



West Virginia E9-1-1 Addressing Reference Guide Version 2.1

September 2008

DRAFT

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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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 E9-1-1 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 will continue to 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 E9-1-1 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 E9-1-1 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 final, revised reference guide, a standard addressing

process, training, and continued support for the statewide addressing project. The *WV 9-1-1 Addressing Handbook, First Edition* was released in April 2003 and provided detailed information on how local governments should start their E9-1-1 addressing process and the critical role that they must play in the E9-1-1 addressing and database development process. The WVSAMB released a second edition handbook, the *WV 9-1-1 Addressing Handbook, Volume II* in October 2004, which provided the necessary tasks for completing the addressing process.

This *West Virginia E9-1-1 Addressing Reference Guide* combines the valuable and relevant tasks and standards from the first two handbooks, and is to serve as the final guide for the statewide addressing project. Tasks from the handbooks, which are now obsolete, have been updated accordingly. Please refer to this final and completed reference guide for direction on the addressing project.

The WVSAMB invites all counties and municipalities to participate in this statewide E9-1-1 addressing project, support for which is only available for a limited time. By participating, county and municipal officials will ensure that all citizens of West Virginia receive the full benefit of E9-1-1 service. The lives and property of your fellow citizens may well depend on your decision to participate in this important project.

Currently, the WVSAMB is implementing an enterprise Geospatial Information System designed to meet the very mission-specific addressing and mapping needs of the state. This system will provide county addressing coordinators with Web-based, easy-to-use tools necessary to perform project-specific functions, such as conflation, advanced-reporting, advanced import/export tools, and matching capabilities. The system will also serve as the long-term maintenance solution, and is to be maintained and housed by the West Virginia Department of Military Affairs and Public Safety's, Division of Homeland Security and Emergency Management Addressing Coordination Office (WVDSHEM-ACO) and the Governor's Office of Technology (WVGOT), respectively.

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1.0 INTRODUCTION TO THE E9-1-1 ADDRESSING REFERENCE GUIDE AND NOTES ON PREVIOUS HANDBOOKS

The West Virginia Statewide Addressing and Mapping Board (WVSAMB or Board) developed the *West Virginia 9-1-1 Addressing Handbook, First Edition*, which was released in April 2003. This edition described the tasks that counties and municipalities needed to accomplish to prepare themselves for the addressing project. The First Edition contained the following information:

- An overview of the West Virginia Statewide Mapping and Addressing Project.
- A set of Frequently Asked Questions (FAQs) about the project.
- An overview of the roles and responsibilities in the project.
- An overview of the WVSAMB and its project manager and contractors.
- A detailed list of tasks for participating counties and municipalities to complete prior to working with the WVSAMB Addressing Contractor.
- An appendix that includes:
 - A basic glossary of E9-1-1 terms
 - *WV E9-1-1 Addressing Standards* for road naming, property numbering, number posting, and road signage.
 - Model addressing ordinances for counties and municipalities.
 - Sample letters for requesting USPS data and for notifying residents about the project.

The *West Virginia 9-1-1 Addressing Handbook, Volume II* was developed to provide information to counties and municipalities for completing the statewide E9-1-1 addressing project begun in 2002. This Volume II, released in October 2004, built upon the tasks outlined in the First Edition by providing

detailed information on those tasks that remain to be accomplished by local governments.

The *West Virginia 9-1-1 Addressing Handbook, Volume II* contained the following information:

- Described the tasks to be undertaken by counties and municipalities to complete E9-1-1 address assignment and E9-1-1 database development.
- Described how counties and municipalities will work with the WVSAMB and its contractors, using the mapping, addressing, and database tools and other provided materials.
- Updated resources, such as the Permanent Rules adopted by the Board and enacted by the West Virginia Legislature in April 2004.
- Discussed short-term and long-term maintenance of E9-1-1 mapping data and addressing databases.

This *West Virginia E9-1-1 Addressing Reference Guide* combines the valuable and relevant tasks and standards from the first two handbooks, and is to serve as the final guide for the statewide addressing project. Tasks from the handbooks, which are now obsolete, have been updated accordingly. Please refer to this final and completed reference guide for direction on the addressing project.

For additional copies of the West Virginia E9-1-1 Addressing Reference Guide, please contact the WVSAMB office at 304-558-5300 or www.addressingwv.org.

2.0 WEST VIRGINIA STATEWIDE ADDRESSING AND MAPPING BOARD

The West Virginia Statewide Addressing and Mapping Board 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 are 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.

Since 2002, the WVSAMB has accomplished the following tasks in fulfillment of its statutory mission:

- Hired 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 a mapping contractor to create the mapping layers necessary to support addressing, a task that was completed in August 2004.
- Published and distributed over 1500 copies of the *West Virginia 9-1-1 Addressing Handbook, First Edition* and the *West Virginia 9-1-1 Addressing Handbook, Volume II* in 2003 and 2004 to county and municipal officials and others.
- Hired an addressing contractor in late 2003 to create new city-style addresses for addressable structures that lacked them.
- Developed and implemented the West Virginia Statewide Addressing and Mapping System (WVSAMS) for the long term maintenance and sustainment of the WVSAMB and County E9-1-1 databases.

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 E9-1-1 systems from counties with a population of thirty thousand or less, directors of E9-1-1 systems from counties with a population of greater than thirty thousand, local exchange telephone companies, and the public at large. WVSAMB members and their contact information are available in Section 3.0.

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 304-558-5300.

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4.0 OVERVIEW OF WEST VIRGINIA E9-1-1 ADDRESSING PROCESS

Enhanced 9-1-1 service (E9-1-1) 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 reference guide, standards, training, and extensive support provided by the WVSAMB.

The primary goal of E9-1-1 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.

E9-1-1 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. E9-1-1 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 E9-1-1 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 E9-1-1 service and emergency response.

Some of the benefits of implementing E9-1-1 addresses include:

- A property number and road name will be displayed on a computer screen at a call answering center when dialing E9-1-1 in an emergency, thus providing the greatest benefit from Enhanced 9-1-1 service.
- Because an E9-1-1 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 an E9-1-1 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.

4.1 THE WEST VIRGINIA E9-1-1 ADDRESSING PROCESS GENERAL STEPS

The general steps in the West Virginia E9-1-1 addressing process are listed below. Tasks to be completed by local governments are divided into two phases, preparatory tasks and completion tasks. Preparatory tasks are steps for counties or municipalities to begin the E9-1-1 addressing process. These tasks will

prepare the county or municipality for working with the WVSAMB. Completion tasks are those steps necessary to *complete* the addressing project. The WVSAMB will assist counties and municipalities as they undertake and accomplish the steps for completing the E9-1-1 addressing and database development process.

4.1.1 Preparatory Tasks

Preparatory tasks are those that were discussed in the *West Virginia 9-1-1 Addressing Handbook, First Edition*. These steps defined tasks that participating counties and municipalities need to accomplish to start the process of creating E9-1-1 addresses. Tasks counties and municipalities should complete to prepare for the addressing project:

1. Provide a written commitment for project participation to the WVSAMB by December 2003.
2. Appoint an Addressing Coordinator to work with the WVSAMB.
3. Identify and name all roads in the county emergency road network. Eliminate conflicting road names.
4. Adopt E9-1-1 addressing standards.
5. Enact an addressing ordinance incorporating addressing standards and detailing the process.
6. Notify residents of the E9-1-1 addressing process.
7. Apply for WVSAMB Partial Reimbursement Funds
8. For counties or communities without city-type addresses:
 - Review and/or update current tax database mailing addresses.
9. For counties or communities with existing city-type addresses:
 - Review existing city-type addresses to evaluate how well they meet the West Virginia E9-1-1 Addressing Standards adopted by the WVSAMB.
10. Contact adjacent counties or the county's municipalities to discuss the naming and numbering of shared roads.
11. Review road names and approve changes, to the extent possible.
12. Identify staff to work with WVSAMB.

The above activities will be discussed in further detail in Section 6.0.

4.1.2 Completion Tasks

The WVSAMB will assist counties and municipalities as they undertake and accomplish the steps for completing the E9-1-1 addressing and database development process. This assistance includes support for completing those preparatory tasks yet to be accomplished, guidance on addressing issues, and tools for assigning and confirming road names, reviewing assigned property addresses and Master Street Address Guides, identifying Emergency Service Zones, completing address conversions with the US Postal Service and telephone companies, and beginning address and mapping maintenance.

The remaining steps for local governments to accomplish include:

1. Complete road centerline and site mapping.
2. Finalize names for all roads to eliminate conflicts or similar sounding names.
3. Delineate Emergency Service Zone boundaries, in conjunction with neighboring jurisdictions.
4. Assign city-type addresses to all addressable structures, or review city-type addresses in already-addressed areas.
5. Perform field collection (where needed).
6. Complete field edits, if necessary.
7. Perform old-to-new address matching for each site.
8. Perform telephone number (TN) matching for each site.
9. Create rural address conversion packages for the US Postal Service, where rural mail delivery exists. Prepare address notification letters for citizens.
10. List updates to local telephone company databases that assign city-type addresses to all telephones.
11. For areas with city-type addresses, conflate original address information onto WVSAMB mapping.

12. Create or update final Master Street Address Guides (MSAGs).
13. Maintain addressing and mapping data upon completion of all addressing activities.

The above activities will be discussed in further detail in Section 7.0.

Completion of the preparatory and completion tasks 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. The WVSAMB addressing support 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 reference guide. 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 statewide E9-1-1 addressing standards, E9-1-1 database requirements, US Postal Service address conversion requirements, WVSAMB data specifications, and all written agreements with the WVSAMB. Please consult the *West Virginia Statewide Addressing and Mapping System Data Specification* for further details regarding data specifications 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 E9-1-1 Addressing Standards* adopted by the WVSAMB and found in this reference guide under Appendix C. 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 ROLES AND RESPONSIBILITIES

The following pages provide specific information regarding the roles and responsibilities of various entities in the West Virginia E9-1-1 addressing process. Sections 6.0 and 7.0 detail the responsibilities of the Counties and Municipalities (if applicable), including those with, and those without, City-Type Addresses. In this section, information is provided for the following entities:

- West Virginia Statewide Addressing and Mapping Board (WVSAMB)
- WVSAMB Contractors
- West Virginia Department of Military Affairs and Public Safety, Division of Homeland Security and Emergency Management (WVDHSEM)
- US Postal Service
- Verizon and Independent Telephone Companies

5.1 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 or reference guide 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 E9-1-1 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.

5.1.1 WVSAMB Project Manager

- Design the addressing and mapping system.
- Train counties in the use of WVSAMS.
- 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.

5.1.2 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.

5.1.3 WVSAMB Addressing Contractor

The WVSAMB addressing contractor created new city-style addresses for many addressable structures that lacked them. These have been incorporated into the WVSAMS database.

5.2 ROLE OF THE WEST VIRGINIA DEPARTMENT OF MILITARY AFFAIRS AND PUBLIC SAFETY, DIVISION OF HOMELAND SECURITY AND EMERGENCY MANAGEMENT (WVDHSEM)

In the absence of an addressing contractor, the State shall implement an Addressing Coordination Office (ACO) within the West Virginia Department of Military Affairs and Public Safety's (WVDMAPS) Division of Homeland Security and Emergency Management (WVDHSEM). Under the Director, the WVDHSEM-ACO shall be required to perform many of the "back-office" tasks needed to finish the project. WVDHSEM-ACO shall deploy and implement appropriate information technology tools, policies and human resources.

The WVDHSEM will play a key role in the E9-1-1 addressing and database development process by assisting counties and municipalities with the following:

- Providing resources to support a call-center to assist counties and municipalities with the matching phase of the project.
- Assisting with the development of tools for the WVSAMS, to facilitate TN and address matching, conflation, and reporting.
- Providing database management support for the underlying WVSAMB project.
- Producing cartographic output, such as maps and forms, to support additional field work and field edits for counties and municipalities.

WVDHSEM has adequate workspace, workstations, telecommunications infrastructure, output devices, input devices, and other components necessary to perform its role toward the completion of the project, as well as long-term sustainment activities. WVDHSEM-ACO shall provide call center resources to assist counties with address-to-TN matching and shall work closely with the WVSAMB Project Manager to design and implement additional tools to facilitate TN-matching, conflation, and reporting. WVDHSEM-ACO shall also utilize "thick-client" desktop mapping software to manage the WVSAMS database and to prepare cartographic output and other specialized data products necessary to complete the project.

5.3 ROLE OF THE US POSTAL SERVICE

The goal of E9-1-1 addressing is to create, to the maximum extent possible, one address that can be used for all purposes: E9-1-1 emergency response, postal delivery, utilities, and others. As part of the statewide E9-1-1 addressing effort, the US Postal Service is working closely with the WVSAMB to coordinate E9-1-1 addressing efforts. This cooperation is designed to coordinate the assignment of city-type addresses for E9-1-1 with postal address conversion on rural routes (RR) and highway contract (HC) routes. Adjustments to city delivery routes may also occur where there exists 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 are found in Section 7.0.

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 E9-1-1 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 E9-1-1 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.

5.4 ROLE OF VERIZON AND INDEPENDENT TELEPHONE COMPANIES

Verizon and the state's independent telephone companies will play a key role in the E9-1-1 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 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 E9-1-1 call to its correct call answering center.

The following two sections outline the roles and responsibilities of the counties to enable a successful outcome for the statewide addressing project.

6.0 TASKS TO PREPARE FOR THE E9-1-1 ADDRESSING PROCESS

The role the counties and municipalities play in the statewide addressing project is crucial for a successful outcome. Tasks to be completed by local governments are divided into two phases, preparatory tasks, which are listed in this section, and completion tasks (as listed in Section 7.0).

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 on E9-1-1 database development, counties and municipalities with city-type addresses should also review (and implement, where needed) the steps listed below.

The following is a series of steps for counties to start the E9-1-1 addressing process. Completion of these steps will prepare the county for working with the WVSAMB, who will assist the county with completing the E9-1-1 addressing and database development process.

6.1 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 E9-1-1 addressing project. If interested in participating, a county 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 E9-1-1 addressing process, which requires adherence to WVSAMB rules and addressing standards and to work in a timely fashion with the WVSAMB to complete identified tasks. Further information on the tasks required is

provided in this reference guide. 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.

6.2 APPOINT AN ADDRESSING COORDINATOR

The Addressing Coordinator will be responsible for coordinating all county or municipal addressing efforts and staff associated with the project, and for working closely with the WVSAMB 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, 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 E9-1-1 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 E9-1-1 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.
- Coordinate the activities of all Municipal Addressing Coordinators within the county with the WVSAMB (if a county Addressing Coordinator).

Later responsibilities of the Addressing Coordinator are described in Section 7.0, and include:

- Link new to old addresses from county tax records and for telephone subscribers.
- Identify intersection address ranges for all streets and roads (for areas with city-type addresses).
- Ensure that all telephone numbers are assigned the correct city-type address (for areas with city-type addresses).
- Identify Emergency Service Zone(s).
- Approve the Master Street Address Guide (MSAG).
- Complete an address conversion package for the US Postal Service.

Following completion of address assignment and conversion and development of all related E9-1-1 databases, the Addressing Coordinator's role will shift to one of address issuance and database maintenance. The Addressing Coordinator, or other staff, will need to:

- Notify residents and businesses of their new addresses.
- Update the county tax database with new addresses.
- Resolve discrepancies that arise with any addressing information in the E9-1-1 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 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.

6.4 ADOPT E9-1-1 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 E9-1-1 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 E9-1-1 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. For standard road name suffixes, please see Appendix C4.
- **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 in Appendix C2. 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 E9-1-1 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 E9-1-1 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 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 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 E9-1-1 Addressing Standards* found in Appendix C5.

6.5 ENACT AN ADDRESSING ORDINANCE.

Enacting an addressing ordinance provides several advantages: 1) the statutory authority for county or municipal 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.

E9-1-1 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 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. 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 E9-1-1 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.

6.6 NOTIFY RESIDENTS OF THE E9-1-1 ADDRESSING PROCESS

Counties and municipalities 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 for a sample letter that can be used to inform all property owners and residents of E9-1-1 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 E9-1-1 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.

6.7 APPLY FOR WVSAMB PARTIAL REIMBURSEMENT FUNDS

Participating counties are eligible for WVSAMB partial reimbursement funds. Counties that remain committed to using the WVSAMS and the WVSAMB procedures outlined in this reference guide are eligible to receive partial reimbursement funds, as deemed equitable for each county by the WVSAMB and the WV E9-1-1 Council.

Counties wishing to complete their addressing project using other tools, personnel, and procedures may do so. However in order to be eligible for WVSAMB funds, these counties must submit a detailed workplan including the technical methodology and schedule. To be eligible for WVSAMB funds counties shall develop electronic databases in accordance with the *West Virginia Statewide Addressing and Mapping System Data Specification*. The WVSAMB Data Specifications describe the database entities and attributes (data dictionary) in which final county deliveries must be made. If a county wishes to hire a contractor it may do so. The WVSAMB shall review and approve all contractor proposals to ensure that they adhere to the WVSAMB specifications. The WVSAMB shall review and approve all final data products and deliverables submitted by Counties.

6.8 REVIEW AND/OR UPDATE CURRENT TAX DATABASE MAILING ADDRESSES (FOR AREAS WITHOUT CITY-TYPE ADDRESSES)

A county or municipality 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 E9-1-1 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.

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

1. A statement that the county (municipality) is starting the statewide addressing project and will be working with the WVSAMB.
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.

6.9 REVIEW EXISTING CITY-TYPE ADDRESSES TO IDENTIFY PROBLEMS (FOR AREAS WITH CITY-TYPE ADDRESSES)

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. Counties and municipalities should approve and enact changes, as needed, once problems are recognized.

Please review the following issues to determine if existing city-type addresses meet West Virginia E9-1-1 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 E9-1-1 Addressing Standards in Appendix C 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 E9-1-1 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 county or 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 E9-1-1 Addressing Standards, please contact the WVSAMB at 304-558-4218 or via e-mail at info@addressingwv.org.

6.10 CONTACT ADJACENT COUNTIES AND MUNICIPALITIES WITHIN YOUR COUNTY.

Addressing Coordinators should contact adjacent counties and municipalities 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.

6.11 REVIEW ROAD NAMES FOR DUPLICATE OR SIMILAR-SOUNDING NAMES.

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. 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.

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 E9-1-1 address conversion process has been completed (for areas without city-type addresses) or for two years after the road name changes have been adopted (for areas with city-type addresses).

Again, jurisdictions 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.

6.12 IDENTIFY STAFF TO WORK WITH THE WVSAMB AND ITS CONTRACTORS.

The county or municipal Addressing Coordinator and staff will be asked to work in a timely manner with the WVSAMB and its contractors on a variety of tasks. These tasks will focus on completing the E9-1-1 addressing and database development process. Before these completion tasks can begin, however, all the tasks described above, especially the adoption of an addressing ordinance and

road naming, must be completed. Tasks to complete the E9-1-1 addressing and database process are detailed in the following section.

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 AND MUNICIPALITIES

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 authority 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 E9-1-1 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 E9-1-1 addressing process.**

- _____ Educate residents on need for E9-1-1 addressing and the process.
 _____ Seek input into process and road name suggestions.

Step Seven:

- _____ Apply for WVSAMB partial reimbursement funds.

- _____ Formalize agreement with the WVSAMB, with written commitment.
 _____ If hiring independent contractor, agree to the WVSAMB Data Specifications.
 _____ If hiring independent contractor, submit detailed workplan to WVSAMB for approval.

Step Eight:**Review and/or update current tax database mailing addresses (for areas without city-type 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 Nine:**Review existing city-type addresses (for areas with 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 Ten:**Contact adjacent counties or the county's municipalities.**

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

Step Eleven:**Review road names and approve changes.**

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

Step Twelve:**Identify staff to work with WVSAMB.**

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

7.0 TASKS FOR COMPLETING THE E9-1-1 ADDRESSING PROCESS

Those counties and municipalities that are participating in the WV Statewide Addressing and Mapping Project should be familiar with and have completed most, if not all of the preparatory tasks listed in Section 6.0 above. To complete their responsibilities for the project, counties and municipalities must undertake a series of tasks described below. It is also vital that local governments complete each task within the specified time frame to insure completion of the project.

In general, the tasks outlined in this section consist of data preparation, development of GIS (geographic information system) mapping layers for E9-1-1 addressable structures, roads, and other features, review of datasets for accuracy and completeness, the development of databases and conversion materials for the US Postal Service and telephone companies, and finally, notification of new addresses to property owners. In essence, this is a multi-step data development program that moves in an organized manner. The project builds the necessary E9-1-1 databases and reliably assigns new addresses for un-addressed or problematically addressed sites.

Note: Some of the tasks described below may have already been completed or are underway at the time of publication of this Reference Guide. Also, for those counties that had already completed E9-1-1 addressing prior to WVSAMB activities, some of the following steps may not apply. Detailed guidance on completing these tasks using the WVSAMS is provided in the WVSAMS User’s Guide. The WVSAMS User’s Guide will be distributed to counties during a full day on-site training session with each county.

7.1 COMPLETE ROAD CENTERLINE AND SITE MAPPING

All counties have been successfully mapped as part of the mapping phase of the WVSAMB Program. This original mapping was flown and compiled in the spring of 2003 by the WVSAMB mapping contractor. Aerial photography was used to stereographically compile a highly accurate geospatial database consisting of

road centerlines, building points, building footprints (for structures larger than approximately 7000 square feet), surface water bodies and streams, bridges, tunnels, dams, and other planimetric features. Additionally, the aerial photography was used to create ortho or “True” aerial photographs that are accurate enough to use for correct placement of new features but mainly used for navigation and reference in the information systems used to visualize the data.

This initial mapping phase did not distinguish between types of features. For example site points were collected for all structures visible in the photography. That means that this initial mapping step generated points for numerous outbuildings and other non-addressable structures. Similarly, the photogrammetrists cannot always distinguish between named roads and private lanes, driveways, and trails. Hence the importance of FIELD WORK to verify and classify the mapping originally performed in this phase.

7.2 FINALIZE ALL ROAD NAMES

One of the first tasks in the Completion phase of the project is to thoroughly review and finalize all road names. Each County (and Municipal) Addressing Coordinator should:

- Review all roads for correct names.
- Identify roads with multiple names and correct, if necessary.
- Identify roads that are missing names, and supply them with names.
- Identify and convert “driveways” and trail features to roads, where needed.
- Identify roads that may not be part of the emergency road network.

Upon a thorough review of all roads, and the assignment of correct road names and other attributes to the road centerlines in the SAMS system, a county will then need to officially approve all road names following the approval process stated in their addressing ordinance.

7.3 DELINEATE EMERGENCY SERVICE ZONE BOUNDARIES

Another important part of the data preparation phase is to identify Emergency Service Zone (ESZ) boundaries and associate emergency response

providers. An ESZ is an emergency response area that has a unique combination of Law Enforcement, Fire, and Emergency Medical Service (EMS) providers who serve a specific range of addresses within a particular geographical area.

Counties and municipalities will need to work with surrounding jurisdictions to identify the specific boundary for the coverage area of each of their emergency responders. Contact information for each emergency response agency should also be recorded in detail at this time. In some cases, minor edits and refinement of the ESZ will only be needed. These changes can be made directly to the ESZ boundary in the WVSAMS. Great care should be taken to identify ESZ boundaries that are geometrically coincident with road centerlines such that one side of the road is served by different emergency response agencies than the other (the left ESN is different from the right ESN along the road).

Following identification and confirmation of all ESZ boundaries, an Emergency Service Number, or ESN, should be assigned to each ESZ by the county or municipality and the local telephone exchange carriers. The ESN facilitates selective routing and selective transfer, if required, to the appropriate Public Safety Answering Point, or PSAP, and the dispatching of the proper service agency(ies). A database of tabular Emergency Service Zone information should also be provided to the appropriate local telephone exchange carrier after finalization.

7.4 ASSIGN OR REVIEW CITY-TYPE ADDRESSES

In areas without city-type addresses, such as areas with rural postal routes (RR and HC) or exclusively PO Box areas, a new city-type address should be assigned to each building site according to the approved addressing standard. During the first phase of the WVSAMB Addressing Project (2004-2006) the WVSAMB Addressing Contractor assigned new addresses to many sites throughout the state that lacked existing city-style addresses. Assignment of city-type addresses must be in accordance with the addressing standards adopted by the county or municipality for number assignment and specified in their addressing ordinance. The WVSAMB developed the *WV E9-1-1 Addressing*

Standards (Appendix C), which were based upon existing E9-1-1 guidance. These standards include the following basics:

Even numbers on the right side of a road, from the point of its beginning, and odd numbers on the left side of a road.

Numbers 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. (A county or municipality may have adopted another standard, such as 5.28, 21.12, or 25 feet, etc. Be careful to recognize that some standards are based on one address per interval, not two.)

A consistent beginning point for numbering, based on one of three options, as specified in the *WV E9-1-1 Addressing Standards*.

Guidelines for numbering corner lots, cul-de-sacs, trailer parks, apartments, bridges, and numerous other situations.

General guidelines for site address assignment include:

- When the primary building access (front door) can be clearly seen from the road, the address will be assigned where that access falls perpendicular to the road.
- If the primary access cannot be seen from the road, the number shall be assigned where the access road or driveway to the building meets the road.
- Addressees will be established for all buildings that have telephone access through a private switch or PBX, regardless of current or planned use of these addresses in the switch database.

Using approved standards, city-type addresses should be assigned to all identified structures in the address site layer in the SAMS. Locations to be addressed include all occupied or inhabited structures, including homes, housing units, businesses, RV parks, trailer courts, campgrounds, marinas, colleges, industrial complexes, pay phones, etc. The addressing process should also include the addressing of multiple structures within a single structure, such as

apartment buildings, town homes, condominiums, and/or commercial retail establishments.

All structures having telephone service should be addressed, including freestanding public telephones. Uninhabited structures or vacant business structures with the potential for telephone service should also be addressed, as well as occupied structures that do not presently have telephone service. Address assignment should likewise be made for bridges and intersections.

In areas with existing city-type addresses, an analysis to determine problematic addressing in the following categories should be done:

1. Properties addressed from the wrong road.
2. Numbering out of order.
3. Incorrect parity (odd or even address numbers that should be on the other side of the road).

The quality of existing addresses should be reviewed by the USPS Address Management Systems office to determine if any existing city-type addresses used for postal delivery create delivery problems. Issues may include duplicate numbers, fractional or alphanumeric numbers, duplicate or similar sounding road names, and the like. If existing addresses cause problems for mail delivery, they may well also cause problems for emergency responders to locate someone in need of assistance.

7.5 PERFORM FIELD VALIDATION AND COLLECTION

Field validation and collection should be completed in all areas requiring a new address. Field work may also be required to identify and name roads – especially those that may currently exist as long private lanes or other access to addressable structures. During this phase, field workers should utilize WVSAMB mapping, orthophotography and (ultimately) GPS field collection techniques to validate the location of each potential address site and road, capture the necessary attributes to determine the current address of each site, determine the use of the site, and capture digital photo(s) of the site, if possible. If they discover

sites or roads missing from the original mapping datasets, they will add these to the dataset with all attributes.

In areas where field collection is needed, field workers should stop at each site to collect data for resident confirmation and capture photos (if deemed appropriate). The collection process obtains an individual digital photo (or multiple individual photos if necessary) that is linked to the site by a unique filename. Counties are asked to perform extensive public awareness activities to assist the field workers in getting the task completed. Residents should be notified and encouraged to cooperate.

The goal of field collection is to determine the existing address of each house and building. This is done by collecting sufficient information at each site to either directly determine the address, capture information that will link the site to a database listing, or provide a method for a resident to send or call in the address at each location.

As part of this effort, field workers may capture the electric utility number at locations that do not post an existing address. This meter number is later linked with the utility company's customer list to obtain a delivery address. Field collection crews may also leave behind a mail-in/phone-in card for providing the current address of that site. Field workers can also utilize a Box number program to determine the current box number of PO Box holders.

Some counties have a large percentage of their residents' mail delivered through a PO Box, which makes it difficult to match the PO number with a site, as there are no records that provide the location of each PO Box holder. A Box number program prepares a card that is mailed to each PO Box holder in these areas. The card directs the recipient to locate the card in a window facing the road, or at a conspicuous location near the road. The face of the card has a bold unique number that is linked to the recipients' PO Box number. The cards are delivered to each post office about one week before data collection begins so that residents have an opportunity to post the cards. This type of program, or similar

course of action, provides the links between a site location and the current PO Box address.

The success of field collection will significantly reduce the county or municipality's ultimate responsibility of reviewing all collected data and in completing the existing address list, such that all locations can be notified of their new addresses.

All counties have been successfully mapped as part of the mapping phase of the WVSAMB Program. This original mapping was flown and compiled in the spring of 2003. New sites, sub-divisions, roads, and commercial areas that have been developed since that time will need to be identified and updated in the WVSAMS. Conversely, labeled sites may now be abandoned, or not be considered an addressable structure. These features will need to be edited in the SAMS accordingly.

7.6 COMPLETE FIELD EDITS, IF NECESSARY

In some circumstances and areas, site information may not have been obtained during the initial field collection. While performing the next two steps, the Old-to-New Address and TN Matching tasks, additional field work may be required. Most counties or municipalities will be responsible for performing additional field edits.

In addition, in areas that already have city-type addresses, field validation and editing may be needed while performing conflation (listed as task 7.11). Conflation can be automated to a certain extent, but may also require a certain amount of field edits for sites that did not conflate, or have conflicting information. If field edits are necessary for areas with city-type addresses, map plots can be developed to help facilitate the field effort.

7.6.1 Map Plots

During the matching process, each county can use map plots to aid in the matching process. County map plots are drawn at either 100 or 400 scale depending on site density, and show a half-page of map display, and a half-page of tabular space made available for manual data collection and recording. A sample

Map Plot can be found in Appendix K. This information will need to be obtained for completion of the matching process. In what manner the county obtains the address matching information is deferred to the county. Some suggestions would be to use:

1. Volunteer fire departments (VFD). The VFDs know their own areas so well that actual fieldwork was not necessary for all sites.
2. County and municipal police departments.
3. 911 Center workers.
4. Other county and municipal entities (such as mayors, assessors, etc.).
5. Town and/or Municipal Addressing Coordinators. These officials need to be involved at an early stage of the matching process, and may know of additional resources within their jurisdiction for addressing information.
6. Utility Companies and Municipal Departments. Some of the utility companies and municipal departments can provide vital information. For example, the water departments in the towns have phone numbers and locations (addresses) for all their customers.

7.6.2 Informational Meetings with Cooperating Agencies

Weeks before beginning the matching process, it is advisable to meet with the organizations listed above, receive feedback about the process, and obtain buy-ins to the project. This is also a good forum to discuss what specifically needs done during the remainder of the project. Other organizations may have ideas about how best to approach the task, or know of other ways to obtain addressing/telephone information.

Those organizations who wish to assist with the matching process can then be given Map Plots. It is advisable to have confidentiality agreements in place with each cooperating agency and, where applicable, each (non-WVSAMB) contractor. The information found on each Map Plot is sensitive and should not be freely distributed. A sample confidentiality agreement and a sample

participation/informational meeting letter can be found in Appendix L and Appendix M, respectively.

7.7 PERFORM OLD-TO-NEW ADDRESS MATCHING

Please refer to Section 7.8 for tasks specific to the matching phase.

7.8 PERFORM TELEPHONE NUMBER (TN) MATCHING

Upon completion of all road naming, ESZ boundary delineation, field collection, and city-type address assignment and review, the next logical step is primarily the matching phase. Each site is analyzed to confirm the best existing (current) address using all available data, including USPS, telephone, and assessor records. Data gathered in the field and in the office are used to match to these independent databases. Depending on the success of the field collection, some sites will have multiple matches, some will have one good source, and some will have insufficient data to determine an existing address.

This phase includes matching each telephone number (TN) with its site location and each USPS record to the site associated with mail delivery. The matching process requires the local Addressing Coordinator to insure that all sites have been accurately matched.

The WVSAMS interface will allow for the organized review and update of each site record. Information provided to the county or municipality includes every site, the existing address, and, if being re-addressed, the recommended new address; and a grandfathered address, if applicable. No changes to addresses will occur without the consent of the responsible county or municipality.

In cases where no existing address has been determined, the county will need to identify the current address. Use of the map plots will assist the county or municipality in obtaining this information in the field, if necessary. In areas that have “grandfathered” addressing, the county will need to determine the addresses of those unidentified sites for future use in E9-1-1 call taking.

The matching phase also includes examination of telephone and USPS records that have been previously matched to each addressable site. As

previously described, each TN and USPS record will have to be matched to the extent possible with the GIS site data. The county will be asked to perform these matches and determine the location of any unmatched sites.

7.8.1 Local call centers

For those listed telephone numbers that are not linked to a site, or for those sites that need TN verification, information may be obtained by establishing a local call center. Personnel from the county or municipality, under the direction of the Addressing Coordinator, can attempt to call each resident whose site location is unknown, to obtain the current and notification addresses. Also verification of the site photo at this time is advisable (if collected).

Once the call center has been staffed adequately, workers should have time to set up and train on the WVSAMS for an established period until they become familiar with the functionality and work flow. Logistical and technical issues will also need to be resolved before “going live” with the call center. This would include the ordering of extra phone lines (if needed), and preparation of additional computers, phones, internet access, etc.

A standard schedule for the call center is dependent upon local knowledge. In general, calls seem to not be answered too early in the morning, or too late at night, so schedule your calling accordingly. However, citizens may return calls on off-peak hours, such as early in the morning or after work. As a rule of thumb, call takers should have a list of old-to-new road names for reference. Callers will, generally, not know their new road name, if it has been changed recently during the addressing project.

A canned script should be utilized by call center personnel when making calls. Call center personnel should identify themselves with their name and representing organization first. The call center should try, at a minimum, to obtain the following information from the citizen:

- Telephone number or numbers at each site
- Resident’s name

- Owner or renter’s name, if applicable
- Description and general location of site
- Road name (New and Current)
- Mailing address

A sample script for the call center can be found in Appendix N.

7.9 CREATE USPS ADDRESS CONVERSION PACKAGE AND PREPARE ADDRESS NOTIFICATIONS

Once all site information is reviewed, and confidently matched with an old address and a telephone number, counties or municipalities will need to create a USPS Address Conversion Package for all Rural Route (RR) or Highway Contract (HC) postal delivery addresses for each five-digit ZIP code within a county. This package will provide the necessary information for the US Postal Service Address Management Systems (AMS) office to convert all rural delivery addresses to city-type addresses.

Note: Postal customers who use Post Office Boxes will not change their mailing address but will be assigned a city type address for their house or business for E9-1-1 service.

The USPS Address Conversion Package consists of:

- An old-to-new address conversion list for each postal edit sheet. The list contains a new address for each box number on the edit sheet and be sorted in the following sequence:
 - ZIP code
 - Carrier Route (C, H, R)
 - Route #
 - Box #

The preparation of address notification letters can also begin during this phase of the addressing project. Notifying residents of their new city-type property address will occur after the USPS and telephone companies have had sufficient

time to enter all changes into their databases. It is important for this waiting period to occur before notification to prevent premature use of the new addresses for mail delivery and to prevent confusion in emergency response. **If the county chooses to notify residents of their new 911 addresses prior to the USPS conversion and notification, it is imperative that the county emphasize that the residents must not use the addresses for mailing purposes until notified by the USPS to do so.**

Upon final review from the county, the USPS will create letters of notification for those customers who are having their mailing address changed. These letters will be provided by the USPS to the local post office for delivery to area residents, and will supply residents with their new city-type address and inform them to immediately begin using the new address for mail delivery and E9-1-1 service. Once the initial notification letters are sent out by the USPS, it becomes the responsibility of the counties to notify the residents and the USPS of any 911 addresses that are changed, as well as any additional 911 addresses that are assigned. For customers who do not receive home mail delivery (such as PO Box customers, or other non-deliverables), the county will be responsible for the notification of a new physical address. Notification of all customers should be completed prior to telephone conversion.

The WVSAMS will support the reporting and printing of these notification letters. A sample address notification letter is found as Appendix O.

7.10 CREATE TELEPHONE CONVERSION FILES

At this time, counties and municipalities will also need to prepare address conversion files for Verizon, Frontier Communications, and any other identified local exchange carrier to create or update Automatic Location Identification (ALI) addresses for E9-1-1 databases. These files will include telephone subscriber name, phone number(s), current mailing address, new physical address, and several other fields of information. These files will be submitted by the county or municipality to the local exchange carriers, who will then update their E9-1-1 service databases.

7.11 PERFORM ADDRESS CONFLATION (FOR AREAS WITH CITY-TYPE ADDRESSES)

Counties or municipalities with existing city-type addressing, and existing mapping, will need to transfer their site information (TN and address data) to the new WVSAMB mapping. This process is called conflation and can be automated to a certain extent. The remainder of conflation is a semi-automated process that requires computer operator input.

Counties or municipalities with existing city-type addressing will also need to identify intersection address ranges on those roads where city-type addressing exists. These ranges will be used to populate relevant attribute fields required by NENA standards for the GIS road centerline layer. Intersection address ranges must contain potential ranges based on a standard numbering interval wherever possible. One-way streets must also be identified and so attributed.

7.12 CREATE OR UPDATE MASTER STREET ADDRESS GUIDE

The Master Street Address Guide, or MSAG, is 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. Counties will need to create an MSAG for each community within a county based on the approved names and address ranges.

Each county (or jurisdiction) will need to create an MSAG for each jurisdiction using NENA-02-010 standards and provide to each local telephone exchange carrier maintaining E9-1-1 databases. An MSAG in digital and hard copy format will also be provided as part of the Address Conversion Package for the USPS for each ZIP code.

7.13 CONTINUE ADDRESS AND DATABASE MAINTENANCE

Counties will also receive training in the WVSAMS long-term maintenance procedures. Once the WVSAMB sunsets, counties (and municipalities, if applicable) will assume responsibility for the maintenance of all E9-1-1 address and mapping databases that are developed through this project. The WVSAMB is

implementing a web-based system that will be provided free-of-charge to the counties. Due to the acceleration of the WVSAMS into a production system, most counties (and municipalities, if applicable) will have been trained in the tools and functionality of the WVSAMS before the project shifts into maintenance mode.

For maintenance the WVSAMS shall enable county addressing coordinators to update database attributes for roads and structures as well as add new road centerlines, building centroids, and other features. This system shall also support database reporting functions necessary to generate standard E9-1-1-related output such as MSAG in both digital and hard copy. Counties, who have not already been fully trained to use the WVSAMS, will receive training for long-term maintenance for the addressing, mapping, MSAG, and ESZ databases. Counties may then assume greater responsibility for the maintenance of these critical E9-1-1 databases and related GIS mapping layers.

Below are some general recommendations for maintaining a localized addressing system. Because each county's addressing procedures may differ, a county or municipality may want to tailor these recommendations to meet their needs.

1. When a request is made for an address assignment, the property's location should be identified, using any identifying structures or landmarks that may help locate the new structure or property requiring the address.
2. Addresses should be assigned based on adopted addressing standards.
3. Requests should be handled the same day they are received, whenever possible.
4. When an address is assigned, all appropriate departments and the local post office should be notified.
5. When a new address is assigned and notifications are complete, the address map and address database should be updated immediately.
6. Other records, such as dispatching databases, voter registration files, jury lists, and land/tax information systems, should be updated, as needed.

7. Depending on the level of activity during the year, or at least once each year, updated maps should be distributed to the agencies using them.

Further details will be contingent upon the possible creation of post-April 2007 statutory mandate to continue state-level support and funding of statewide addressing and mapping maintenance.

COMPLETION CHECKLIST FOR COUNTIES AND MUNICIPALITIES

Step One:**Complete road centerline and site mapping.**

_____ County or municipality successfully mapped by WVSAMB contractor.

Step Two:**Finalize names for all roads.**

_____ Review all roads for correct names.

_____ Identify roads with multiple names or missing names.

_____ Identify and convert “driveways” or other features to roads, if needed.

_____ Identify roads that may not be part of the emergency road network.

Step Three:**Delineate Emergency Service Zone (ESZ) boundaries.**

_____ Identify ESZ boundaries and emergency response providers for your area.

_____ Work with surrounding jurisdictions.

_____ Assign an Emergency Service Number (ESN) to each ESZ.

_____ Provide a tabular ESZ to the appropriate local telephone carrier.

Step Four:**Assign or review city-type addresses.**

_____ Using approved standards, assign city-type addresses to all structures.

_____ Review city-type addresses for problematic addresses.

Step Five:**Perform field collection.**

_____ Validate the location of each potential address site and road.

_____ Capture information to determine the current address of each site.

_____ Capture digital photo(s) of each site.

_____ Add missing sites and roads to the original mapping.

Step Six:**Complete field edits, if necessary.**

_____ Have map plots created for areas with no current address and/or no telephone number.

_____ Coordinate local information meetings.

Step Seven:**Perform old-to-new address matching for each site.**

_____ Review and update the old-to-new address match for each site.

_____ Determine the location (if needed) and addresses of each unidentified site.

Step Eight:

_____ Perform telephone number (TN) matching for each site.

_____ Review and update the TN match for each site.

_____ Determine the location (if needed) and addresses of each unidentified site.

_____ Establish a local call center to obtain TN information.

Step Nine:**Create rural address conversion packages for the USPS and prepare notification letters.**

_____ Create a USPS address conversion package for all rural addresses, which includes an old-to-new conversion list.

_____ Begin preparing address notification letters for citizens without mail delivery.

Step Ten:**Create update lists to local telephone company.**

_____ Prepare and submit address conversion files for telephone carriers, to create or update ALI databases.

Step Eleven:**Perform conflation for areas with city-style addresses.**

_____ Transfer site information to the new WVSAMB mapping.

_____ Perform field edits, if necessary.

_____ Identify intersection address ranges.

Step Twelve:**Create or update MSAGs.**

_____ Create an MSAG for each community, using NENA-02-010 standards.

APPENDIX A BASIC E9-1-1 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 (E9-1-1)

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/na_recommended_standards.htm

APPENDIX B
WVSAMB LEGISLATIVE RULES

TITLE 169

LEGISLATIVE 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 W. Va. Code §24E-1-6, -7, and -9(b), 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 W. Va. Code §24E-1 et seq.; and governing protections of privacy of the state's citizens and of the homeland security during the project, as well as governing the distribution generally of works created as a result of the project.

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

1.3. Filing Date. -- April 8, 2004.

1.4. Effective Date. -- April 8, 2004.

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 W. Va. Code §24E-1 et seq.

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 related to 9-1-1 or enhanced 9-1-1 dispatch and response.

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

1.6.e. “Local exchange telephone company” means any public utility that is engaged in the provisions of local exchange service in this state and that operates and maintains an automatic location identification database of addresses of subscribers for use with enhanced emergency telephone systems.

1.6.f. “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 W. Va. Code §24E-1 et seq.

- 1.6.g. “Project manager”** means the project manager hired by the Board for the Project.
- 1.6.h. “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.i. “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 Handbook, First Edition, April 2003.” Where the term “should” is used in those standards and guidelines, 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 Handbook, First Edition, April 2003, 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

2.2.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: The Board shall adhere to W. Va. Code 24E-1 et seq.;

- 3.2.a.** 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, First Edition, April 2003, when completed, which is to be written in plain English;
- 3.2.b.** 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.c.** The Board shall, at no cost to participating public agencies, hire and supervise a project manager for the Project;
- 3.2.d.** 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.e.** 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.f.** The Board has the power to review and approve all aspects of the Statewide Addressing and Mapping System;
- 3.2.g.** The Board has the power to review and approve all proposals for local modification of the Statewide Addressing and Mapping System;
- 3.2.h.** 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.i.** 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.j.** 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.k.** 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 W. Va. Code §29E-1-9(B);
 - 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 manager 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 911 Addressing Handbook, First Edition, April 2003, 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 911 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 U.S. 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 W. Va. Code §24E-1-9(b);

- 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 manager 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 911 Addressing Handbook, First Edition*, April 2003, 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 style 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 U.S. 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 December 31, 2004 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.

3.6.a. 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 W. Va. Code §24E-1 et seq. Such contracts may, without limitation, include intergovernmental agreements or private contracts related to any aspect of the Project, including without limitation (1) data storage, data distribution, systems administration or any other function necessary or convenient to the Project, or (2) the creation of supplemental, modified or additional works.

3.6.b. 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.

3.6.c. The rights and obligations of any private entity participating in the Project, or of any federal, state or local agency participating in the

Project, other than a public agency, are governed by its contract with the Board.

- 3.6.d.** The rights and obligations of any public agency with a contract with the Board are governed by 3.3 and 3.4 above, whichever is applicable, and by the public agency's contract with the Board. In the event of a conflict between specified rights and obligations under these rules and under a contract with the Board, the specific rights and obligations under the contract are to prevail.
- 3.6.e.** No contracts entered into under these rules may be construed to grant rights to third parties beyond the limitations of W. Va. Code §24E-1-8.
- 3.6.f.** 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 any conditions imposed by the Board to protect reasonable expectations of privacy, if any, of the information in those works, consistent with the West Virginia Freedom of Information Act, W. Va. Code §29B-1 et seq., and consistent with W. Va. Code §24E-1-9(b).

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.c. 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, Homeland Security and Distribution of Works.

4.1. Protection of Privacy.

4.1.a. Except as otherwise specified in these rules, 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, W. Va. Code §29B-1 et seq, and consistent with W. Va. Code §24E-1-9(b).

4.1.b. The following standards apply to the distribution of maps, compilations or other works under these rules:

- 4.1.b.1.** Any such works may be distributed for emergency services purposes to public agencies, local exchange telephone companies and other persons with a legitimate need to know for such purposes. Except as otherwise permitted by the Board or these rules, such public agencies, local exchange telephone companies and other persons may use such works solely for emergency services purposes.
- 4.1.b.2.** Except as otherwise specified in these rules, maps and mapping works may be distributed to any person paying the applicable fees to be established by the Board. The Board explicitly finds that there is no reasonable expectation of privacy by individual citizens in such maps or mapping data, and that the distribution of such works is consistent with the legislature’s declaration of policy under W. Va. Code §29B-1-1.
- 4.1.b.3.** Addresses and other non-mapping works may be distributed at the sole discretion of the board, to the postal service, utilities and other entities with a legitimate need to know as determined by the Board. Other than the distribution of such works to the postal service, the Board may establish fees, terms and conditions for the distribution of such works, including without limitation such restrictions, if any, on the further distribution of such works to protect reasonable expectations of privacy.
- 4.2. Homeland Security.** No portion of any map, mapping work, address or other work may be distributed to any person or entity if the Board determines that the distribution of such portion of the work may have a likelihood of harm to homeland security. In making that determination, the Board may consult with any affected agencies of the state or federal governments. In such consultations, certain areas may be deemed

sensitive by federal, state or local agencies responsible for homeland security. Where the responsible agency has done so, the Board will accept the judgment of the responsible agency. Areas adjacent to secure areas may also not be divulged so as not to divulge the exact location of the secure areas, as determined by the Board after any consultation with the agency or agencies responsible for homeland security.

- 4.3. Procedure.** Except for the distributions of works under 4.1.b.1, any requests for the distribution of a work related to the Project must be made, in the first instance, to the Project manager. The Project manager shall make recommendations to the Board as to the requested distribution, and may consult with the Board’s counsel prior to making such recommendation. No such works may be distributed (except for the distribution of works under 4.1.b.1) without the approval of the Board under these rules.

TITLE 169**LEGISLATIVE RULES****WEST VIRGINIA STATEWIDE ADDRESSING AND MAPPING BOARD****SERIES 3****FINAL DISTRIBUTION AND USE OF****STATEWIDE ADDRESSING AND MAPPING FUND****§169-3-1. General.**

- 1.1. Scope.** Pursuant to W. Va. Code §24E-1-5, the West Virginia statewide addressing and mapping board adopts the following rules governing the final distribution and use of any remaining amounts in the statewide addressing and mapping fund upon the termination of the board scheduled under W. Va. Code §24E-1-11 for April 1, 2007.
- 1.2. Authority.** -- W. Va. Code §§ 24E-1-5; 29A-3-15.
- 1.3. Filing Date.** -- May 10, 2006
- 1.4. Effective Date.** -- May 11, 2006
- 1.5. Definitions.**
 - 1.5.a. “Board”** means the West Virginia statewide addressing and mapping board.
 - 1.5.b. “Eligible county commissions”** means those county commissions that comply fully with the board’s standards and other requirements for the statewide addressing and mapping system.
 - 1.5.c. “Emergency services purposes”** means use related to 9-1-1 or enhanced 9-1-1 dispatch and response.

- 1.5.d. “Fund”** means the West Virginia statewide addressing and mapping fund.
- 1.5.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.
- 1.5.f. “System”** means the statewide addressing and mapping 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 term “system” also includes any local modifications that may be made to the system in order to tailor it to meet specialized local concerns.

§169-3-2. Final Distribution and Use of Remaining Amounts in Fund.

2.1. Distribution and Use of Fund. The board shall, as its last act prior to its termination, transfer to eligible county commissions any remaining amounts in the fund, according to the formula contained in W.Va. Code §24-6- 6b(d)(1): Provided, That the provisions of §24-6-6b(d)(1) by which a county may receive a special eight and one half tenths of one percent because of the date upon which it enacted its 9-1-1 ordinance are not applicable to the apportionment of funds transferred pursuant to this rule. In accordance with the Legislature’s express intention under W. Va. Code §§ 24E-1-1 and 24E-1-5 that the fund be used solely for establishment of a statewide addressing and mapping system primarily for emergency services purposes, those amounts may be used by county commissions solely to implement and maintain the project or the system within each county primarily for emergency services purposes.

2.2. Ineligible County Commissions. Any county commission that fails to comply fully with the board’s standards and other requirements for the statewide addressing and mapping system, and that does not remedy

its failure, or demonstrate substantial progress toward doing so and obtain an appropriate waiver from the board by the time of the final distribution of the fund, is ineligible to receive any distribution from the fund. Instead, the board shall distribute the share of the fund that the county commission would have received to the eligible county commissions, in the same proportions and manner as wireless enhanced 9-1-1 fees are distributed to county commissions under W. Va. Code §24-6-6b for the year in which the remaining amounts from the fund are distributed.

TITLE 169**LEGISLATIVE RULES****WEST VIRGINIA STATEWIDE ADDRESSING AND MAPPING BOARD****SERIES 4****STANDARD FEES FOR PLANIMETRIC ELEVATION DATA****§169-4-1. General.**

- 1.1. Scope.** Pursuant to Chapter 24E, Article 1, Sections 6, 7, and 9(a) of the West Virginia Code, the West Virginia Statewide Addressing and Mapping Board does hereby adopt the following rules establishing standard fees for the license of its planimetric elevation data. These rules do not establish fees for hydrology, roads, railroads, structures or other planimetric data sets.
- 1.2. Authority.** -- W. Va. Code §§ 24E-1-6, 7 & 9(a); 29A-3-15.
- 1.3. Filing Date.** -- May 10, 2006
- 1.4. Effective Date.** -- May 11, 2006
- 1.5. Application.**
 - 1.5.a. Planimetric Elevation Data.** These rules establish standard fees for planimetric elevation data. The fees established by these rules are reasonable and, to the extent possible, are based on cost.
 - 1.5.b. Other Planimetric Data.** These rules do not establish fees for hydrology, roads, railroads, structures or other planimetric data sets created expressly for the statewide addressing and mapping project. Nothing in these rules, however, prevents the Board from entering

into agreements governing the release of those data, or any portion of those data, if otherwise lawful and expressly approved by the Board.

- 1.5.c. 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. “Emergency services purposes”** means use for 9-1-1 or enhanced 9-1-1 (“E9-1-1”) dispatch and response.
- 1.6.c. “Fund”** means the West Virginia statewide addressing and mapping fund.
- 1.6.d. “Planimetric Elevation Data”** means the digital mass point and breakline elevation data derived from photogrammetric interpretation of the surface terrain of West Virginia. The data are to be provided in either a Microstation or ESRI shapefile format to be used in a computer-aided drafting (“CAD”) program or geographic information system (“GIS”).
- 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-style 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 tailor it to meet specialized local concerns.

§169-4-2. Standard Fees for Planimetric Elevation Data.

2.1. Applicable Standard Fees and Order Processing.

2.1.a. Base Price. The base price for elevation data is five (5) cents per acre. The Board may require ordering by a standard size area (i.e., a “tile”), may specify the tile size, and may require a minimum and maximum number of tiles per order. The Board may require orders of standard sizes to be specified by the Board. In addition, the Board may impose an upper limit on the amount of data per order.

2.1.b. Order Processing Charges. The Board may impose an order processing charge of no more than one hundred twenty-five dollars (\$125.00) per order. Additional order processing charges may apply for an order requiring more than one digital versatile disk (“DVD”), in an amount not to exceed \$125.00 per additional disk.

2.1.c. E-commerce. The Board may make the elevation data available on an e-commerce website on the Internet, and may establish a separate fee structure for orders placed via the e-commerce website. E-commerce fees will not exceed the fees established for non-internet orders.

2.1.d. Payment. The Board may specify the forms of acceptable payment, such as check, cash, or credit card, etc., for orders of the data, in accordance with State statute. State law requires that payment be received in advance of service delivery. The Board may create order forms and other documents, and establish relationships with other state agencies as necessary to conduct its business transactions.

2.2. Exemptions.

2.2.a. Certain Entities Exempt By Statute. Pursuant to W. Va. Code §24E-1-9(a), these rules exempt from the payment of fees any entity providing twenty-five percent or more of the funding to the Fund.

2.2.b. County Commissions. Pursuant to W. Va. Code §24E-1-9(a), these rules exempt from the payment of fees any county commissions obtaining the data for emergency services purposes.

§169-4-3. Ownership of Data; License Agreements; Other Contracts and Financial Arrangements.

3.1. Ownership of Data. All right, title and interest in the data produced by the Project vests solely in the Board.

3.2. Licenses. No person may receive a copy of any data produced by the Project without first signing a license or other agreement in a form acceptable to the Board.

3.3. Other Contracts and Financial Arrangements. Nothing in these rules restricts the ability of the Board to 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, pursuant to Series 2 of the Board's legislative rules.

§169-4-4. Termination of Fees.

4.1. Expiration of the Board. This rule and any fees for the licensure of planimetric elevation data provided herein shall expire and terminate on

the first day of April, two thousand seven, in accordance with the termination of the West Virginia Statewide Addressing and Mapping Board pursuant to W. Va. Code §24E-1-11, unless sooner terminated, continued or reestablished.

ENROLLED**COMMITTEE SUBSTITUTE****FOR****H. B. 2525**

(By Delegates Swartzmiller, Beach, Hrutkay, Klempa, Pethtel,

Ennis, Iaquina, Hutchins, Perry, Shook and DeLong)

[Passed March 10, 2007; in effect from passage.]

AN ACT to amend and reenact °24E-1-3 and °24E-1-11 of the Code of West Virginia, 1931, as amended, all relating to the statewide addressing and mapping board; clarifying board composition; extending board members' terms; establishing powers and duties; providing for legal counsel; providing the division with rule-making and emergency rule-making authority; requiring the board to share information; extending the termination of the board; providing for the transfer of the powers and duties of the board to the division of homeland security and emergency management.

Be it enacted by the Legislature of West Virginia:

That §24E-1-3 and §24E-1-11 of the Code of West Virginia, 1931, as amended, be amended and reenacted, all to read as follows:

ARTICLE 1. WEST VIRGINIA STATEWIDE ADDRESSING AND MAPPING BOARD.

§24E-1-3. West Virginia statewide addressing and mapping board; term of office; compensation and expenses of board members; transfer of data; legal counsel.

- (a) The West Virginia statewide addressing and mapping board is hereby continued.
- (b) Commencing on the first day of July, two thousand seven, the board is to be composed of eleven members appointed by the Governor as follows:
- (1) The Secretary of the Department of Military Affairs and Public Safety or his or her designee , shall serve as chairperson of the board;
 - (2) A Commissioner of the Public Service Commission or his or her designee ;
 - (3) An official or employee of the State Geological and Economic Survey, qualified in the field of geographic information systems;
 - (4) An official or employee of the Division of Highways;
 - (5) A county commissioner;
 - (6) A county assessor;
 - (7) A mayor of a municipality or a municipal official;
 - (8) A director of an enhanced emergency telephone system from a county with a population of thirty thousand or less as shown by the last federal census;
 - (9) A director of an enhanced emergency telephone system from a county with a population of greater than thirty thousand as shown by the last federal census;
 - (10) A representative of a local exchange telephone company; and
 - (11) A member of the public at-large that may be affiliated with any of the above entities.

- (c) In making appointments to the board, the Governor shall, to the extent possible, ensure representation on the board, by one or more members, of any entity providing twenty-five percent or more of funding to the statewide addressing and mapping fund created and continued under the provisions of this article.
- (d) Any member serving on the board on the first day of January, two thousand seven, shall continue to serve until the first day of July, two thousand ten, or until replaced by the Governor.
- (e) Members of the board are entitled to the same expense reimbursement paid to members of the Legislature for their interim duties as recommended by the citizens legislative compensation commission and authorized by law for each day or substantial portion thereof engaged in the performance of official duties. Their expense reimbursement is to be paid from the West Virginia statewide addressing and mapping fund.
- (f) On or before the first day of July, two thousand seven, the board, or a subcommittee of the board, will commence meetings to develop a plan to transfer a backup copy of the aerial map database, and to periodically transfer updated entries to the database to the Rahall Appalachian Transportation Institute, it shall make all non-sensitive data available to state agencies on request.
- (g) On or before the first day of December, two thousand seven, and each year thereafter until its final termination and transfer to the Division of Homeland Security and Emergency Management, the board shall report to the Division of Homeland Security and Emergency Management as to its transfer of data to the Rahall Appalachian Transportation Institute.
- (h) Commencing on the first day of July, two thousand seven, the board will utilize legal counsel approved by the Secretary of the Department of Military Affairs and Public Safety and the board shall pay any costs associated with legal counsel.

§24E-1-11. Termination of board; transfer of duties and title; legislative and emergency rules; advisory board.

- (a) The board shall terminate on the first day of July, two thousand nine, after

which it shall have one year to wind up its affairs pursuant to the provisions of article ten, chapter four of this code. Upon final termination, the board shall transfer all its right, title and interest to any maps, compilations or other works that it created as a result of the statewide addressing and mapping to the respective county commissions.

(b) Upon final termination of the board, county commissions shall maintain and update the addressing and mapping systems within their respective jurisdictions under the standards established by the board, as updated thereafter by the Division of Homeland Security and Emergency Management of the Department of Military Affairs and Public Safety under this section, and shall supply the updated information to the division in the format it establishes through its rule making authority.

(c) Except as provided in subsection (b) of this section, upon final termination of the board, the powers and duties of the board shall be transferred to the Division of Homeland Security and Emergency Management.

(d) Prior to the final termination of the board, the division may propose rules for legislative approval in accordance with the provisions of article three, chapter twenty-nine-a of this code which shall become effective only upon the final termination of the board. The rules shall:

- (1) Maintain and update the standards for statewide addressing and mapping;
- (2) Establish standard reasonable fees, based on cost, to be charged by county commissions for copies or use of any maps, compilations or other works created as a result of the statewide addressing and mapping, subject to the exemptions provided under section nine of this article;
- (3) Govern centralization and interoperability of the county systems within the integrated statewide addressing and mapping system; and
- (4) Ensure the public safety in any manner the division considers advisable.

(e) Upon final termination of the board, the division may propose rules for legislative approval in accordance with the provisions of article three, chapter twenty-nine-a of this code for the purposes set forth in this article.

(f) Upon final termination of the board, the division may promulgate emergency

rules pursuant to the provisions of section fifteen, article three, chapter twenty-nine-a of this code.

(g) Rules in effect as of the reenactment of this article during the two thousand seven regular session will remain in effect until amended, modified, repealed or replaced pursuant to this article.

(h) Effective the first day of July, two thousand ten, the statewide addressing and mapping board shall become an advisory board within the Division of Homeland Security and Emergency Management and will continue to be composed as set forth in this article and the members will serve at the will and pleasure of the Governor.

APPENDIX C

WEST VIRGINIA E9-1-1 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 E9-1-1 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 E9-1-1 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 road 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.

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).

21. 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)	GDN(S)	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

E9-1-1 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 E9-1-1 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 E9-1-1 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 an E9-1-1 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 E9-1-1 Addressing Reference Guide*, 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

E9-1-1 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 E9-1-1 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, non-duplicative 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 E9-1-1 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 E9-1-1 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 E9-1-1 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 E9-1-1 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 E9-1-1 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 E9-1-1 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**

E9-1-1 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 it's Emergency E9-1-1 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 E9-1-1 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 E9-1-1 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 E9-1-1 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

Jimmy Gianato, Chairman
Greenbrooke Building
1124 Smith Street, Room LM-10
Charleston, WV 25301-1323
304-558-4218
info@addressingwv.org

US Postal Service AMS Office – Except Brooke, Hancock, Marshall, and Ohio Counties.

Gerry Smith, AMS Specialist
US Postal Service, Address Management Systems
P.O. Box 59321
Charleston, WV 25350-9321
304-561-1125
gerry.l.smith@usps.gov

US Postal Service AMS Office – Brooke, Hancock, Marshall, and Ohio Counties only.

James (Jim) Gloeckl, Manager
US Postal Service, Address Management Systems
1001 California AVE, RM 2063
Pittsburgh, PA 15290-9321
412-359-7862
james.j.gloeckl@usps.gov

APPENDIX J

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 E9-1-1 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 E9-1-1 Addressing Standards*. This reference guide 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?

Section 6.0 of this reference guide contains a list of tasks for starting the process of creating city-type addresses. Included in these tasks, are passing an addressing ordinance, appointing an Addressing Coordinator, and agreeing to participate in the statewide addressing project.

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 E9-1-1 databases. Once the addressing process is complete, local governments will need to maintain and update E9-1-1 database information as needed.

19. What addressing support is being provided?

The WVSAMB is providing a comprehensive reference guide, standards, and training to support the counties and municipalities. This support is available at no cost. Also, counties that remain committed to using the WVSAMS and the WVSAMB procedures outlined in this reference guide are eligible to receive partial reimbursement funds by entering into the WVSAMB Intergovernmental Agreement (IA).

20. What is the cost to my community?

Staff time or volunteer labor is necessary to undertake and complete the E9-1-1 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. The WVSAMB will administer partial reimbursement monies to eligible counties to offset some of these costs.

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 E9-1-1 service.

22. What are other benefits of creating city-type addresses for E9-1-1?

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 E9-1-1 addressing and mapping project?

Because the E9-1-1 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 E9-1-1 addressing?

Yes. Counties wishing to complete their addressing project using other tools, personnel, and procedures may do so. However in order to be eligible for WVSAMB funds, these counties must submit a detailed workplan including the technical methodology, budget and schedule. To be eligible for WVSAMB funds counties shall develop electronic databases in accordance with the *West Virginia Statewide Addressing and Mapping System Data Specification*. In this case, however, the county will be responsible for all associated costs and for following *West Virginia E9-1-1 Addressing Standards* and all other requirements of the E9-1-1 addressing process established by the WVSAMB.

25. Should my county 9-1-1 organization buy GIS software to maintain the maps and addresses?

No. Not unless your organization plans to use desktop GIS for a broader set of tasks and you are prepared to make a long-term commitment and investment in specialized training and software maintenance fees.

26. Should my county 9-1-1 organization buy GPS equipment now to begin mapping new roads and building sites?

No. The WVSAMB will provide GPS equipment to each county to perform (if necessary) field collection, field edits, and additional mapping of roads and sites. This equipment will be available to counties during the fall of 2006.

27. What if my county already has GIS?

There are a handful of county 9-1-1 organizations in West Virginia that have invested in desktop GIS or have the resources to do so. Across the counties, there are different GIS products in-use throughout the enterprise. These focused systems have reached a high state of functionality and are an essential tool for many county agencies and stakeholders. However they are not a necessary component of WVSAMS.

28. What if my county already has GPS?

If your organization is capable of mapping new road centerlines and building sites to within +/- 10 ft of their true position you may collect information and submit it to the WVSAMB in a standard exchange file format. The WVSAMB will provide GPS equipment to each county to perform (if necessary) field collection, field edits, and additional mapping of roads and sites. This equipment will be available to counties during the fall of 2006.

29. What will be the fee for county 9-1-1 organizations to use the state system?

Nothing. It will be free-of-charge to the counties. The minimum requirements are a personal computer and a broadband Internet connection.

30. What happens to the information entered by the county 9-1-1 organization?

It goes directly into a database maintained by the State. The road centerline, building sites, boundaries and related E9-1-1 features will be stored in this secure database. This database will be linked to other state databases and made available as a web mapping tool. Secure information will be handled properly. Public information will be shared with other agencies including the state universities who will also publish it on their own mapping web sites.

31. How will the information be used by the State?

The state will use the information to enhance state services and emergency management functions. The state will also add useful attributes to the information for use by the counties. For example, the DOT will add useful information such as mile posts and traffic data. State Tax may update its system using the new physical addresses and then pass back property value data to the counties attached to the points. There are many other examples of how this cooperation will benefit everyone.

32. Will the information be secure and will our citizen's privacy be respected?

Yes. The data will reside on a highly secure computer system in an accredited data center. No personal information such as names and phone numbers will be made public or even stored on a publicly-accessible server. Strict state and federal laws apply.

33. What state agency will oversee long-term map and address maintenance after the WVSAMB sunsets?

Beginning in the summer of 2005 the WVSAMB formed a Sunset Committee. With the assistance of the PM, the Sunset Committee conducted an analysis to determine the best ways to guarantee the long-term success of the WVSAMB project beyond sunset of the WVSAMB. Part of this analysis was to identify a single state agency to take the lead role in sustaining the WVSAMS by validating database updates made by the counties and other state organizations and providing support. Considered in this analysis were: The West Virginia Department of Transportation – Division of Highways (WVDOH), The West Virginia Public Service Commission (WVPSC), and The West Virginia Geologic and Economic Survey (WVGES). The committee also considered both the Nick J. Rahall Appalachian Transportation Institute (RTI) at Marshall University and the West Virginia University GIS Technical Center (WVU-GISTC). The committee deemed the Department of Military Affairs and Public Safety (WVDMAPS) to be the appropriate organization based on the sensitivity of the data being stored. WVDMAPS is the only organization equipped to deal with the sensitivity and potential mission-criticality of the WVSAMB data.

34. What's in it for me?

By committing to participate in the WVSAMB project, using the WVSAMB tools, and adopting the WVSAMB's long-term maintenance procedures you and or your organization may save lives, save money, improve public safety and vital services for all West Virginians, protect the public from disasters and

terrorism, support economic development, protect the environment, and a lot more. Specifically:

- If you are a citizen of West Virginia you will benefit by having continuously improved E9-1-1 service and better overall service from state and local government.
- If you are a county or 9-1-1 organization you will receive free-of-charge data and tools necessary to map and address. The tools can be used for other county purposes. The state will add value to the data you help maintain and this data will be available to the counties forever.
- If you are a municipality you may receive these same tools to assist your county 9-1-1 organizations within your community.
- If you are a state or federal agency you will benefit by having access to a continuously updated, highly accurate geospatial database of the state of West Virginia on an open scalable computer system.

APPENDIX K SAMPLE MAP PLOT



Nicholas County, West Virginia

Map 1 of 1 for Sheet 0011A



Site ID	Existing Address	New Address	Name Of Resident	Resident Phone No.	Meter No.	Picture ID	Comments
122919	NC 75	PRIVATE DR			0	0	
122920	NC 75	BANNER ST			0	0	
122921	NC 75	PRIVATE DR			0	0	
122922	NC 75	MOUNTAINVIEW EXPRESSWAY			0	0	
122923	NC 75	POWELL CREEK RD			0	0	
122924	NC 75	POWELL CREEK RD			0	0	
122925	NC 75	POWELL CREEK RD			0	0	
122926	NC 75	POWELL CREEK RD			0	0	
122927	NC 75	POWELL CREEK RD			0	0	
122928	NC 75	POWELL CREEK RD			0	0	
122929	NC 75	POWELL CREEK RD			0	0	
122930	NC 75	POWELL CREEK RD			0	0	
122931	NC 75	POWELL CREEK RD			0	0	
122932	NC 75	POWELL CREEK RD			0	0	
122933	NC 75	POWELL CREEK RD			0	0	
122934	NC 75	POWELL CREEK RD			0	0	
122935	NC 75	POWELL CREEK RD			0	0	
122936	NC 75	POWELL CREEK RD			0	0	
122937	NC 75	POWELL CREEK RD			0	0	
122938	NC 75	POWELL CREEK RD			0	0	
122939	NC 75	POWELL CREEK RD			0	0	
122940	NC 75	POWELL CREEK RD			0	0	
122941	NC 75	POWELL CREEK RD			0	0	
122942	NC 75	POWELL CREEK RD			0	0	
122943	NC 75	POWELL CREEK RD			0	0	
122944	NC 75	POWELL CREEK RD			0	0	
122945	NC 75	POWELL CREEK RD			0	0	
122946	NC 75	POWELL CREEK RD			0	0	
122947	NC 75	POWELL CREEK RD			0	0	
122948	NC 75	POWELL CREEK RD			0	0	
122949	NC 75	POWELL CREEK RD			0	0	
122950	NC 75	POWELL CREEK RD			0	0	
122951	NC 75	POWELL CREEK RD			0	0	
122952	NC 75	POWELL CREEK RD			0	0	
122953	NC 75	POWELL CREEK RD			0	0	
122954	NC 75	POWELL CREEK RD			0	0	
122955	NC 75	POWELL CREEK RD			0	0	
122956	NC 75	POWELL CREEK RD			0	0	
122957	NC 75	POWELL CREEK RD			0	0	
122958	NC 75	POWELL CREEK RD			0	0	
122959	NC 75	POWELL CREEK RD			0	0	
122960	NC 75	POWELL CREEK RD			0	0	
122961	NC 75	POWELL CREEK RD			0	0	
122962	NC 75	POWELL CREEK RD			0	0	
122963	NC 75	POWELL CREEK RD			0	0	
122964	NC 75	POWELL CREEK RD			0	0	
122965	NC 75	POWELL CREEK RD			0	0	
122966	NC 75	POWELL CREEK RD			0	0	
122967	NC 75	POWELL CREEK RD			0	0	
122968	NC 75	POWELL CREEK RD			0	0	
122969	NC 75	POWELL CREEK RD			0	0	
122970	NC 75	POWELL CREEK RD			0	0	
122971	NC 75	POWELL CREEK RD			0	0	
122972	NC 75	POWELL CREEK RD			0	0	
122973	NC 75	POWELL CREEK RD			0	0	
122974	NC 75	POWELL CREEK RD			0	0	
122975	NC 75	POWELL CREEK RD			0	0	
122976	NC 75	POWELL CREEK RD			0	0	
122977	NC 75	POWELL CREEK RD			0	0	
122978	NC 75	POWELL CREEK RD			0	0	
122979	NC 75	POWELL CREEK RD			0	0	
122980	NC 75	POWELL CREEK RD			0	0	
122981	NC 75	POWELL CREEK RD			0	0	
122982	NC 75	POWELL CREEK RD			0	0	
122983	NC 75	POWELL CREEK RD			0	0	
122984	NC 75	POWELL CREEK RD			0	0	
122985	NC 75	POWELL CREEK RD			0	0	
122986	NC 75	POWELL CREEK RD			0	0	
122987	NC 75	POWELL CREEK RD			0	0	
122988	NC 75	POWELL CREEK RD			0	0	
122989	NC 75	POWELL CREEK RD			0	0	
122990	NC 75	POWELL CREEK RD			0	0	
122991	NC 75	POWELL CREEK RD			0	0	
122992	NC 75	POWELL CREEK RD			0	0	
122993	NC 75	POWELL CREEK RD			0	0	
122994	NC 75	POWELL CREEK RD			0	0	
122995	NC 75	POWELL CREEK RD			0	0	
122996	NC 75	POWELL CREEK RD			0	0	
122997	NC 75	POWELL CREEK RD			0	0	
122998	NC 75	POWELL CREEK RD			0	0	
122999	NC 75	POWELL CREEK RD			0	0	
123000	NC 75	POWELL CREEK RD			0	0	

APPENDIX L

SAMPLE CONFIDENTIALITY AGREEMENT

SAMPLE 911 CENTER CONFIDENTIALITY AGREEMENT

This Confidentiality Agreement (this "Agreement") is made effective as of DATE, between COUNTY 911 AGENCY, of ADDRESS, and The Undersigned, of _____.

In this Agreement, the party who owns the Confidential Information will be referred to as ("COUNTY 911 AGENCY" OR "911"), and the party to whom the Confidential Information will be disclosed will be referred to as _____.

The COUNTY 911 AGENCY is engaged in the process of providing E9-1-1 SERVICE OR CITY-TYPE ADDRESSES to the Citizens of SAMPLE COUNTY and information received and maintained here is of a personal and confidential nature. The COUNTY 911 AGENCY also has confidentiality agreements with the various Telephone companies that serve it, as well as confidential information received here for law enforcement and criminal justice purposes. The COUNTY 911 AGENCY is engaged in the process of updating and maintaining the E9-1-1 database and may have access to other confidential information. To ensure the confidentiality of all information used at the 911 Center has represented that he or she will protect the confidential material and information which may be disclosed between 911 and THE UNDERSIGNED.

Therefore the parties agree as follows:

I. CONFIDENTIAL INFORMATION. The term "Confidential Information" means any information or material which is proprietary to 911, whether or not owned or developed by 911, which is not generally known other than by 911, and which may obtain through any direct or indirect contact with 911.

A. Confidential Information includes without limitation:

- business records and plans
- customer lists and records
- trade secrets
- technical information
- products
- computer programs and listings

- All Telco database information
- All law enforcement information
- and other proprietary information,

B. Confidential Information does not include:

- information disclosed by operation of law
- and any other information that both parties agree in writing is not confidential,

II. PROTECTION OF CONFIDENTIAL INFORMATION.

_____ understands and acknowledges that the Confidential Information has been developed or obtained by 911 by the investment of significant time, effort and expense, and that the Confidential Information is a valuable, special and unique asset of 911 which provides 911 with a significant competitive advantage. Therefore, _____ agrees to hold in confidence and to not disclose the Confidential Information to any person or entity without the prior written consent of 911.

No Copying.

_____ will not copy or modify any Confidential Information without the prior written consent of 911.

Unauthorized Disclosure of Information.

If it appears that _____ has disclosed (or has threatened to disclose) Confidential Information in violation of this Agreement, 911 shall be entitled to an injunction to restrain

_____ from disclosing, in whole or in part, the Confidential information. 911 shall not be prohibited by this provision from pursuing other remedies, including a claim for losses and damages.

III. RETURN OF CONFIDENTIAL INFORMATION.

Upon the written request of 911, _____ shall return to 911 all written materials containing the Confidential Information.

_____ shall also deliver to 911 written statements signed by certifying that all materials have been returned within five (5) days of receipt of the request.

IV. NO WARRANTY.

_____ acknowledges and agrees that the Confidential Information is provided on an AS IS basis. 911 MAKES NO WARRANTIES. EXPRESS OR IMPLIED, WITH RESPECT TO THE CONFIDENTIAL INFORMATION AND HEREBY EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL 911 BE LIABLE FOR ANY DIRECT, INDIRECT,

SPECIAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING OUT OF THE PERFORMANCE OR USE OF ANY PORTION OF THE CONFIDENTIAL INFORMATION.

V. GENERAL PROVISIONS.

This Agreement sets forth the entire understanding of the parties regarding confidentiality. Any amendments must be in writing and signed by both parties. This agreement shall be construed under the laws of the State of WV. This Agreement shall not be assignable by either party, and neither party may delegate its duties under this Agreement, without the prior written consent of the other party.

VI.

By signing this agreement the signing party also authorizes the COUNTY 911 AGENCY to conduct a background check of any past criminal record and any other checks as it may deem necessary to comply with all Federal and State regulations concerning confidentiality of information on site.

COUNTY 911 AGENCY

BY: _____
Director/County Addressing Coordinator

The undersigned

By: _____
The undersigned

APPENDIX M

SAMPLE INFORMATION MEETING LETTER

COUNTY 911 AGENCY
ADDRESS
PHONE
FAX
DATE

M E M O R A N D U M

To: County Fire Departments
Municipality Mayors
Police Chiefs

Fr: Addressing/Mapping Department
Addressing Coordinator

Re: Meeting – Date, Time, and Location

There will be a meeting at the County 9-1-1 Center in the “Meeting Room” on “date” at “time” to discuss the current status of the Addressing Project.

We are about to begin assigning house numbers. We have received a large volume of photos/maps of structures within the county that we were unable to obtain information on (see enclosed example). We are asking all fire departments, city addressing contacts, Mayors, and police chiefs to assist us in gathering this information in their areas in order to get this done in a timely fashion.

Please make every effort to attend this meeting, or send a representative of your town or department. If no one can attend, please contact this department and we will arrange a time for you to come by and pick up the Site Match Forms.

Thanks to all of you for the help you have given the project. It is truly appreciated.

APPENDIX N

SAMPLE CALL CENTER SCRIPT

Introduction

Hello, my name is _____.

I am calling from the 911 Mapping & Addressing Department at the 9-1-1 Center.

Have I reached 304-_____.

May I speak with _____.

We are getting ready to assign city-type addresses in the county and we need to get some information from you. Do you have time to talk for a minute?

First, we have your phone number and your name. Now we need to find the location of the phone you are speaking on right now.

I am going to try to find your house on my computer and the picture we have of it; can you tell me exactly where your house is located? And what does your house look like?

- Ask for the community they live in, the nearest church, school, landmark, route, etc
- Find their house and click to view the picture
- Describe what you are seeing and verify their house (mailing address, old address, etc.)

WHAT STREET OR ROAD DOES YOUR HOUSE FACE?

- Ask them if you can get to their house from that road or is it accessed from another road?
- Log it on the call sheet

WHAT IS YOUR CURRENT MAILING ADDRESS?

- Log this on your spreadsheet

Thank you for your time. We will notify you by mail when we have finished addressing the county. Continue to use your current address until then.

APPENDIX O

SAMPLE ADDRESS NOTIFICATION LETTER

"Postal Customer"
 RRI BOX 186
 OAK HILL WV 25901

Dear Post Office Box Customer:

The Fayette County E-911 Mapping Office has assigned physical addresses to county residents. Your new physical address is shown below. This physical address **does not** replace your current mailing address. Your new physical address is necessary to support the Emergency 911 telephone system and improve the response time to any emergency you might have. If you are a Post Office Box customer **do not** attempt to use this new address to receive your mail. **This is a physical address only and should only be used for non-postal deliveries to your home.**

1466 THURMOND RD
 GLEN JEAN WV 25901

Posting your new physical address

- 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.
- 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, or 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.
- 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.
- Below are common notifications/updates that you may need to notify of your new physical address. **Be sure to advise them that this does not change your mailing address.**

Department of Motor Vehicles
 Car/Boat Registrations
 Insurance Policies

Voter Registration
 Bank Accounts
 Schools

- Please contact your local telephone company of your new 911 physical address to ensure the address will be displayed correctly in the 911 system should you ever have a 911 emergency.

If you have any questions or need assistance concerning your physical address in Fayette County, please contact Fayette County Emergency Operations at **304-574-3590**.

Sincerely,

Address Coordinator

911 Addressing Coordinator.

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