible, duplicate road names cannot share duplicate number ranges.

To become official, all road names must be approved by the procedure specified in the addressing ordinance. A moratorium on any road name changes should begin at that time and continue for a specified period of time, possibly for two years after the 9-1-1 address conversion process has been completed.

Again, counties that have solicited road name suggestions from affected residents and property owners should encounter less opposition to any changes when pursuing the adoption of road names.

6.2.10 Identify staff to work with the WVSAMB Addressing Contractor.

When the WVSAMB Addressing Contractor is hired in 2003, the county Addressing Coordinator and staff will be asked to work in a timely manner with the contractor on a variety of tasks. These tasks will focus on completing the 9-1-1 addressing and database development process. Before these final tasks can begin, however, all the tasks described in this handbook, especially the adoption of an addressing ordinance and road naming, must be completed.

Tasks to complete the 9-1-1 addressing and database process will be detailed in the Second Edition of this handbook. Briefly, they will require the county to:

- Provide access to parcel maps and tax roll addressing.
- Link and validate city-type addresses for all properties.
- Assign names and other attributes to digital road centerlines.
- Complete rural address conversion with the US Postal Service.
- Complete the linking of addresses to telephone subscribers.
- Verify the Master Street Address Guide (MSAG) with Verizon or appropriate local exchange carrier.
- Identify Emergency Service Zone (ESZ) boundaries and associated emergency response agencies.

Following address conversion with the US Postal Service and telephone companies, the county staff will need to undertake the following tasks:

- Update the county tax database with new addresses.
- Notify property owners of their new addresses.
- Update the Master Street Address Guide and Emergency Service Zones, as needed.
- Facilitate new address adoption by utility companies and others.

The county staff will also need to implement a maintenance system for road centerlines, MSAG, ESZ, new address assignment, and mapping. More detail on this and the above tasks will be provided in the Second Edition of this handbook to be issued in late 2003.

For answers to questions on any of the above activities, please contact the WVSAMB at 304-558-4218 or via e-mail at *info@addressingwv.org*.

**READINESS CHECKLIST
FOR COUNTIES WITHOUT CITY TYPE ADDRESSES**

Step One: Provide written commitment to the WVSAMB by July 1, 2003.

- Indicate willingness to participate.
- Identify Addressing Coordinator and provide contact information.

Step Two: Appoint an Addressing Coordinator.

- Has proper county authority or quick access to commission approval.
- Coordinates county staff working on project.

Step Three: Identify all roads in county emergency road network.

- Identify all public and private roads.
- Identify roads without names.
- Compile list of all existing road names.
- Identify roads with conflicting names.

Step Four: Adopt 9-1-1 addressing standards.

- Review any existing standards or adopt WVSAMB standards.
- Road naming and property numbering.
- Beginning point and odd/even sides.
- Numbering interval.
- Number posting and road signage.

Step Five: Enact an addressing ordinance.

- Contains addressing standards.
- Identifies addressing authority.
- Explains procedures.

Step Six: Notify residents of the 9-1-1 addressing process.

- Educate residents on need for 9-1-1 addressing and the process.
- Seek input into process and road name suggestions.

Step Seven: Review and/or update current tax database mailing addresses.

- Identify ZIP codes in county.
- Request letter of confidentiality from the USPS.
- Request postal customer address lists from the USPS in separate letter.
- Update tax database.

Step Eight: Contact adjacent counties or the county's municipalities.

- Identify existing city-type addressing.
- Identify numbering issues.
- Identify shared roads.

Step Nine: Review road names and approve changes.

- Follow standards and procedure specified in addressing ordinance.
- Encourage citizen participation and input.
- Approve road names.

Step Ten: Identify staff to work with WVSAMB Addressing Contractor.

- Have local knowledge.
- Have time available.
- Can provide timely response.

6.3 MUNICIPALITIES AND COUNTIES WITH CITY-TYPE ADDRESSES

The legislation creating the WVSAMB recognized that some counties and municipalities in West Virginia had made progress in achieving city-type addressing and that those accomplishments should be respected. Under the rules enacted by the WVSAMB, however, counties and municipalities must review their existing city-type addresses to insure they meet the highest recognized standards for emergency response. The WVSAMB is providing support for these efforts and for other necessary changes to meet the requirements of the West Virginia Statewide Addressing and Mapping System. In preparation for working with the WVSAMB and the WVSAMB Addressing Contractor on 9-1-1 database development, counties and municipalities with city-type addresses should undertake the steps listed below.

6.3.1 Provide a written commitment to the WVSAMB by July 1, 2003.

A letter of invitation will be sent by the WVSAMB to all counties and municipalities in March 2003 to request participation in the statewide 9-1-1 addressing project. If interested in participating, a county or municipality should send a reply from its county commissioners or mayor to the WVSAMB by July 1, 2003. This reply should confirm the county's or municipality's willingness to participate in the statewide 9-1-1 addressing process, which requires adherence to WVSAMB rules and addressing standards and to work in a timely fashion with the WVSAMB Addressing Contractor to complete identified tasks. Further information on the tasks required is provided in this handbook. The letter should also identify and provide contact information for an Addressing Coordinator whose responsibilities are outlined in the following pages. A sample letter of participation is found in Appendix D on page 74.

6.3.2 Appoint an Addressing Coordinator.

The Addressing Coordinator will be responsible for coordinating all county or municipal addressing efforts and any staff associated with the project, and for working closely with the WVSAMB Addressing Contractor to complete identified tasks. The Addressing Coordinator must either have the authority to make

decisions or be able to quickly obtain official approval. The Addressing Coordinator will need to enlist support from a wide variety of people, including county or municipal staff, commissioners or councilors, assessors, county or municipal clerks, planners, 9-1-1 agency personnel, members of law enforcement, fire, and emergency medical service agencies, volunteer civic organizations, members of local historical societies, utility companies, the general public, and others.

Some of the initial tasks the Addressing Coordinator will be responsible to undertake include the following, which are described in more detail in the following pages:

- Answer citizen questions about addressing.
- Lead the adoption of 9-1-1 addressing standards and an addressing ordinance, if needed.
- Identify all roads to be included in the county or municipal emergency road network.
- Identify any of these roads that lack names or have road name conflicts.
- Lead the road naming or re-naming process.
- Work with the county Addressing Coordinator to coordinate all activities with the WVSAMB Addressing Contractor (if a municipal Addressing Coordinator).

Additional responsibilities of the Addressing Coordinator will be described more fully in the Second Edition and include working with the WVSAMB Addressing Contractor to:

- Identify intersection address ranges for all streets and roads.
- Insure that all telephone numbers are assigned the correct city-type address.
- Identify Emergency Service Zone(s).
- Approve the Master Street Address Guide (MSAG).
- Complete address conversion, as necessary, with the US Postal Service.

Further, the Addressing Coordinator, or other staff, will need to:

- Notify residents and businesses of their new addresses.
- Resolve discrepancies that arise with any addressing information in the 9-1-1 databases.
- Set up and manage a system for maintaining address and mapping data.
- Monitor local development activities for the creation of new roads and subdivisions to assign new addresses.
- Determine and issue new property numbers.

6.3.3 Identify all roads in the county or municipal emergency road network.

Using a road list and maps from the WV Division of Highways (DOH) or other municipal sources, identify all roads, public and private, to be covered by emergency services. It is recommended that any navigable road be included if it has two or more permanent structures served by emergency services. This includes fire roads or any roads with seasonal camps, commercial buildings, or any structure that may have a telephone installed.

Include roads that have structures without telephones. Why? Because emergency responders often need to find a building whose occupant has called from another property. Also, with cellular phones increasing in use and plans underway to provide location information for cellular phones dialing 9-1-1, all year-round or seasonally occupied structures should be considered for addressing, regardless of their current telephone situation.

A long driveway with only one house should also be considered for addressing, regardless of length, if the potential exists to erect additional houses or other structures along that driveway. This may avoid the possible re-addressing of the structure later. Please note that private roads named by a local jurisdiction do not automatically become a publicly maintained way. Likewise, mail delivery on private roads that are named will not automatically occur.

Once all roads have been identified, the Addressing Coordinator should compile an alphabetical list of all existing road names. This will assist in the

naming of roads without names to avoid duplicating existing names. It will also help identify any current or proposed road names that may duplicate or be similar-sounding to existing road names.

6.3.4 Identify and adopt 9-1-1 addressing standards.

Addressing standards insure that all roads are clearly named and properties consistently numbered. To fulfill its obligation under state statutes, the WVSAMB adopted the West Virginia 9-1-1 Addressing Standards in late 2002. These standards provide a guide for counties and municipalities to establish city-type addresses within their jurisdictions where no such addresses exist. Where city-type addresses do exist, these standards can be used to evaluate the quality and consistency of addresses for 9-1-1 emergency response and provide a basis for change, if necessary, to existing addressing standards.

9-1-1 addressing standards should cover the following issues:

- **Road naming.** All roads should have a unique name. Eliminate duplicate or similar-sounding road names and multiple names on the same road. Why? If certain road names are currently causing confusion during the dispatch of emergency services, they will continue to be a problem, because Enhanced 9-1-1 service only displays the caller's address on a screen at a call answering center. It does not change the dispatching of the address information over a radio, where background noise, radio static, and people working under stress sometimes lead to miscommunication and human error.

Numbered roads, such as a state route or a fire road, should also be named to avoid using numbers in both the property address and the road name. This will avoid a situation such as "25 State Route 15" being misheard as "15 State Route 25" when confirming the location of an emergency.

Please see the full list of road naming standards in Appendix C1 beginning on page 60. For standard road name suffixes, please see Appendix C4 on pages 69 and 70.

- **Beginning point.** This designates the point, location, or direction from which numbers begin to ascend on a road. Please see the options for choosing a beginning point on page 63. Whichever option is chosen should be consistently applied throughout the county or community. Consider such factors as existing numbering directions (if any), the numbering pattern on roads shared with neighboring communities or counties, and the direction from which emergency services respond.
- **Odd and even sides.** This determines which side of the road will be assigned odd numbers and which will be assigned even numbers, as numbers ascend from the numbering origin. The West Virginia 9-1-1 Addressing Standards state that odd numbers should be assigned to structures on the left side of the road and even numbers to the right, as numbers ascend from the beginning point.

If part of a county or municipality has been previously numbered in the opposite fashion, however, then consider maintaining that standard for consistency.

- **Numbering interval.** This is the standard interval in feet used to assign consecutive property numbers along a road, regardless of whether or not a structure is at every interval. The standard numbering interval in the West Virginia 9-1-1 Addressing Standards is 10.56 feet, which provides 1000 numbers per mile (500 odds numbers and 500 even numbers).

Using the above interval provides a means for emergency responders to quickly calculate the location of an emergency caller. For example, the address 2346 Oakwood Road is approximately 2.3 miles down the road on the right. The use of a standard interval for assigning property numbers also provides sufficient room to assign unused numbers to future structures built between existing ones.

- **Property numbering.** These standards establish how numbers are assigned for houses, apartments, businesses, circular streets,

condominiums, cul-de-sacs, corner lots, duplexes, mobile home parks, shopping malls, and other special situations. Please see Appendix C2 beginning on page 63 for a comprehensive list of property numbering standards and recommendations.

- **Number posting.** This standard applies to how numbers should be affixed to all properties to insure visibility during an emergency response. Please see Appendix C3 on page 68 for further information.
- **Road signage.** If a county or municipality chooses to erect its own road signs, it should at least follow, at a minimum, existing standards set by the WV Division of Highways. Their standards have been incorporated into the West Virginia 9-1-1 Addressing Standards and can be found in Appendix C5 beginning on page 71.

6.3.5 Enact an addressing ordinance.

Enacting an addressing ordinance provides several advantages: 1) the statutory authority for county or municipal addressing will be listed, 2) addressing standards (numbering direction, numbering interval, odd/even sides, road naming, etc.) will be clearly stated, and 3) the process for assigning new road names and property numbers will be identified.

Each West Virginia county has the legal authority to create city-type addresses by naming roads and numbering properties. This authority has been granted or confirmed by the Legislature under W. Va. Code Articles 7-1-3 and 24E-1-1, et seq. Under W. Va. Code Articles 8-12-5 and 24E-1-1, West Virginia municipalities also have the legal authority to create city-type addresses by naming streets and alleys and numbering properties. Counties and municipalities have the authority to cooperate in naming and addressing, both generally under W. Va. Code Articles 7-3-1i and 8-23-1, et seq., and specifically with the West Virginia Mapping and Addressing Project under Article 24E-1-1, et seq. and the Board's regulations.

9-1-1 is mostly handled at the county level in West Virginia. Also, the areas of the state that do not have city-type addresses are mainly outside municipal boundaries. Therefore, counties generally must take the lead in city-style addressing in the rural areas of the state. The active and positive cooperation of municipalities, however, remains key to the success of the goal of quick and effective emergency services dispatch through the use of city-type addresses.

Some municipalities may wish to enact their own stand-alone addressing ordinance. Those municipalities should be careful that their ordinance is consistent with the addressing ordinance of the county in which they are located. Other municipalities may wish merely to pass an ordinance confirming that they will cooperate with the county. A county or stand-alone municipal addressing ordinance should not only include the standards and process to be followed for naming or renaming roads and assigning property numbers in a consistent manner, but also identify the person(s) responsible for address assignment.

Please see Appendix E on page 75 for a model county addressing ordinance. A model ordinance for municipalities who wish to pass an ordinance confirming that they will cooperate with the county is found in Appendix F on page 89. Copies of both are also available as computer files by calling the WVSAMB at 304-558-4218 or downloading copies at *www.addressingwv.org*.

Counties or municipalities should use the public hearing usually associated with ordinance adoption to educate residents about the 9-1-1 addressing process and the need to establish city-type addresses. This hearing may also provide an opportunity to discuss the naming of unnamed roads and the renaming of conflicting road names and to solicit potential new road names.

6.3.6 Notify residents of the 9-1-1 addressing process.

Counties and municipalities should inform their residents about the need to create or change city-type addresses for Enhanced 9-1-1 service. Beyond the public hearing for an ordinance, other methods to inform residents include letters, newsletters, public notices, or local public access channels. Seasonal residents who live elsewhere part of the year and out-of-state property owners should be

informed with a letter. Please see Appendix H on page 96 for a sample letter that can be used to inform all property owners and residents of 9-1-1 addressing efforts. When informing residents about addressing efforts, some jurisdictions have used the opportunity to recruit volunteers to assist with their efforts.

Generally, the better residents understand the reason for 9-1-1 addressing (increased public safety) and the more they have an opportunity to offer input, the less resistance will be encountered at public meetings. While the creation of city-type addresses has many advantages for a community, there are genuine reasons for resistance. Those reasons listed below and any others should be openly discussed and considered in the planning process.

- Business owners typically feel a close identification of their activities with their address and are reluctant to change. They also will have to pay to acquaint the public with their new address, such as having signs repainted or new stationery printed.
- For citizens, a change of address will mean that their personal checks must be reprinted and their addresses on work records, credit cards, and magazine subscriptions must change. They must also notify relatives, friends, and businesses.
- Historical societies or older members of the community may dislike changes in historic names.
- Finally, there will be some objections simply because it is a change.

Whatever the objection, please remind people that they achieve the greatest benefit from Enhanced 9-1-1 service when a phone number is linked to unique city-type address that clearly identifies where a 9-1-1 caller is located.

6.3.7 Review existing city-type addresses to identify problems. Approve and enact changes, as needed.

Most existing city-type addresses are clear and consistent and do not cause problems with locating a caller in an emergency. Some addresses, however, are confusing, inconsistent, or ambiguous and cause problems for emergency dispatch and response. Under its adopted rules, the WVSAMB must respect those

efforts of counties and municipalities that created city-type addresses. These rules also require those counties and municipalities with city-type addresses to review their addresses for compliance with road naming and property numbering standards established by the WVSAMB. This review effort will help identify addresses or street names that are confusing to emergency responders.

Please review the following issues to determine if existing city-type addresses meet West Virginia 9-1-1 Addressing Standards or are in need of potential change.

- 1) **Street numbers.** Are whole numbers available to assign to structures built on vacant lots? Or will numbers with a letter or fraction have to be assigned? Do any existing addresses contain a letter or fraction after the property number, e.g., 45A Brown Road or 26½ Ash Street? Only whole numbers should be assigned to structures to reduce potential opportunities for error. The US Postal Service also discourages the use of mailing addresses containing fractions or letters.
- 2) **Number sequence.** Do numbers run sequentially up each street, e.g., 1-2-3-4-5-6-7.....? Or are they out of order, e.g. 1-17-8-26-14.....? Property numbers that are out of sequence will confuse emergency responders when trying to find a house where emergency assistance is desperately needed.
- 3) **Odd/even parity.** Are odd numbers found consistently on one side of all streets and even numbers consistently on the opposite side? Or are odd numbers and even numbers mixed in on the same side of a street? Again, odd and even numbers mixed in on the same side of a street will confuse emergency responders when they are searching for a particular house number.
- 4) **Beginning point.** Is the beginning point for numbering on each street or road consistent throughout the community? All streets should have their numbers ascend as they proceed away from a designated beginning

point or follow a consistent numbering direction throughout a community or county.

- 5) **Street and road names.** Do duplicate or similar-sounding street names exist, such as Maple Street and Maple Road or River Lane and River View Lane? Again, if certain street names are currently causing confusion with emergency responders, they will continue to be a problem.

Please consult the West Virginia 9-1-1 Addressing Standards in Appendix C beginning on page 59 for a full range of issues to be considered. Please also consult local emergency dispatch and response personnel who are an excellent resource to identify existing addressing problems.

If a county or municipality finds that it currently has addressing problems, it should follow West Virginia 9-1-1 Addressing Standards to correct them. In doing so, it is recommended that any re-numbering of properties or re-naming of streets be applied only to those specific properties or streets that are a problem, and not to all properties or streets in the community. Only confusing numbers and names should be changed, leaving alone what is clear, consistent, and acceptable.

Under extreme circumstances, a municipality with existing city-type addresses may feel it needs to re-number all streets because of significant numbering inconsistencies throughout the entire community. If contemplating either partial or complete re-numbering, please contact the WVSAMB and the USPS AMS Office to discuss potential issues prior to re-numbering.

If you have any questions about possible problems with existing city-type addresses in your county or municipality or about the *West Virginia 9-1-1 Addressing Standards*, please contact the WVSAMB at 304-558-4218 or via e-mail at info@addressingwv.org.

6.3.8 Contact adjacent counties and municipalities within your county.

The Addressing Coordinator should contact adjacent counties and municipalities to learn of any existing city-type addresses and standards used to

create those addresses. Additionally, discuss the consistent naming and numbering of “shared” roads to eliminate any possible confusion. Examples of shared roads include roads that travel from one county or community into another, those that run into and then back out of a neighboring county or community, or those which follow a jurisdictional boundary.

Discussion of shared roads is particularly important when communities are served by the same emergency service providers or dispatching services. In this situation, adjacent jurisdictions should discuss with each other the implications of potential duplicate road names and address ranges being created in both jurisdictions.

Suggestions for naming and numbering shared roads include:

- If neighboring jurisdictions agree to keep the same name of a road running between them, the numbering should be consecutive, starting in one community and ending in the other. This will avoid duplicate property numbers in close proximity on a same-named road.
- For same-named roads spanning many towns, such as a state route, it may not be practical to use consecutive numbering starting in one town and ending in another many miles away. In this case, it may be better to number consecutively through three or four towns and then start the numbering over again. This will prevent high property numbers from being created and separate duplicate numbers by a large geographical distance. An Emergency Service Zone coverage boundary might be used to determine such a number break.
- If neighboring communities cannot agree on the same name, each community’s road segment should have a separate name and be numbered separately. It is strongly recommended that numbers on that road not ascend towards each other, since this could result in similar property numbers in close proximity near jurisdictional borders, despite dissimilar road names.
- If names of non-contiguous streets are duplicated within a community or ZIP code, the numbering cannot overlap (e.g., 1-500 Main Street in

Anytown and 1-600 Main Street in North Anytown). This is also an issue when mail delivery in one town is performed by a Post Office in another town. In such cases, every effort should be made to avoid using the same road names. If this is not possible, every effort should be made to avoid duplicate property numbers to avoid postal delivery address problems.

Early discussion of adjacent addressing issues will avoid problems later. For the name and telephone number of the Addressing Coordinator in an adjacent county or municipality, please contact the WVSAMB at 304-558-4218.

6.3.9 Review road names for duplicate or similar-sounding names. Promote and approve changes, as needed.

The naming or re-naming of roads is frequently the biggest political challenge in the addressing process. Many people are reluctant to have their street names changed for a variety of reasons, not the least of which is simple resistance to change. Lessen resistance by educating residents on the need for changing confusing road names and by asking affected residents to suggest new names. In the final analysis, approval of street names by the process established in the addressing ordinance does constitute the legal procedure to name roads, public and private.

For a full list of road naming guidelines, please see Appendix C1 on page 60.

If a road must be named or re-named, allow the residents on public roads and the owners of private roads, including those who live out of state, the opportunity to suggest a new name. This will lessen opposition to the change when it comes time for seeking road name approval. Also solicit suggestions from the local historical society or longtime residents.

There should be no duplication of road names. Duplicate names (e.g., Pine Road and Pine Lane) or similar-sounding names (e.g., Beach and Peach, Lynwood and Linwood, Morgan Road and Morgan Hill Road, etc.) often create confusion during emergency situations. Using an alphabetical list helps identify existing road name duplications and avoid duplications when new names are proposed.

If certain road names are currently causing confusion during the dispatch of emergency services, they will continue to be a problem. Why? Because Enhanced 9-1-1 service only displays the caller's address on a screen at a call answering center. It does not change the dispatching of the address over a radio, where background noise, radio static, and people working under stress sometimes lead to miscommunication and error. Emergency dispatch and response personnel should be able to provide many examples of this.

The US Postal Service may ask a community to eliminate a duplicate road name if the community completely shares the same ZIP code with another community. If not possible, duplicate road names cannot share duplicate number ranges.

To become official, all road names must be approved by the procedure specified in the addressing ordinance. A moratorium on any road name changes should begin at that time and continue for a specified period of time, possibly for two years after the road names changes have been adopted.

Again, jurisdictions that have solicited road name suggestions from affected residents and property owners should encounter less opposition to any changes when pursuing support for adoption.

6.3.10 Identify staff to work with the WVSAMB Addressing Contractor.

When the WVSAMB Addressing Contractor is hired later in 2003, the Addressing Coordinator and staff will be asked to work in a timely manner with the contractor on a variety of tasks. These tasks will focus on completing the 9-1-1 addressing and database development process. Before these final tasks can begin, however, all the steps described in this edition of the handbook, especially the adoption of an addressing ordinance and road naming, must be completed.

When working with the WVSAMB Addressing Contractor, the Addressing Coordinator will need to undertake certain tasks to complete the 9-1-1 addressing and database process. These tasks will be described in detail in the Second Edition of this handbook. Briefly, these tasks will require the Addressing Coordinator, or another designated individual, to:

- Validate assignment of city-type addresses to all telephone numbers.
- Assign names and other attributes, including intersection address ranges, to digital road centerlines.
- Complete telephone subscriber and address matching and Master Street Address Guide (MSAG) verification with Verizon or an appropriate local exchange carrier.
- Identify Emergency Service Zone (ESZ) boundaries and associated emergency response agencies.

Following any address conversion with the US Postal Service and telephone subscriber address matching with the telephone companies, the Addressing Coordinator or other staff will also need to:

- Update the county tax database with new addresses.
- Notify property owners of their new addresses.
- Facilitate new address adoption by utility companies and others.
- Update the MSAG and ESZs, as needed.

County or municipal staff will also need to implement a maintenance system for road centerlines, MSAG, ESZ, and new address assignment, and mapping. More detail on the above tasks will be provided in the Second Edition of this handbook to be issued in later 2003.

For answers to questions on any of the above activities, please contact the WVSAMB at 304-558-4218 or at info@addressingwv.org.

READINESS CHECKLIST FOR COUNTIES AND MUNICIPALITIES WITH CITY-TYPE ADDRESSES

Step One: Provide written commitment to the WVSAMB by July 1, 2003.

- _____ Indicate willingness to participate.
- _____ Identify Addressing Coordinator and provide contact information.

Step Two: Appoint an Addressing Coordinator.

- _____ Has authority to act or quick access to commission/council approval.
- _____ Coordinates staff working on project.

Step Three: Identify all roads in county emergency road network.

- _____ Identify all public and private roads.
- _____ Identify roads without names.
- _____ Compile list of all existing road names.
- _____ Identify roads with conflicting names.

Step Four: Adopt 9-1-1 addressing standards.

- _____ Review any existing standards or adopt WVSAMB standards.
- _____ Road naming and property numbering.
- _____ Beginning point and odd/even sides.
- _____ Numbering interval.
- _____ Number posting and road signage.

Step Five: Enact an addressing ordinance.

- _____ Contains addressing standards.
- _____ Identifies addressing authority.
- _____ Explains procedures.

Step Six: Notify residents of the 9-1-1 addressing process.

- _____ Educate residents on need for 9-1-1 addressing and the process.
- _____ Seek input into process and road name suggestions.

Step Seven: Review existing city-type addresses.

- _____ Check numbering sequence, parity, and beginning point.
- _____ Check street and road names for conflicts.
- _____ Identify postal address issues.
- _____ Make changes, as needed.

Step Eight: Contact adjacent counties or the county's municipalities.

- _____ Identify existing city-type addressing.
- _____ Identify numbering issues.
- _____ Identify shared roads.

Step Nine: Review road names and approve changes.

- _____ Follow standards and procedure specified in addressing ordinance.
- _____ Encourage citizen participation and input.
- _____ Approve road names.

Step Ten: Identify staff to work with WVSAMB Addressing Contractor.

- _____ Have local knowledge.
- _____ Have time available.
- _____ Can provide timely response.

6.4 ROLE OF THE US POSTAL SERVICE

The goal of 9-1-1 addressing is to create, to the maximum extent possible, one address that can be used for all purposes: 9-1-1 emergency response, postal delivery, utilities, and others. As part of the statewide 9-1-1 addressing effort, the US Postal Service is working closely with the WVSAMB and its Addressing Contractor to coordinate 9-1-1 addressing efforts. This cooperation is designed to coordinate the assignment of city-type addresses for 9-1-1 with postal address conversion on rural routes (RR) and highway contract (HC) routes. Adjustments to city delivery routes may also occur where there exist conflicting or non-standard addresses.

Coordination of address conversion requires that the WVSAMB create a standard process for US Postal Service rural address conversion that all West Virginia counties and municipalities must follow. This process will consist of a standard set of procedures and address conversion package materials that must be submitted to the US Postal Service in a required format and sequence. Specific details on these procedures and format will be included in the Second Edition of this handbook.

For many years the US Postal Service has used RR or HC box numbers to deliver mail to residents living in rural areas. Thus, someone with an address of RR 1 Box 889, for example, was one of many people along a particular rural route created by the US Postal Service to deliver mail in that area. In West Virginia today, the US Postal Service has several hundred rural delivery routes, serving approximately 340,000 postal customers.

For many, rural delivery mail is delivered from the Post Office within their own community. For others, rural routes cross community boundaries, meaning that residents in one community have their mail delivered from one or more Post Offices in neighboring communities. This situation may exist even though these residents have a Post Office in their own community. In this instance, these postal customers use the name of the neighboring town and its ZIP code rather

than their own community's name and associated ZIP code. This is also true of postal customers who live in communities with no Post Office at all.

With the coming of the WVSAMB statewide 9-1-1 addressing project, rural route box addresses will be changing to city-type addresses to better locate dwellings in an emergency. To insure that these city-type addresses can be used for both an emergency address and a mailing address, it is necessary for mail to be delivered to customers from the Post Office within their community. Otherwise, some customers would have two addresses: a rural route mailing address from a different community and a city-type address used for emergencies within their own community.

Given the large number of rural mailing addresses used in the state, the US Postal Service will, as far as is practical, switch rural route addresses when they are able. These changes may occur after the assignment of 9-1-1 addresses, however. Whenever these changes occur, those postal customers who live in a community with no Post Office will continue to have their mail delivered from a neighboring community's Post Office. When this happens, these postal customers will use their new city-type address, their community name, and the ZIP code of the community that delivers their mail, providing the US Postal Service serves the entire community under one ZIP code.

6.5 ROLE OF VERIZON AND INDEPENDENT TELEPHONE COMPANIES

Verizon and the state's independent telephone companies will play a key role in the 9-1-1 addressing and database development process by assisting counties and municipalities with the following:

- Providing and supporting network hardware and software and configuration support for dispatch centers.
- Providing telephone subscriber lists to the WVSAMB Addressing Contractor and local governments for matching telephone numbers to new city-type addresses.
- Entering and maintaining data provided by the counties and municipalities for the Master Street Address Guide (MSAG). The MSAG is a database containing a listing of all street and roads within a community, the correct spelling and suffixes of road names, and the low to high address range on these roads.

Creating and maintaining a listing of all Emergency Service Zones (ESZ) based on information provided by the counties. An ESZ is a unique combination of law enforcement, fire, and emergency medical service responders within a specific area. Each ESZ is assigned an Emergency Service Number (ESN) that is used to route each 9-1-1 call to its correct call answering center.

APPENDIX A

BASIC 9-1-1 GLOSSARY

ALI (Automatic Location Identification)

The automatic display at the PSAP of the caller's telephone number, the address of the telephone number, and supplementary emergency services information.

ANI (Automatic Number Identification)

Telephone number associated with the access line from which a call originates.

City-Type Address

City-type address means a unique address for a structure using a building number and street name. City-type addresses are based on an addressing system, which means that they usually appear in a consistent numeric sequence along a street and reflect parity conventions (that is, odd numbers all appear on one side of the street and even numbers on the other). If number assignment is based on a standard numbering interval, then the city-type address will also logically provide a distance location from the beginning point of the road. Also referred to as city-style address or street address.

Enhanced 9-1-1

An emergency telephone system, which includes network switching, database, and other elements capable of providing Selective Routing, Selective Transfer, Fixed Transfer, ANI, and ALI.

ESN (Emergency Service Number) and ESZ (Emergency Service Zone)

An ESN is a three to five digit number representing a unique combination of emergency service agencies (Law Enforcement, Fire, and Emergency Medical Service) designated to serve a specific range of addresses within a particular geographical area, or Emergency Service Zone (ESZ). The ESN facilitates selective routing and selective transfer, if required, to the appropriate PSAP and the dispatching of the proper service agency(ies).

MSAG (Master Street Address Guide)

A database of street names and house number ranges within their associated communities defining Emergency Service Zones (ESZs) and their associated Emergency Service Numbers (ESNs) to enable proper routing of 9-1-1 calls.

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.

TN/Site Matching

The matching of a telephone number (TN) to a physical location, such as a residence or business with a city-type address.

A comprehensive *Master Glossary of 9-1-1 Terminology* is available for download in .pdf format from the National Emergency Number Association. The web address for this document is:

www.nena9-1-1.org/9-1-1TechStandards/nea_recommended_standards.htm

APPENDIX B
WVSAMB RULES ADOPTED DECEMBER 2002

TITLE 169
EMERGENCY RULES

WEST VIRGINIA STATEWIDE ADDRESSING AND MAPPING BOARD

SERIES 2
ADDRESSING AND MAPPING STANDARDS
AND
PARTICIPATION BY PUBLIC AGENCIES
IN STATEWIDE ADDRESSING AND MAPPING PROJECT

§169-2-1. General.

1.1. Scope. Pursuant to Chapter 24E, Article 1, Sections 6, 7 and 9(b) of the West Virginia Code, the West Virginia Statewide Addressing and Mapping Board does hereby adopt the following rules governing statewide addressing and mapping standards; governing participation by public agencies in the statewide addressing and mapping project undertaken by the Board pursuant to Chapter 24E, Article 1; and governing interim protections of privacy of the state's citizens during the project.

1.2 Authority. -- W. Va. Code §§ 24E-1-6, 7 & 9(b); 29A-3-15.

1.3 Filing Date. December 20, 2002.

1.4 Effective Date. --

1.5 Application.

1.5.a. In general. These rules establish statewide addressing and mapping standards, and regulations for participation in the statewide addressing and mapping project undertaken by the Board pursuant to Chapter 24E, Article 1 of the West Virginia Code.

1.5.b. Waiver. If these rules result in an unreasonable or undue hardship, application may be made to the Board for temporary exemption from these rules under the circumstances for which application is made, for unreasonable or undue hardship and good cause shown. The Board may also grant waivers upon its own motion.

1.6 Definitions.

1.6.a. “Board” means the West Virginia statewide addressing and mapping board.

1.6.b. “City-type address” means a unique address for a structure using a building number and street name. “City-type addresses” are based on an address system, which means that they usually appear in a consistent numeric sequence along a street and reflect parity conventions (that is, odd numbers all appear on one side of the street and even numbers on the other). If number assignment is based on a standard numbering interval, then the “city-type address” will also logically provide a distance location from the beginning point of the road.

1.6.c. “Emergency services purposes” means use for 911 or enhanced 911 dispatch and response.

1.6.d. “Fund” means the West Virginia statewide addressing and mapping fund.

1.6.e. “Project” means the project for the creation of a statewide addressing and mapping system for emergency services purposes, but usable as a base for other purposes, in accordance with and consistent with Chapter 24E, Article 1 of the West Virginia Code.

1.6.f. “Project manager” means the project manager hired by the Board for the Project.

1.6.g. “Public agency” means any municipality, county, public district or public authority that provides or has the authority to provide firefighting, police, ambulance, medical rescue or other emergency services.

1.6.h. “Statewide Addressing and Mapping System” or “the System” means the system to be created as a result of the Project, with the participation of public agencies and other entities, including, without limitation, the establishment of city-type addressing and mapping systems essential to the prompt and accurate dispatch of emergency service providers. The terms “Statewide Addressing and Mapping System” and “the System” also include any local modifications that may be made to the System in order to tailor it to meet specialized local concerns.

§169-2-2. Addressing and Mapping Standards.

2.1. Addressing Standards.

2.1.a. Unaddressed areas. By the time of the completion of the Project, all areas without city-type addresses must be addressed in accordance with, and otherwise conform to, the Statewide Addressing and Mapping System, including addresses and signage.

2.1.b. Established addresses and addressing systems. By the time of the completion of the Project, all public agency addressing systems, including addresses and signage, must conform to the Statewide Addressing and Mapping System, unless:

2.1.b.1. The public agency is exempt under W. Va. Code § 24E-1-6(b); or

2.1.b.2. The public agency has obtained a waiver under these rules.

2.1.c. Changes of addresses and addressing systems. Addresses and addressing systems in the state are not to be changed unless necessary to conform to requirements of the Statewide Addressing and Mapping System, and then, only after the Board finds that conformance to the System is necessary or advisable for prompt and accurate emergency services dispatch for the protection of human life, the protection of property or the maintenance of general community security, and the public agency responsible for the change of address makes the change. This subsection does not, however, prevent public agencies from making changes to addresses, without the participation of the Board, that are otherwise in compliance with these rules.

2.1.d. Addressing standards for the Statewide Addressing and Mapping System. The Statewide Addressing and Mapping System must follow the standards and guidelines in the attached “West Virginia 911 Addressing Standards,” which are to be incorporated into the “West Virginia 911 Addressing Handbook.” Where the term “should” is used in those Standards, it means that the standard or guideline in question must be followed in good faith and consistent with prompt and accurate emergency services dispatch, but may be deviated from where compliance is not feasible or practical under the circumstances. The affected public agency has the right to determine, in the first instance, whether to comply with or deviate from the standards and guidelines in the West Virginia 911 Addressing Standards, subject to review at the discretion of the Board.

2.2. Mapping Standards.

2.2.a. In general. By the time of the completion of the Project, all public agency mapping systems used for emergency services purposes must conform to the Statewide Addressing and Mapping System, unless:

2.2.a.1. The public agency is exempt under W. Va. Code § 24E-1-6(b); or

2.1.a.2. The public agency has obtained a waiver under these rules.

2.2.b. Use of mapping work product. In the absence of an exemption or a waiver, a public agency may comply with subsection 2.2.a. only by using the mapping work product and database systems of the Statewide Addressing and Mapping System to be created as a result of the Project.

2.2.c. Specific mapping standards. The Statewide Addressing and Mapping System must follow the specifications set forth in the attached Expression of Interest, SAMB 0202, and the response thereto selected by the Board, unless otherwise established by the Board.

§169-2-3. Creation of the Statewide Addressing and Mapping Systems; Participation by Public Agencies and Other Entities; Rights and Responsibilities of Participating Public Agencies and Other Entities.

3.1 Creation of the Statewide Addressing and Mapping System.

The Board shall create the Statewide Addressing and Mapping System with the participation of the public agencies and other entities under these rules. The Statewide Addressing and Mapping System may include local modifications in order to tailor it to meet specialized local concerns, where the Board finds them to be consistent with the Board's mission to develop the System within the financial and other constraints of the Project, and consistent with protecting human life and property, and maintaining general community security. Public agencies desiring to propose such local tailoring of the System (in the absence of an exemption or a waiver under subsection 2.1.b or subsection 2.2.a) must participate in the Project under these rules.

3.2 Rights and Responsibilities of the Board.

The Board has the following rights and responsibilities:

3.2.a. The Board shall adhere to Chapter 24E, Article 1 of the West Virginia Code;

3.2.b. The Board shall, upon request by a public agency and at no cost to participating public agencies, provide public agencies with a copy of the West Virginia 911 Addressing Handbook, when completed, which is to be written in plain English;

3.2.c. The Board shall, upon request by public agencies and at no cost to participating public agencies, provide public agencies with model addressing and mapping ordinances;

3.2.d. The Board shall, at no cost to participating public agencies, hire and supervise a project manager for the Project;

3.2.e. The Board shall, at no cost to participating public agencies, hire a mapping contractor or contractors for the Project, who are to be subject to the supervision of the project manager;

3.2.f. The Board shall, at no cost to participating public agencies, hire an addressing contractor or contractors subject to the supervision of the project manager;

3.2.g. The Board has the power to review and approve all aspects of the Statewide Addressing and Mapping System;

3.2.h. The Board has the power to review and approve all proposals for local modification of the Statewide Addressing and Mapping System;

3.2.i. The Board has the power to make final approval of the Statewide Addressing and Mapping System, including, without limitation, all portions thereof such as addressing systems, mapping systems, databases and other systems; and

3.2.j. The Board may remove from participating in the project any public agency that fails to comply with these rules, including, without limitation, the failure of the public agency to cooperate in good faith, and may remove any other entity from participation in the project for failure to comply with applicable contractual or other duties.

3.2.k. The Board shall notify all public agencies of the final approval of the Statewide Addressing and Mapping System and the completion of the Project;

3.2.l. The Board has any and all other rights and responsibilities as provided for by law.

3.3 Rights and Responsibilities of Participating Public Agencies with City-type Addresses.

Participating public agencies with city-type addresses have the following rights and responsibilities:

3.3.a. Such participating public agencies will receive the right to use, at no cost, all maps, compilations and other works created as a result of the Project, subject to present or future licensing rights of the Board and its assigns under these rules, and subject to the emergency or legislative rules establishing the conditions and requirements for the distribution of such works, to be filed by the Board, pursuant to Chapter 24E, Article 1, Section 9(b) of the West Virginia Code;

3.3.b. Such participating agencies may make proposals to the Board for the modification of the Statewide Addressing and Mapping System, on a localized basis, in order to tailor it to meet localized concerns;

3.3.c. Such participating public agencies shall cooperate in good faith with the Board, and shall appoint an employee or official as an Addressing Coordinator or officer who will work with the Board, its project manager, authorized agents and designated contractors;

3.3.d. Such participating public agencies shall make all reasonable efforts to enact any and all ordinances necessary to comply with the Statewide Addressing and Mapping System and complete the Project;

3.3.e. Such participating public agencies shall cooperate in good faith with the Board to update the maps, compilations and other works of the Statewide Addressing and Mapping System;

3.3.f. Such participating public agencies shall comply with the West Virginia 9-1-1 Addressing Handbook, including, but not necessarily limited to, reviewing road names for duplicate or similar-sounding names, reviewing existing city-type addresses to identify any issues with number assignment, considering making address changes, as needed, cooperating in good faith with the Board's addressing contractor to identify intersection address ranges and other required attributes for all streets and roads, completing 9-1-1 database requirements with the appropriate local telephone exchange carrier, and establishing an address maintenance system;

3.3.g. Such participating public agencies, if address changes are made, shall follow established notification procedures with the US Postal Service and the appropriate local telephone exchange carrier, and notify property owners of any new addresses; and

3.3.h. Such participating public agencies have all other rights and responsibilities as provided for by law.

3.4 Rights and Responsibilities of Public Agencies Without City-type Addresses.

Participating public agencies without city-type addresses have the following rights and responsibilities:

3.4.a. Such participating public agencies will receive the right to use, at no cost, all maps, compilations and other works created as a result of the Project, subject to present or future licensing rights of the Board and its assigns under these rules, and subject to the emergency or legislative rules establishing the conditions and requirements for the distribution of such works, to be filed by the Board, pursuant to Chapter 24E, Article 1, Section 9(b) of the West Virginia Code;

3.4.b. Such participating agencies may make proposals to the Board for the modification of the Statewide Addressing and Mapping System, on a localized basis, in order to tailor it to meet localized concerns;

3.4.c. Such participating public agencies shall cooperate in good faith with the Board, and shall appoint an employee or official as an Addressing Coordinator or officer who will work with the Board, its project manager, authorized agents and designated contractors;

3.4.d. Such participating public agencies shall make all reasonable efforts to enact any and all ordinances necessary to comply with the Statewide Addressing and Mapping System and complete the Project;

3.4.e. Such participating public agencies shall cooperate in good faith with the Board to update the maps, compilations and other works of the Statewide Addressing and Mapping System;

3.4.f. Such participating public agencies shall comply with the West Virginia 9-1-1 Addressing Handbook, which necessarily requires more extensive participation, including, but not necessarily limited to, reviewing and updating current tax database mailing addresses, reviewing addressing issues with other public agencies, reviewing road names and soliciting input on potential road names, establishing city-type addresses for all identifiable structures based on the West Virginia 911 Addressing Standards, completing 911 database requirements with the appropriate local exchange telephone carrier, and establishing an address maintenance system;

3.4.g. Such participating public agencies, if address changes are made, shall follow established notification procedures with the US Postal Service and the appropriate local telephone exchange carrier, and notify property owners of any new addresses; and

3.4.h. Such participating public agencies have all other rights and responsibilities as provided for by law.

3.5. Participation by Public Agencies.

Any county commission and municipality is entitled to participate in the Project by notifying the Board, in writing, no later than July 1, 2003 of its intention to participate in the Project in accordance with these rules. Any other public agency, including county commissions and municipalities electing to participate after that date, may participate in the Project only upon the approval of the Board at a regularly scheduled or special meeting.

3.6. Contracts and Financial Arrangements.

The Board may enter into contracts, including financial arrangements, with public agencies or other entities, public or private, in order to accomplish the purposes of Chapter 24E, Article 1 of the West Virginia Code. No entity, other than a public agency, may participate in the creation of the Statewide Addressing and Mapping System without such a contract with the Board. All such contracts must be reduced to writing and approved by the Board in accordance with law. Such contracts may include provisions regarding the licensing of maps, compilations or other works created as a result of the Project. No such maps, compilations or other works may be distributed, however, except under conditions imposed by the Board to protect reasonable expectations of privacy of the information in those works, consistent with the West Virginia Freedom of Information Act, Chapter 29B, Article 1 of the West Virginia Code, and consistent with Chapter 24E, Article 1, Section 9(b) of the Code.

3.7. Reimbursement of Public Agencies.

3.7.a. Standards for Reimbursement. The Board may consider applications of participating public agencies, including without limitation, county commissions and municipalities, for reimbursement from the Board's fund. Because the Board's funding is limited, however, reimbursement may occur only under exceptional circumstances. In deciding whether to grant reimbursement, the Board may consider the following factors:

3.7.a.1. Whether the activities for which reimbursement is sought will reduce the overall cost of the Project;

3.7.a.2. Whether the Board may equitably reimburse the public agency without also reimbursing other public agencies for similar or other activities;

3.7.a.3. Whether the Board may still accomplish the purposes of the Project by making the reimbursement in combination with like, but equitable reimbursements of other public agencies;

3.7.a.4. Whether the activities comply with the Board's rules and standards;

3.7.a.5. Whether, by making the reimbursement, the Board can still meet its obligations to its project manager and other vendors by making the reimbursement, keeping in mind the possibility of like, but equitable reimbursements of other public agencies;

3.7.a.6. Whether the activities for which reimbursement is sought are in addition to those activities that may be reasonably expected of all participating public agencies as a part of their emergency services mission;

3.7.a.7. Whether the activities for which reimbursement is sought are good and satisfactory consideration for the reimbursement;

3.7.a.8. The relative size of the participating agency and whether it may reasonably be expected to absorb the expense;

3.7.a.9 Whether the activities for which reimbursement is sought were already paid for, or are subject to reimbursement from, federal, state or other non-public agency funds; and

3.7.a.10. Any other relevant factors.

The Board specifically expects public agencies to show the spirit of volunteerism that has long characterized the provision of emergency services in West Virginia and elsewhere in the United States, and encourages public agencies to submit only those applications that are consistent with that spirit, and that add significant value to the Project beyond the activities that may be reasonably expected of all public agencies as a part of their emergency services mission.

3.7.b. Conditions of Reimbursement. The Board may impose conditions on reimbursement, including requiring an otherwise exempt public agency to comply with the standards in these rules as a condition of receiving reimbursement. Any such conditions must be stated in writing. No disbursement may be made from the Board's fund unless the public agency agrees to such conditions in writing.

3.7.b. Form of Application for Reimbursement. Any application for reimbursement must be substantially in the form prescribed by the Board, SAMB Form # 1, "Application of Public Agency for Reimbursement."

§ 169-2-4 Protection of Privacy of the State's Citizens.**4.1 Interim Protection of Privacy.**

Pending the submission by the Board of more detailed emergency or legislative rules establishing the conditions and requirements for the distribution of such works pursuant to Chapter 24E, Article 1, Section 9(b) of the West Virginia Code, no person may distribute any maps, compilations or other works created as a result of the Project without the express written permission of the Board, and then, only under conditions imposed by the Board to protect reasonable expectations of privacy of the information in those works, consistent with the West Virginia Freedom of Information Act, Chapter 29B, Article 1 of the West Virginia Code, and consistent with Chapter 24E, Article 1, Section 9(b) of the Code.

APPENDIX C

WEST VIRGINIA 9-1-1 ADDRESSING STANDARDS

The West Virginia Statewide Addressing and Mapping Board was created by the West Virginia Legislature in 2001 (Senate Bill 460, codified as W. Va. Code 24E-1-1 et seq.) to advance the infrastructure of West Virginia by overseeing two major tasks:

- 1) Providing new high quality digital mapping of the entire state;
- 2) Assigning a standard city-type address to every identifiable structure in the state.

To fulfill its mission, the West Virginia Statewide Addressing and Mapping Board has adopted the *West Virginia 9-1-1 Addressing Standards* to provide standards for counties and municipalities to use in establishing city-type addresses within their jurisdictions where no such addresses exist. In areas where city-type addresses do exist, these standards can be used to evaluate the quality and consistency of addresses and provide a basis for needed change. The standards cover the following issues:

- Road naming
- Property numbering
- Number posting
- Road name suffixes
- Road signage

The *West Virginia 9-1-1 Addressing Standards* are based on the following standards:

- *Addressing Guidelines for The State of West Virginia* (Adopted by the West Virginia Enhanced 9-1-1 Council and the US Postal Service District Office, Charleston, WV, July 1999.)
- National Emergency Number Association Addressing Systems (1995)
- US Postal Service Postal Addressing Standards (Pub 28, November 2000)
- US Postal Service Address Conventions (Filing Number DM-940-89-03, July 1989)
- West Virginia Division of Highways standards for road signing

Questions regarding these standards can be directed to the West Virginia Statewide Addressing and Mapping Board at 304-558-4218.

APPENDIX C1

ROAD NAMING STANDARDS

The following standards should be adhered to when naming or renaming roads:

1. Each road should have one correct name for emergency services purposes and postal delivery purposes.
2. Never assume a road does not have a name. Research should be conducted to find whether a road has a name or not.
3. Any road with two or more residences should be named. Additionally, any road or trail without structures that might need to be accessed by emergency responders should be considered for naming to better locate it in an emergency.
4. Avoid duplicate road names at a minimum in the same ZIP code, and emergency service zone wherever practical. Optimally, avoid duplications in the entire county.
5. Avoid duplicate road names with different suffixes, such as PINE RD and PINE LN, especially when naming new roads or existing roads without names, or renaming existing ones.
6. Avoid sound-alike names. For example: BEECH and BEACH, MAINE and MAIN, GREY AND GRAY.
7. Avoid family names or individual's names, especially living persons or politicians.
8. Rename a road when one current name sounds too much like another road name or if the road name is a duplicate. Once two or more roads have been identified with similar sounding or duplicating names, rename the road or roads that will impact the least number of residents and businesses.
9. When renaming roads, involve the property and business owners affected. Providing a choice of three to five options will usually eliminate most controversy. In developing names, use historical considerations.

10. Never rename a road unless absolutely necessary.
11. If a road is continuous, try not to change the road name. If the name must change, then do so at an intersection or prominent landmark, rather than at a curve or some other arbitrary point.
12. Avoid road names longer than 22 characters (excluding pre- and post-directional and suffix). Abbreviations of such names may produce inadvertent duplicates.
13. Avoid special characters in street names. For example: hyphens, apostrophes, periods, and ampersands (&).
14. Avoid assignment of a primary street name that is also used as a standard suffix or directional. For example: NORTH AVE, COURT ST, SOUTHEAST BLVD.
15. Avoid using numbers or numbered streets. For example: US HIGHWAY 290, 1ST ST, THIRD AVE.
16. All roads names should use a suffix. For a complete list of approved suffixes, see the enclosed standards for new and existing road names.
17. If a directional (pre or post) is used in a road name, it should be abbreviated to avoid potential confusion with the road name. Approved directional abbreviations are: N, S, E, W, NE, NW, SE, and SW.
18. Avoid the use of pre- or post-directionals or suffixes to distinguish separate non-continuous or continuous streets. For example: PALM CT, N PALM CT, PALM ST, PALM AVE.
19. Avoid the use of non-standard street name suffixes in residential areas that may be confused with commercial developments. For example: STONEWALL PLZ, SMITH CTR.
20. Avoid using double suffixes in new street names. For example: TWIN BRANCH LN, CARVER RUN RD.

21. When naming new roads, consider using a consistent suffix for the type of road, such as those suggested below:

Avenue = A thoroughfare running principally in a north-south direction (or could be east-west depending on how “street” is defined).

Circle = Short road that returns to itself; circular or semi-circular roads.

Lane = Fire road or private road.

Loop = Short drive that begins and ends on the same road.

Road = Most common designation for a secondary thoroughfare; generally indicates a heavily traveled route.

Street = Usually found in downtown or more congested areas; run principally in an east-west direction (or could be north-south depending on how “avenue” is defined).

22. Use the following format for road or street names: Pre-Directional – 2 characters (max.), Road Name – 22 characters (max.), Road Suffix – 4 characters (max.), and Post-Directional – 2 characters (max.).

Note: Instances may arise that do not conform to the guidelines set forth in this document. When such situations occur, the county’s 9-1-1 center, the US Postal Service District Address Management Systems Office, and the West Virginia Division of Highways should be consulted to reach a joint decision.

APPENDIX C2

PROPERTY NUMBERING STANDARDS

The following standards should be adhered to when assigning property numbers:

- 1. Frontage interval.** Numbers should be assigned every 10.56 feet or each 1/500 mile on each side of a road. This will yield 1000 numbers per mile, 500 odd on one side and 500 even on the other. The interval chosen gives meaning to an address. For example, 3746 Mountain Road is located approximately 3.7 miles from the beginning of Mountain Road.
- 2. Odd/Even number location.** Even numbers should be assigned the right side of a road, from the point of its beginning. Assign odd numbers on the left side of a road, from the point of its beginning.
- 3. Beginning point.** Numbering should begin in a consistent manner on each road throughout a county or municipality. Use one of the following options for establishing the beginning point for numbering roads.

Option One: Numbers should ascend as emergency responders enter a majority of roads. For example, if emergency responders were based at the center of the county, then this would establish the beginning point for road numbering. All roads whose ends are closest to this origination point would have their numbers begin from that end.

Option Two: Numbers should normally begin when a road proceeds away from the road that is deemed of higher importance. The defined road hierarchy for the determination of road directions will be arterial, collector, local, unpaved, seasonal and non-essential. In the event that the roads are at the same hierarchy and importance level, road direction should be based on Option One above.

Option Three: Consider a numbering origin at a West beginning point and proceed eastward, or begin at a South beginning point and proceed northward.

Regardless of the option chosen, the following considerations should apply.

1) If numbers ascend on a road that cross jurisdictional boundaries, care should be taken to insure that the numbers at the border are not in close proximity to those numbers near the border in the adjacent jurisdiction. If so, then discussions with that jurisdiction should insure that numbering continues in one direction or another. 2) The beginning point for all dead-end roads should be at the place of departure from the main road. 3) The above guidelines will apply unless continuing a city numbering scheme, as in leaving a city where other numbers are being used. The system in place will then dictate the beginning number.

- 4. Intersections.** Both 4-way and “T” type intersections should be numbered, just as houses. These addresses will be useful as references.
- 5. Bridges.** Bridges longer than 50 (fifty) feet should be numbered just as houses. In most cases measure the middle of the bridge and post the numbers at the ends of the bridge in both directions. You may prefer to use an odd and even number to post the bridge address, odd on the odd numbered side facing traffic and even on the even numbered side facing traffic. On bridges longer than ½ mile, number the ends of the bridge and post accordingly.
- 6. Circular streets.** Circular streets and roads begin where they meet the lowest numbered intersecting road. The outside of the circle is numbered first according to the frontage interval. The inside is then numbered to match and mix with the outside. This will result, in some cases, with fewer numbers on the inside of the circle, a smaller frontage interval, and spaces between numbers.
- 7. Cul-de-sacs.** Cul-de-sacs often require applying the rules for both dead-end and circular streets. The numbering begins from the intersection toward the cul-de-sac. Once in the cul-de-sac, the numbers proceed following the odd/even rules to the center point of the cul-de-sac (i.e. odd numbers proceed around one side of the circle and even around the other side). On rare

occasions there may be structures inside the cul-de-sac. When this occurs, name the circular section of the cul-de-sac a separate road name from the access road. Number this street counter-clockwise according to the circular street numbering rule.

- 8. “T” roads.** Roads with no outlet at both ends and that are intersected by an entering road should be named and numbered as a separate road or roads. If using the same name, then numbering should begin at the left end of the road and run the length of the road, unless that end may be extended in the foreseeable future. If two names are used, then numbering should begin for each road where it leaves the intersecting road. In the case where the intersecting road logically continues to the end of one of the road segments, then continue the name and numbering of the intersecting road to that end and separately name and number the spur road from where it departs the intersecting road.
- 9. Crossing county lines.** When crossing county lines, consideration should be given to an existing numbering system in that county. If no system exists, the numbering should stop at the county line. If a system does exist in that county, those numbers may continue, following the standards for distance and direction. Since many emergency-response zones cross county lines, try not to rename roads at the county line, unless there is a permanent landmark such as a river, in order to avoid confusion to responders. Instead, bring the road to a logical point, such as an intersection, before changing the road name.
- 10. Stacked addresses.** Houses or trailers behind other trailers facing the road sharing a common driveway should be numbered with consecutive odd or even numbers. If more than two structures share a driveway, consider naming the driveway as a separate road and number the structures accordingly.
- 11. Apartment and duplexes.** Apartments with individual outside entrances (such as duplexes or townhouses) should be assigned separate street addresses. Apartments and multi-tenant structures with one main entrance should be assigned one primary number with a secondary address as the

assigned apartment number (ex. 123 MAIN ST APT 101). Apartment numbers should only be numeric. Do not use 0 for an apartment number. Apartments should be numbered consecutively with odd apartment numbers on the left and even on the right (from the point of access).

In multi-level apartment houses or complexes, if more than four apartments are on a floor, a three-digit apartment number should be used. The first digit of the apartment number represents the floor number. For example, apartment 304 represents the second apartment on the right on the third floor. If there are more than nine floors, the apartment numbers should follow the same rules, but for floors 10 and higher the apartment number will be four digits. For example, apartment 1216 would be located on the 12th floor. Basement apartments should be numbered beginning with the number 1.

Offices in multi-unit buildings should be assigned a number following the same guidelines, but will be referred to as a suite (STE) instead of an apartment (APT). In a multiple building apartment complex, each building should be assigned its own street address and follow consistent apartment numbering from building to building.

- 12. Businesses.** Office buildings and business districts should be numbered following the apartment numbering rules. The secondary address will be referred to as suites instead of apartments. Strip malls and office parks, where each business has its own entrance, should be assigned separate street addresses for each business.
- 13. Trailer parks.** If possible, name roads accessing trailer parks and number pads or lots using the frontage system. An alternative is to number the trailers just like apartments. Assign one primary address to the park and then assign secondary addresses to the trailers using Lot # instead of Apt #. If it is not conducive to address in either manner, a joint decision on numbering should be made between the county's 9-1-1 center, the US Postal Service District Address Management Systems Office, and the West Virginia Division of Highways.

- 14. Highways.** Highways with no city numbering systems in place or where the city system is to be changed should be numbered from county line to county line following the number origination guidelines set by the county.
- 15. Number assignment location for structures.** When assigning numbers, the middle of a structure should determine the number. Structures should always be numbered according to the road they face, not where the driveway enters the road or where the mailbox is. An exception to this is when the house can be seen but not approached directly from the road. In this case, the driveway should be numbered on the road from which it departs.
- 16. Preplanning subdivisions.** Use maps provided by the developer to assign numbering to new subdivisions. Ensure either footage is marked on the maps or the map is drawn using an engineering scale. In addition, corner lots should be numbered in both directions so as to accommodate a house built facing either street.
- 17. Interfacing with existing systems.** When interfacing with an existing numbering system, care should be taken in locating the last assigned number of the existing system. All possible sources should be checked to determine the last number. Once the last number is determined, start the new numbering from the next available hundred block. For example, if the last number is 3846, begin numbering from 3900. Some roads leaving a city limit may not have any numbers within the city. These may be numbered from the in-city beginning point.
- 18. General numbering guidelines.** Primary numbers assigned to structures should be whole numbers. Use of the following types of numbers is not acceptable:
- Alphanumeric numbers, ex. 235A.
 - Numbers with hyphens or special characters, ex. 45-46 or 78/1.
 - Numbers with fractions, ex. 28 ½.
 - Numbers with more than six digits.

APPENDIX C3

NUMBER POSTING STANDARDS

To insure that numbers will be visible, they should be posted as follows:

- 1. Number on the Structure.** Where the structure is within 50 (fifty) feet of the edge of the road right-of-way and can be clearly seen from the road, the assigned number should be displayed on the front of the structure in the vicinity of the front door or entry.
- 2. Number at the Road Line.** Where the structure is over 50 (fifty) feet from the edge of the road right-of-way, the assigned number should be displayed on the structure as above and be displayed on a post, fence, wall, mailbox, or on some structure at the property line adjacent to the walk or access drive to the numbered structure. Any posted number at the road should be placed high enough to not be obscured by snow during an average winter.
- 3. Size and Color of Number.** Numbers should be a minimum of four (4) inches high and be of a contrasting color to their background. Numbers made from block letters and reflective materials are recommended.
- 4. Property owner responsibility.** Every person whose duty is to display the assigned number should remove any different number that might be mistaken for, or confused with, the number assigned to the property.
- 5. Interior location.** All residents and other occupants should post their assigned number and road name adjacent to their telephone for emergency reference.

APPENDIX C4

ROAD NAME SUFFIXES FOR NEW ROADS

ALLEY	ALY
AVENUE	AVE
BOULEVARD	BLVD
BYPASS	BYP
CIRCLE	CIR
DRIVE	DR
EXPRESSWAY	EXPY
EXTENSION	EXT
FREEWAY	FWY
HIGHWAY	HWY
LANE	LN
LOOP	LOOP
PARKWAY	PKWY
ROAD	RD
SPUR	SPUR
STREET	ST
TERRACE	TER
TURNPIKE	TPKE
WAY	WAY

APPENDIX C4 (CONT.)

SUFFIX ABBREVIATIONS FOR EXISTING ROADS

ALLEY	ALY	FLAT(S)	FLT(S)	PARKWAY	PKWY
ANNEX	ANX	FORD(S)	FRD(S)	PASS	PASS
AVENUE	AVE	FOREST	FRST	PASSAGE	PSGE
BEACH	BCH	FORGE(S)	FRG(S)	PATH	PATH
BEND	BND	FORK(S)	FRK(S)	PIKE	PKE
BLUFF(S)	BLF(S)	FORT	FT	PINE(S)	PNE(S)
BOTTOM	BTM	FREEWAY	FWY	PLACE	PL
BOULEVARD	BLVD	GARDEN(S)	GDNS	PLAIN(ES)	PLN(S)
BRANCH	BR	GATEWAY	GTWY	PLAZA	PLZ
BRIDGE	BRG	GLEN(S)	GLN(S)	POINT(S)	PT(S)
BROOK(S)	BRK(S)	GREEN(S)	GRN(S)	PRARIE	PR
BYPASS	BYP	GROVE(S)	GRV(S)	REST	RST
CAMP	CP	HARBOR(S)	HBR(S)	RIDGE(S)	RDG(S)
CANYON	CYN	HAVEN	HVN	ROAD	RD
CAPE	CPE	HEIGHTS	HTS	ROW	ROW
CAUSEWAY	CSWY	HIGHWAY	HWY	RUN	RUN
CENTER(S)	CTR(S)	HILL(S)	HL(S)	SHORE(S)	SHR(S)
CIRCLE(S)	CIR(S)	HOLLOW	HOLW	SPRING(S)	SPG(S)
CLIFF(S)	CLF(S)	ISLAND(S)	IS(S)	SPUR	SPUR
CORNER(S)	COR(S)	JUNCTION	JCT	SQUARE(S)	SQ(S)
COURSE	CRSE	KNOLL(S)	KNL(S)	STATION	STA
COURT(S)	CT(S)	LANDING	LNDG	STREAM	STRM
COVE(S)	CV(S)	LANE	LN	STREET	ST
CREEK	CRK	LOCK(S)	LCK(S)	SUMMIT	SMT
CRESCENT	CRES	LODGE	LDG	TERRACE	TER
CREST	CRST	LOOP	LOOP	THRUWAY	TRWY
CROSSING	XING	MALL	MALL	TRACE	TRCE
DALE	DL	MANOR(S)	MNR(S)	TRACK	TRAK
DAM	DM	MEADOW(S)	MDW(S)	TRAIL	TRL
DIVIDE	DV	MILL(S)	MLS(S)	TURNPIKE	TPKE
DRIVE	DR	MISSION	MSN	VALLEY(S)	VLY(S)
ESTATE(S)	EST(S)	MOTORWAY	MTWY	VIEW(S)	VW(S)
EXPRESSWAY	EXPY	MOUNTAIN(S)	MTN(S)	VILLAGE	VLG
EXTENSION	EXT	NECK	NCK	VILLE	VL
FALL	FALL	ORCHARD	ORCH	VISTA	VIS
FERRY	FRY	OVAl	OVAl	WALK	WALK
FIELD(S)	FLD(S)	PARK(S)	PARK	WAY	WAY

APPENDIX C5 ROAD SIGNAGE

Installing road signs is one of the final, and more important tasks in addressing. To assist both emergency service personnel and the general public, signs must be visible and maintained. A frequent complaint about road signs is that snow banks or vegetation often hide them. Annual trimming or minor maintenance can eliminate this problem.

- 1. Color.** Signs should be reflectorized. The letters and background should be of contrasting colors and should have white letters and border on a green background. **Letters should be at least 3" upper case.** It is important to insure that letters are tall enough and thick enough to be easily seen day or night.
- 2. Grade.** High Intensity Reflective Sheeting (250 candle power silver high intensity) is recommended when nighttime high visibility is necessary from long distances or at high accident intersections where quick identification of markings is important. High intensity sheeting is available in packaged letters or can be cut on a machine as with the engineer grade sheeting. High intensity sheeting meets the Federal Manual of Uniform Traffic Control Devices (MUTCD) specifications and carries a ten-year warranty.
- 3. Lettering.** Letters should conform to the standard alphabets for highway signs printed by the Federal Highway Administration. Suffix abbreviation should follow those listed in these standards, such as ALY, RD, LN, CIR, AVE, etc. Road names should not be abbreviated.
- 4. Materials.** The most commonly used material for blades is either extruded aluminum with a 0.25" inch flange thickness and a 0.090" inch web (min.) or flat sheet aluminum with a minimum thickness of 0.08 inches. 6061T6 aluminum alloy is a hard, strong alloy manufactured from flat sheet. This has been replaced, to some extent, by 5052H38 series alloy, which is softer and comes in a roll. 5052H38 is flattened on a press, but retains a memory and may warp slightly over time. Both alloys must be alodined or anodined or the sheeting may delaminate to the surface of the blank over a period of time. Thickness can range from .080" to 0.125", but 0.080" are recommended.

- 5. Posts.** Posts for elevated signs vary from round to "U" channel. Both types of post are made of aluminum or galvanized steel. The type of post chosen may depend on the environment, soil type, cost, or preference of the installing and maintaining agency. Sign mounting hardware is available for both types of post. When installing posts, it is recommended to install anchor posts, such as "Lok-Set" post anchors. These anchors will help keep the sign from leaning and will also keep vandals from twisting the sign around, a very popular pastime among juveniles. Any new obstacles have to be a break away device approved by the Federal Highway Administration.
- 6. Heights.** The height of the sign is very important. Posts come in lengths of 8 feet to 14 feet. In most cases, the taller the better. As a general rule, signs should be 7 feet or more off the ground when mounted on the post. This keeps the signs visible and can reduce some types of vandalism.
- 7. Placement.** Sign placement is generally prescribed by state and federal rules. As a general guide, signs are placed on two sides of each four-way intersection and on the right hand side of a "T" intersection. It is generally recommended that a four-way sign be used, one that displays the name of both roads using a sign-to-sign bracket. If not economically possible to place the four-way sign at every intersection, an attempt should be made to place one at every other intersection.
- 8. Installation.** Before installing any road signs, a municipality or county must call Miss Utility of West Virginia, Inc. at least 48 hours before digging. Miss Utility can be contacted 24 hours a day, seven days a week by calling toll-free **1-800-245-4848**. Routine 48-hour notifications can be made via fax or e-mail. Notification must not be made more than 10 business working days in advance of the beginning of any such work due to the possible deterioration of the locate markings. The time requirements are exclusive of Saturdays, Sundays, and legal holidays.

For additional information on the design and installation of road name signing, please refer to the following standards of the West Virginia Division of Highways.

STANDARDS FOR THE DESIGN AND INSTALLATION OF ROAD NAME SIGNING

Proposed Location of Sign at Jct. Of: And:		Posted Speed	Letter Height	Border	Arrow	County Route No.	Bkgd. Color	Legend Color
US or WV Rte.	Local Serv. Rte.	All	3"	Yes	Yes	Yes	Green	White
US or WV Rte.	Private Drive	All	3"	Yes	Yes	No	Green	White
Local Serv. Rte.	Local Serv. Rte.	35 and Above	3"	Yes	Yes	Yes	Green	White
Local Serv. Rte.	Local Serv. Rte.	Less than 35	2" or 3"	Yes	Yes	2" No - 3" Yes	Green	White
Local Serv. Rte.	Private Drive	35 and Above	3"	Yes	Yes	No	Green	White
Local Serv. Rte.	Private Drive	Less Than 35	2"	Yes	No	No	Green	White

In addition to the above noted design criteria, the following installation procedures should also be followed:

- 1) WV DOH approved supports to be used.
- 2) Supports to be standard depth in ground (normally 3').
- 3) Lateral clearance of 6' - 12' from edge of pavement should be strived for.
- 4) Vertical clearance of 7' from edge of pavement to bottom of sign should be maintained.
- 5) Existing supports for existing signs should not be used to mount road name signing except on stop and yield signs, with the positioning of these signs not affecting the purpose of the signs.

APPENDIX D
OFFICIAL PARTICIPATION LETTER

[Date]

West Virginia Statewide Addressing and Mapping Board
Greenbrooke Building
1124 Smith Street, Room LM-10
Charleston, WV 25301-1323

Dear Board Members:

Please accept this letter as official notification of the election of the Sample County Commission [or City or Town of Sample] to participate in the West Virginia Statewide Addressing and Mapping Project, pursuant to the Emergency Rules of the West Virginia Statewide Addressing and Mapping Board on file with the office of the Secretary of State, Title 169, Series 2 of the Code of State Rules.

The Sample County Commission [or Council of the City or Town of Sample] voted at its meeting today to appoint _____ as its Addressing Coordinator, who can be contacted at (304) ____-_____.

Thank you.

Sincerely,

_____, President
Sample County Commission

(or
_____, Mayor]
[City or Town of Sample]

APPENDIX E
MODEL COUNTY ADDRESSING ORDINANCE

SAMPLE COUNTY
COMMISSION

SAMPLE COUNTY
WEST VIRGINIA

9-1-1 ADDRESSING
AND MAPPING
ORDINANCE

AN ORDINANCE TO PROVIDE ASSIGNMENT OF NAMES TO STREETS AND ROADWAYS AND IMPLEMENTATION AND MAINTENANCE OF THE MAPPING AND POSTING OF STREET SIGNS AND BUILDING NUMBERS IN SAMPLE COUNTY, WEST VIRGINIA

In order to uniformly assign and maintain street addresses and provide for easy identification of those numbers for various purposes and to promote the health, safety and welfare of the citizens of the County of Sample, Sample County enacts its 9-1-1 Addressing and Mapping Ordinance as follows:

WHEREAS, pursuant to W. Va. Code Articles 7-1-3 and 7-1-3cc, and consistent with W. Va. Code Article 24E-1-1 et seq., the Sample County Commission has the authority to provide for the elimination of hazards to public health and safety; to establish and regulate the naming or renaming of roads, ways, streets, avenues, drives and the like, in cooperation with local postal authorities, the division of highways and the directors of Sample County emergency communications centers; and to assure uniform, non-duplicative conversion of all rural routes to city-type addressing on a permanent basis; may cooperate with other governmental units, shall maintain and update the addressing and mapping framework within their jurisdictions, and,

WHEREAS, the establishment of an Enhanced 9-1-1 Emergency Telephone System in Sample County has been approved and implemented by the Sample County Commission; and,

WHEREAS, the establishment of such system requires the assignment of names to all streets and roads in Sample County, the assignment of building numbers to all buildings having telephones and/or occupancies, the erection of appropriate street signs at intersections; and the maintenance of a statewide mapping system, and,

WHEREAS, the Sample County Commission has the authority to delegate, contract or cooperate with other governmental units to complete all necessary components of this Ordinance, for final approval by the Sample County Commission,

WHEREAS, the Sample County Commission intends to elect to participate in the Statewide Addressing and Mapping Project, pursuant to Title 169, Series 2 of the Code of State Rules, thus promoting the goal of prompt and accurate dispatch of emergency services or 9-1-1 personnel in Sample County, and thereby enhancing the safety of the lives and property of the citizens and residents of Sample County.

NOW, THEREFORE, BE IT ORDAINED this _____ day of _____, 200__ by the County Commission of Sample County, West Virginia, Ordinance Number _____.

Section 1: APPLICABILITY

- Section 1.1 The provisions of this Ordinance apply to all unincorporated areas of Sample County. The municipal corporations in Sample County have the option to adopt cooperative addressing ordinances or to adopt their own stand-alone addressing ordinances. If a municipal corporation in Sample County does not act to adopt a cooperative or standalone ordinance within one hundred twenty (120) days of the date of the enactment of this Ordinance, this Ordinance will apply to areas within such municipal corporations until and unless the municipal corporation acts to adopt a standalone ordinance.
- Section 1.2 Pursuant to the Emergency Rules of the West Virginia Statewide Addressing and Mapping Board on file with the office of the Secretary of State, Title 169, Series 2 of the Code of State Rules, Sample County Commission hereby elects to participate in the West Virginia Statewide Addressing and Mapping Project. (Optional addition: The President of the Sample County Commission shall, pursuant to those Emergency Rules, serve notice of this election on the Board within five (5) days of the enactment of this Ordinance, together with a true copy of this Ordinance.)

Section 2: DEFINITIONS AS USED IN THIS ORDINANCE

- Section 2.1 For the purpose of this Ordinance, the following terms, phrases, works and their derivations shall have the meaning that is provided in the National Emergency Number Association (NENA) Standard Guidelines as referenced by the United States Postal Service, unless the context clearly indicates otherwise.
- Section 2.2 “Address number” means the number assigned to consecutive intervals along a street or road pursuant to the Number Assignment Formula contained herein.
- Section 2.3 “Road” or “Street” means any public or private thoroughfare, used for vehicular traffic and/or any easement or right-of-way that provides sole access to more than two parcels or lots. This term shall be defined as the “Street Suffix” and shall include, but is not limited to; avenue, drive, way, boulevard, highway, lane, pike or similar street types.

- Section 2.4 “Number Assignment Formula” means as follows: Beginning from the point of origin a house number shall be assigned for each interval, with each interval on the right side of the roadway as one leaves the point of origin being assigned an even number, and each interval on the left side as one leaves the point of origin being assigned an odd number. Left and right shall be determined from the perspective of a traveler moving away from the road point of origin in a forward motion.
- Section 2.5 “Interval” means the distance along a roadway of 10.56 feet, there being 500 intervals per mile on both sides of a road.
- Section 2.6 “Point of origin” means the end point of a road, which is the starting point for a numbering sequence. The point of origin for Sample County shall be _____. (See the West Virginia 9-1-1 Addressing Standards for origin options.) The point of origin for an individual road may be adjusted, upon Commission approval, to avoid numbering conflicts.
- Section 2.7 “Primary structure” means, but is not be limited to, residential building, mobile home parks, commercial building, industrial building, office building, public building, utility, communications tower.
- Section 2.8 “Display” means the manner the numbers are affixed to a structure or otherwise displayed when affixing to a structure.
- Section 2.9 “Non-compliance” means any failure to comply with the provisions of this Ordinance including, but not limited to, by way of example: a number out of sequence, odd or even number on wrong side of street, rural box numbers in a 9-1-1 address area, numbers improperly affixed, numbers illegible, numbers unclear, numbers obstructed, numbers not visible, numbers not present, numbers of improper size, numbers not in contrast with immediate background, weatherworn numbers, wrong numbers, and non-approved numbers.
- Section 2.10 “Occupant” is any person, firm, entity, partnership, trust, corporation, association or other organization that is occupying or leasing a building or other property for a period exceeding thirty (30) days.
- Section 2.11 “Owner” is any and all persons, firms, entities, partnerships, trusts, corporation, associations, or other organizations that own the fee title to, or have an undivided interest in, any building or property, which is subject to the provisions of this Ordinance.

- Section 2.12 “City-type address” means a unique address for a structure using a building number and street name. “City-type addresses” are based on an address system, which means that they usually appear in a consistent numeric sequence along a street and reflect parity conventions (that is, odd numbers all appear on one side of the street and even numbers on the other). If number assignment is based on a standard numbering interval, then the “city-type address” will also logically provide a distance location from the beginning point of the road.
- Section 2.13 “Emergency services purposes” means use for 9-1-1 or enhanced 9-1-1 dispatch and response.
- Section 2.14 “West Virginia Statewide Addressing and Mapping Project” means the project for the creation of a statewide addressing and mapping system for emergency services purposes, but usable as a base for other purposes, in accordance with and consistent with Chapter 24E, Article 1 of the West Virginia Code.
- Section 2.15 “West Virginia Statewide Addressing and Mapping System” or “the System” means the system to be created as a result of the Project, in which Sample County Commission is participating, including, without limitation, the establishment of city-type addressing and mapping systems essential to the prompt and accurate dispatch of emergency service providers. The terms “Statewide Addressing and Mapping System” and “the System” also include any local modifications that may be made to the System in order to tailor it to meet specialized local concerns.

Section 3: APPOINTMENT AND DUTIES OF ADDRESSING AND MAPPING COORDINATORS

- Section 3.1 _____ is hereby appointed the Sample County Addressing Coordinator. In addition to the duties set forth elsewhere in this Ordinance, the Sample County Addressing Coordinator has the following duties:
- Section 3.1.1 The Sample County Addressing Coordinator shall recommend names, for approval by the Sample County Commission, to any public or private road or street in Sample County, which provides access to two or more occupied buildings.

- Section 3.1.2 The Sample County Addressing Coordinator shall negotiate with residents along streets or roads bearing duplicate or confusingly similar names in the Sample County and to recommend name changes of such roads or streets to eliminate such duplication or confusing similarity. The Sample County Addressing Coordinator shall direct the placement of street signs at intersections within the Sample County. The initial costs of such signs and installation will be funded by the Sample County Commission for all unincorporated areas of Sample County.
- Section 3.1.3 The Sample County Addressing Coordinator shall recommend a “Sample County Road Name Index” for adoption by the Sample County Commission and filing in the Office of the Sample County Clerk. This Index is to be the official listing of names for streets and roads in Sample County and such streets and roads are hereby assigned the names listed therein. As used in the Ordinance, the terms “street” and “road” shall have the same meaning and shall also include but not limited to avenues, boulevards, highways, lanes, ways, and similar street types.
- Section 3.1.4 The Sample County Addressing Coordinator shall cooperate with the West Virginia Statewide Mapping and Addressing Board, the Board’s Project Manager, the Sample County 9-1-1 Director, the West Virginia Enhanced 9-1-1 Council, the Sample County’s Assessor’s office, municipal corporations within Sample County, the United States Postal Service and other interested agencies and persons in order to accomplish, within Sample County, city-type addressing and other systems essential to the prompt and accurate dispatch of emergency service providers or other emergency services or 9-1-1 purposes, and for such other goals of the West Virginia Statewide Addressing and Mapping Project. The Sample County Addressing Coordinator may not, however, take any official action not expressly authorized in this Ordinance or otherwise by the Sample County Commission.
- Section 3.1.5 In applying this Ordinance and the guidelines in the West Virginia 9-1-1 Addressing Handbook, the Sample County Addressing Coordinator shall have the authority, in cooperation with the above agencies, to interpret this Ordinance to ensure a logical and efficient numbering and street addressing system.
- Section 3.2 _____ is appointed the Sample County Mapping Coordinator. The Sample County Mapping Coordinator shall cooperate with the West Virginia Statewide Mapping and Addressing Board, the Board’s Project Manager, the Sample

County 9-1-1 Director, the West Virginia Enhanced 9-1-1 Council, the Sample County's Assessor's office, municipal corporations within Sample County and other interested agencies and persons in order to accomplish, within Sample County, digital mapping and other systems essential to the prompt and accurate dispatch of emergency service providers or other emergency services or 9-1-1 purposes, and for such other goals of the West Virginia Statewide Addressing and Mapping Project. The Sample County Mapping Coordinator may not, however, take any official action not expressly authorized in this Ordinance or otherwise by the Sample County Commission.

Section 4: INTERPRETATIONS AND APPLICATION

This Ordinance is to be interpreted and applied consistent with the West Virginia Statewide Addressing and Mapping System. The Sample County Addressing Coordinator and the Sample County Mapping Coordinator shall make any necessary application to the Board for a waiver, or for local modifications of the System in order to tailor it to this Ordinance.

Section 5: STRUCTURE AND LOCATION NUMBERING AND DISPLAY

Section 5.1 Whenever any house, building, or structure is erected or located after the initial establishment of the uniform numbering system as provided herein, it shall be the duty of the property owners to procure the correct number or numbers for the property and to affix these numbers to the building in accordance to this Ordinance. The owner shall place or cause to be placed upon each house or building controlled by him the number or numbers assigned under the uniform number system within thirty (30) days of notification of the assigned address. The cost of posting the address shall be the responsibility of the property owner.

Section 5.2 The owner shall file an application for an address assignment with the Sample County Addressing Coordinator or such other duly authorized agent of the Sample County Commission. No address may be assigned until the footer is in place and properly inspected. The address must be issued not later than sixty (60) days following identification of address and installed on the structure prior to final inspection.

- Section 5.3 Display of Number – Residential Structure – Each primary structure must display the number of the address assigned to that address. The street number for residences shall be in accordance with The BOCA National Property Maintenance Code, Section PM-303.3, Exterior Structure, Premises Identification. The numbers shall be in Arabic numerals at least four (4) inches in height, and of a durable and clearly visible material. The numbers shall be placed on, above, or at the side of the main entrance so the number is clearly visible from the public right-of-way. Whenever a residence entrance is greater than fifty (50) feet from a public right of way, or not clearly visible from the public right-of-way, a number shall also be placed end the end of a driveway, or property entrance. Address numbers are to be a contrasting color to the background on which they are mounted.
- Section 5.5 The owner or person in charge of any house, building, mobile home, or other structure to which a number has been assigned shall affix the number as outlined in this Ordinance within thirty (30) days after the receipt or notification of such number.
- Section 5.6 Display of Number – Commercial and Industrial Structure – Address numbers for commercial and industrial structures must follow BOCA PM 303.3 code regulations of at least six (6) inches in height. The number must be placed above or on the main entrance to the structure when possible. If such number is not clearly visible from the public right-of-way, the number must be placed along a driveway or on a sign visible from the same. Address numbers are to be a contrasting color to the background on which they are mounted.
- Section 5.7 Display of Number – Apartments and Similar – The address number assigned to a single building number shall be displayed on each assigned structure following the BOCA PM 303.3 code. Numbers and/or letters for individual apartments or units within these complexes must be displayed on, above, or to the side of the main doorway of each apartment or unit. It shall be the responsibility of the property owner to affix apartment or unit numbers.
- Section 5.7.1 Display of Number – Trailer Park and Similar – The address number assigned to a trailer within an organized trailer park must be one address number for the trailer park with each trailer assigned a lot or space number. The lot or space number must be posted and permanently affixed to the lot identifying the lot or space number. The main address to the trailer park must be

posted at the entrance of the park. Address numbers are to be a contrasting color to the background on which they are mounted.

Section 5.8 The combination of such an address number and the road or street name must be the official address of such primary structure.

Section 5.9 All costs to individuals or households in complying with this section of the Ordinance must be borne by that individual or household.

Section 6: ROAD NAMING

Section 6.1 The “Sample County Road Name Index” is to be the official listing of names for streets and roads in Sample County.

Section 6.2 No street within the Sample County may be assigned a name on a subdivision plat or otherwise until such name is registered with the Sample County Commission, approved, and added to the Sample County Road Name Index. The Sample County Commission, or the duly authorized agent, shall have the authority to refuse registration of any name already in use, confusingly similar to a name already registered, deemed confusing for purposes of emergency response, or deemed inappropriate by the Sample County Commission.

Section 6.3 No street name currently shown on a subdivision plat filed with the Sample County or otherwise shall be implemented by a subdivision owner until such name has been registered, approved and added to the Sample County Road Name Index. The Sample County Addressing Coordinator shall have the authority to refuse registration of any name already in use, confusingly similar to a name already registered, deemed confusing for purposes of emergency response, or deemed inappropriate by the Sample County Commission.

Section 6.4 Road names may not duplicate road names already assigned, irrespective of road name prefixes or suffixes except for roads located within different corporations.

Section 6.5 A street name may not be differentiated using the same name by changing the street suffix such as a street or avenue.

Section 6.6 A Street may have only one name throughout its entire length unless approved as an exception by the Sample County Commission.

Section 6.7 Following the completion of the address conversion portion of the Statewide Addressing and Mapping Project within Sample County, there shall be a moratorium on changes in road and street names in the unincorporated parts of the Sample County for a period of two (2) years.

Thereafter, a petition requesting a change in name, signed by owners of eighty percent (80%) of the parcels on the street whose name is proposed to be changed, shall be filed with the Sample County Clerk. Such petition should not be filed until the Sample County Commission, or duly authorized agent, confirms the availability of the proposed name, but, not later than ninety (90) days following such confirmation.

Documentation such as a tax bill or deed, showing the ownership of each signatory to the petition must accompany the petition at the time of filing.

A non-refundable deposit of \$_____ shall accompany the petition. Upon approval of the name change, the petitioner shall be obligated to pay to the Sample County for the actual costs incurred by the name change.

Residents along the affected road or street shall be responsible for advising the United States Postal Service of such road or street name change. The Sample County Addressing Coordinator may also provide notice of such change to the United States Postal Service.

Section 7: STREET SIGNS

Section 7.1 All new street signs erected within Sample County must be in conformance with the specifications of this section, unless the West Virginia Department of Transportation, Division of Highways or the Sample County Commission grants a variance.

Section 7.2 The owner of any subdivision or other development shall erect or cause to be erected street signs in conformance with this Ordinance at any and all intersections within such subdivision or

development upon construction of any street on or after the effective date of this Ordinance, unless, by vote of the Sample County Commission, such responsibility is assumed by the Sample County Commission or its duly authorized agent. Where any subdivision owner is currently required to erect street signs but has failed to do so, the future erection of street signs shall be in conformance with this Ordinance.

Section 7.3 Sign Specifications – All signs erected shall be in conformance, at minimum, to West Virginia Department of Transportation, Division of Highways specifications as defined in the “Standards for the Design and Installation of Road Name Signing” published March 1999.

Section 7.4 Signage which is damaged or destroyed shall be the responsibility of the individual(s) causing such damage or destruction, whether by negligence or otherwise. The agency or individual(s) responsible for maintenance of the damaged sign shall have the authority to recover the costs of replacing the sign from the individual(s) causing such damage or destruction.

Section 7.5 Any such person found to be responsible for damage or destruction of any road or street sign shall pay to the Sample County all of the costs for such damage or destruction, including but not limited to, costs for sign removal and replacement. Failure to pay for damage or destruction may result in legal action against the responsible party for all costs, such as court costs and reasonable attorney fees.

Section 8: MAPPING

Section 8.1 Sample County Commission hereby adopts the Statewide Addressing and Mapping System as the base map for Sample County.

Section 8.2 Emergency services or 9-1-1 dispatch within Sample County must utilize the Statewide Addressing and Mapping System, when completed.

Section 8.3 The core layers of maps for Sample County may include, but need not necessarily be limited to, CADASTRAL, ELEVATION, GEODETIC CONTROL, GOVERNMENTAL UNITS, HYDROGRAPHY, ORTHOIMAGERY, TOPOGRAPHIC MAPS and TRANSPORTATION.

- Section 8.4 The application layers of maps for Sample County may include, but need not be limited to, GEOLOGY, LAND COVER and SOILS.
- Section 8.5 The Sample County Mapping Coordinator shall propose a plan for the future maintenance of the maps for Sample County that are to be delivered by the West Virginia Statewide Addressing and Mapping Board to Sample County Commission pursuant to W. Va. Code Article 24E-1-1, et seq. The Sample County Mapping Coordinator shall seek the advice of West Virginia Statewide Addressing and Mapping Board, the Sample County 9-1-1 Director, the West Virginia Enhanced 9-1-1 Council, the Sample County's Assessor's office, and other interested agencies and persons prior to proposing such a plan. The Sample County Mapping Coordinator shall propose such plan no later than the date that the maps are ready for delivery.
- Section 8.8 Sample County Mapping Coordinator, as from time to time authorized by the Sample County Commission, may delegate, contract or cooperate with individuals, companies, corporations, governmental organizations or sub-divisions to coordinate, update and maintain the Sample County base map.

Section 9: APPEALS, AMENDMENT, CONFLICT WITH OTHER LAWS, VALIDITY

- Section 9.1 During the initial project stage and prior to the completion of the Statewide Addressing and Mapping Project within Sample County, any requests concerning road name changes and/or addressing complaints will first be directed to the Sample County Addressing Coordinator, or other duly authorized agent of the Sample County Commission, within thirty (30) days from the time of road name or address assignment. If the initial contact does not satisfy the individual's concern, he or she may appeal the decision to the Sample County Commission for final disposition provided, however, that all such appeals must be filed no later than 10 days after the decision. The Commission may, at its discretion, hear such appeals as oral argument or may rule based upon the written appeal. All such appeals shall be decided on or before 30 days after the appeal is heard.
- Section 9.2 After implementation of the Statewide Addressing and Mapping System within Sample County, any concerns, problems, or complaints regarding the naming and numbering system are to be handled on a case-by-case basis by the Sample County Addressing

or Mapping Coordinator, as the case may be, and if necessary, by the Sample County Commission.

- Section 9.3 Amendment - By lawful procedure, the Sample County Commission may, from time to time, amend, supplement or change the provisions of this Ordinance.
- Section 9.4 Conflict With Other Laws - Where the provisions of this Ordinance impose greater restrictions than those of any other ordinance or regulation, the provision of this Ordinance shall be controlling. Where the provision of any statute, other ordinance or regulation imposes greater restrictions than this Ordinance, the provisions of such statute, ordinance or regulations shall be controlling.
- Section 9.5 Validity – If any article, section, subsection, paragraph, clause or provision of this Ordinance shall be declared by a court of competent jurisdiction to be invalid, such decisions shall not affect the validity of this Ordinance as a whole or any other part thereof.

Section 10: PENALTIES AND ENFORCEMENT

- Section 10.1 It is unlawful for any person to violate this Ordinance. When it appears that a violation of this Ordinance has occurred, the responsible party shall be notified by means of a written Violation Notice. The Violation Notice shall specify the nature of the violation and shall request that the violation be terminated within 30 days from the date appearing on the notice. After thirty (30) days of non-compliance from the time of written notification, the violation of any section of this Ordinance shall be deemed a misdemeanor punishable by a fine of not to exceed five hundred dollars (\$500.00). Each day a violation continues shall constitute a separate offense.
- Section 10.2 Whenever the Sample County Commission's duly authorized agent has reason to believe there has been or there exists a violation of this Ordinance, the Commission shall give written notice of such violation to the person failing to comply, and order the person to take corrective measures within thirty (30) days from date of notification. If such person(s) fail to comply with the duly issued order, the Sample County Commission shall initiate necessary actions to terminate the violation through the Sample County Court.

Section 11: ADOPTION AND SIGNATURES

Section 11.1 This Ordinance is effective

Adopted this _____ day of _____, _____.

SAMPLE COUNTY COMMISSION

President of the Commission

Commissioner

Commissioner

APPENDIX F
MODEL MUNICIPAL ADDRESSING ORDINANCE

CITY (TOWN) OF SAMPLE

CITY (TOWN) OF
SAMPLE, WEST
VIRGINIA

9-1-1 ADDRESSING
AND MAPPING
ORDINANCE

**AN ORDINANCE TO PROVIDE FOR THE COOPERATION OF THE CITY [TOWN]
OF SAMPLE WITH THE SAMPLE COUNTY COMMISSION FOR THE
IMPLEMENTATION OF 9-1-1 ADDRESSING AND MAPPING WITHIN THE CITY
[TOWN] OF SAMPLE, WEST VIRGINIA, IN CONNECTION WITH THE WEST
VIRGINIA STATEWIDE ADDRESSING AND MAPPING PROJECT**

In order to provide for the uniform assignment and maintenance of street addresses and to provide for easy identification of those numbers for various purposes and to promote the health, safety and welfare of the citizens of the City [Town] of Sample, West Virginia, the Council of the City [Town] of Sample enacts this Ordinance as follows:

WHEREAS, pursuant to West Virginia Code Article 8-12-5, the City [Town] of Sample has the authority to regulate the use of streets, avenues, roads, alleys, ways, sidewalks, crosswalks and public places belonging to the City [Town] of Sample, including the naming or renaming thereof, and to consult with local postal authorities, the division of highways and the directors of county emergency communications centers to assure uniform, nonduplicative addressing on a permanent basis, and,

WHEREAS, pursuant to W. Va. Code Articles 7-1-3 and 7-1-3cc, and consistent with W. Va. Code Article 24E-1-1 et seq., the Sample County Commission has the authority to provide for the elimination of hazards to public health and safety; to establish and regulate the naming or renaming of roads, ways, streets, avenues, drives and the like, in cooperation with local postal authorities, the division of highways and the directors of Sample County emergency communications centers; and to assure uniform, non-duplicative conversion of all rural routes to city-type addressing on a permanent basis; may cooperate with other governmental units, shall maintain and update the addressing and mapping framework within their jurisdictions, and,

WHEREAS, the establishment of an Enhanced 9-1-1 Emergency Telephone System in Sample County has been approved and implemented by the Sample County Commission, and,

WHEREAS, the establishment of such system requires the assignment of names to all streets and roads in Sample County, the assignment of building numbers to all buildings having telephones and/or occupancies, the erection of appropriate street signs at intersections; and the maintenance of a statewide mapping system, and,

WHEREAS, the City [Town] of Sample has the authority to delegate, contract or cooperate with other governmental units, including, without limitation, Sample County Commission, and,

WHEREAS, the Sample County Commission has elected to participate in the Statewide Addressing and Mapping Project, pursuant to Title 169, Series 2 of the Code of State Rules, thus promoting the goal of prompt and accurate dispatch of emergency services or 9-1-1 personnel in Sample County, and thereby enhancing the safety of the lives and property of the citizens and residents of Sample County, and,

WHEREAS, the Sample County Commission has adopted a County Addressing Ordinance effective _____, providing for municipalities within the County to adopt cooperative ordinances, and,

WHEREAS, the City [Town] of Sample wishes to cooperate with the Sample County Commission, thereby enhancing the safety of the lives and property of the citizens and residents of the City [Town] of Sample, and,

WHEREAS, the Council of the City [Town] of Sample has elected to participate in the Statewide Addressing and Mapping Project, pursuant to Title 169, Series 2 of the Code of State Rules, thus promoting the goal of prompt and accurate dispatch of emergency services or 9-1-1 personnel in Sample County, and thereby enhancing the safety of the lives and property of the citizens and residents of Sample County,

NOW, THEREFORE, BE IT ORDAINED this _____ day of _____, 200__ by the Council of the City [Town] of Sample, West Virginia, Ordinance Number____.

Section 1: APPLICABILITY

Section 1.1 The provisions of this Ordinance apply to all areas of the City [Town] of Sample, except as may be expressly set forth below.

Section 1.2 Pursuant to the Emergency Rules of the West Virginia Statewide Addressing and Mapping Board on file with the office of the Secretary of State, Title 169, Series 2 of the Code of State Rules, the City [Town] of Sample hereby elects to participate in the West Virginia Statewide Addressing and Mapping Project. (Optional addition: The Mayor of the City [Town] of Sample shall, pursuant to those Emergency Rules, serve notice of this election on the Board within five (5) days of the enactment of this Ordinance, together with a true copy of this Ordinance.)

Section 2 COORDINATION WITH COUNTY ADDRESSING PROGRAM; ADOPTION OF ADDRESSING PROGRAM; PENALTIES FOR NON-COMPLIANCE

Section 2.1 All provisions of the 9-1-1 Addressing and Mapping Ordinance of the Sample County Commission, dated _____, including the penalties for non-compliance, hereby apply within the City [Town] of Sample County, as if fully set forth herein, except as set forth in Section 2.2 below.

Section 2.2 Nothing in this ordinance affects existing city-type addresses, which are satisfactory for 9-1-1 and emergency services purposes, provided that those addresses are consistent with the Statewide Addressing and Mapping Project and otherwise comply with the Rules and Regulations of the West Virginia Statewide Addressing and Mapping Board.

Section 3 APPOINTMENT AND DUTIES OF ADDRESSING AND MAPPING COORDINATORS

Section 3.1 The Sample County Addressing Coordinator shall act as the Addressing Coordinator for the City [Town] of Sample. The Addressing Coordinator may not, however, take any official action not expressly authorized in this Ordinance or in the 9-1-1 Addressing and Mapping Ordinance of Sample County, dated _____, without the approval of the Council of the City [Town] of Sample.

***[Alternative:** _____ is hereby appointed the Addressing Coordinator for the City [Town] of Sample. The Addressing Coordinator for the City [Town] of Sample shall cooperate with the Sample County Addressing Coordinator, West Virginia Statewide Mapping and Addressing Board, the Board's Project Manager, the Sample County 9-1-1 Director, the West Virginia Enhanced 9-1-1 Council, the Sample County's Assessor's office, municipal corporations within Sample County, the United States Postal Service and other interested agencies and persons in order to accomplish, within the City [Town] of Sample, city-type addressing and other systems essential to the prompt and accurate dispatch of emergency service providers or other emergency services or 9-1-1 purposes, and for such other goals of the West Virginia Statewide Addressing and Mapping Project; provided, however, that the Addressing Coordinator for the City [Town] of Sample shall coordinate principally through the Sample County Addressing Coordinator for purposes of the implementation of the West Virginia Statewide Addressing and Mapping Project within the City [Town] of Sample. The Addressing Coordinator of the City [Town] of Sample may not take any official action not expressly authorized in this Ordinance or in the 9-1-1 Addressing and Mapping Ordinance of Sample County, dated _____, without the approval of the Council of the City [Town] of Sample.*

Section 3.2 The Sample County Mapping Coordinator shall act as the Mapping Coordinator for the City [Town] of Sample. The Mapping Coordinator may not, however, take any official action not expressly authorized in this Ordinance or in the 9-1-1 Addressing and Mapping Ordinance of Sample County, dated _____, without the approval of the Council of the City [Town] of Sample.

***[Alternative:** _____ is hereby appointed the Mapping Coordinator for the City [Town] of Sample. The Mapping Coordinator for the City [Town] of Sample shall cooperate with the Sample County Mapping Coordinator, West Virginia Statewide Mapping and Addressing Board, the Board's Project Manager, the Sample County 9-1-1 Director, the West Virginia Enhanced 9-1-1 Council, the Sample County's Assessor's office, municipal corporations within Sample County, the United States Postal Service and other interested agencies and persons in order to accomplish, within the City [Town] of Sample, city-type addressing and other systems essential to the prompt and accurate dispatch of emergency service providers or other emergency services or 9-1-1 purposes, and for such other goals of the West Virginia Statewide Addressing and Mapping Project; provided, however, that the Mapping Coordinator for the City [Town] of Sample shall coordinate with other agencies and persons principally through the Sample County Mapping Coordinator for purposes of the implementation of the West Virginia Statewide Addressing and Mapping Project within the City [Town] of Sample. The Mapping Coordinator of the City [Town] of Sample may not take any official action not expressly authorized in this Ordinance or in the 9-1-1 Addressing and Mapping Ordinance of Sample County, dated _____, without the approval of the Council of the City [Town] of Sample.*

Section 4 INTERPRETATION AND APPLICATION

This Ordinance is to be interpreted and applied consistent with the West Virginia Statewide Addressing and Mapping System. The Addressing Coordinator and the Mapping Coordinator of the City [Town] of Sample shall make any necessary application to the Statewide Addressing and Mapping Board for a waiver, or for local modifications of the Statewide Addressing and Mapping System in order to tailor it to this Ordinance.

Section 5 ADOPTION AND SIGNATURES

Section 5.1 This Ordinance is effective _____.

Adopted this _____ day of _____, _____.

Council of the City [Town] of Sample, West Virginia

APPENDIX G

US POSTAL SERVICE LETTER OF CONFIDENTIALITY

9-1-1 ADDRESS INFORMATION CONFIDENTIALITY AGREEMENT

_____ (hereinafter called "the County") hereby certifies that it has the authority to fulfill the County's locatable address conversion needs for ZIP Code area(s) _____ in connection with its Emergency 9-1-1 program.

In consideration of the agreement by the United States Postal Service (USPS) to provide to the County name and address information, for the purpose of assisting in such address conversion, the County hereby agrees to protect the confidentiality of any such address information, to use such information solely for the purpose of Emergency 9-1-1 System implementation, and to limit access to such information to those employees of the County having a need to know.

The County agrees not to copy any address information received from the USPS and to return all such information to the USPS within 30 days after it has completed its addressing project, or immediately upon demand of the USPS. The County agrees that it will not at any time disclose to the public, in any manner, any address information received from the USPS or any address information resulting from such information.

I, _____ (name), _____ (title), am duly authorized to act on behalf of the County in entering into this agreement, and agree to all the terms and conditions of this agreement on behalf of the County.

Signature Date

Telephone number, including area code

WARNING: **The furnishing of false information on this agreement may result in a fine of not more than \$10,000 or imprisonment of not more than 5 years, or both. (18 USC 1001)**

Received by: _____
Print Signature Date

Title

APPENDIX H

INFORMATION LETTER TO RESIDENTS

Dear Resident,

Sample County is responding to legislation enacted to establish city-type addresses throughout all of West Virginia for Enhanced 9-1-1 service. The service is called Enhanced 9-1-1 because it displays the address of the caller on a computer screen at a call answering center. If a caller is hysterical, becomes unconscious, or is forced to hang up, the answering center will know exactly where to send help. Those unfamiliar with their location, such as out-of-state visitors, will also benefit.

To provide the exact location of a caller, each telephone number must be linked to a city-type address. A city-type address is a unique address that clearly identifies where a property is located, such as 911 Country Road or 98 Pine Lane. A rural route mailing address, such as RR1 Box 889, is not considered a city-type address.

Creating city-type addresses requires naming all roads with unique names and assigning numbers consistently to all properties. Once the road names and property numbers are assigned and adopted by our county/community, the new city-type addresses will be used primarily for 9-1-1 service. The US Postal Service, utilities, delivery services, and others will also use these addresses.

Recently, our county assigned an Addressing Coordinator to work with the state to create the city-type addresses recommended for 9-1-1 service. The committee will be holding public meetings and contacting residents to seek their comments during this addressing process. Citizen suggestions will specifically be sought in the renaming of roads, if necessary, to eliminate duplicate or similar-sounding road names and to name all public and private roads that are currently unnamed.

If you have any questions or wish to volunteer to assist addressing efforts, please contact the Sample County Addressing Coordinator below:

APPENDIX I CONTACT INFORMATION

West Virginia Statewide Addressing and Mapping Board

West Virginia Statewide Addressing and Mapping Board
Greenbrooke Building
1124 Smith Street, Room LM-10
Charleston, WV 25301-1323
304-558-4218
info@addressingwv.org

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