



MINUTES OF MEETING
New Castle County TMT Meeting
May 3, 2006



James Gilliam Building, New Castle, Delaware

Meeting Date: May 3, 2006
Location: James Gilliam Building, New Castle, Delaware
Purpose: New Castle County Transportation Management Team (TMT) Evacuation Meeting

List of Committee Members and Meeting Attendees:

First Name	Last Name	Agency	Email
Jeff	Benyo	Christiana Care	jbenyo@christianacare.org
Jerry	Brennan	DE Fire School	jerry.brennan@state.de.us
Ruth	Campbell	Division of Social Services	Ruth.Campbell@state.de.us
Dave	Carpenter	NCC – Emergency Preparedness	dcarpenter@co.new-castle.de.us
Jim	Clacher	DeIDOT TMC	jim.clacher@state.de.us
Mark	Clavelaux	DEMA	mark.clavelaux@state.de.us
Gene	Donaldson	DeIDOT TMC	Gene.donaldson@state.de.us
Paul	Ford	DeIDOT – DTC	pford2@state.de.us
George	Giles	City of Wilmington Police	ggiles@wilmingtonpd.state.de.us
John	Goodier	Civil Air Patrol	jmgoodier@aol.com
John	Janowski	NCC Land Use	jjjanowski@co.new-castle.de.us
Joseph	Kalinowski	City of Wilmington Fire Department	joe.kalinowski@cj.state.de.us
Vince	Kowal	NCC Land Use	vkowal@co.new-castle.de.us
Mamie	Lynch	Edwards and Kelcey	mglynch@ekmail.com
Stephen	Maichle	Wilmington Manor Fire Company	red2832@aol.com
Chris	Marsh	DeIDOT TMC	chris.marsh@state.de.us
Nathaniel	McQueen	DSP Troop 1	Nathaniel.McQueen@state.de.us
Marcia	Nickle	NCC – Emergency Preparedness	mnickle@co.new-castle.de.us
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Susan	Poley	Newark Police Department	susan.poley@cj.state.de.us
David	Roberts	NCC PD 911 Communications	djroberts@co.new-castle.de.us
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Daniel	Valle	American Red Cross	daniel@redcrossdelmarva.org
Derek	Voight	Edwards and Kelcey	dvoight@ekmail.com
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James	Wormley	DeIDOT Canal District	jim.wormley@state.de.us

Handouts provided during the meeting:

1. Statewide TMT Action Item List
2. Statewide Hurricane Evacuation Plan PowerPoint Slides
3. Development of New Castle County Evacuation Annex Draft

I. Opening Remarks

Gene Donaldson (DeIDOT TMC) opened the meeting with introductions from the attendees. Gene asked if anyone had comments on the Statewide TMT Action Item List. Since there were no



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comments, Gene explained that the purpose of this meeting is to begin New Castle County's evacuation planning.

II. Statewide Hurricane Evacuation Plan

Mamie Lynch (EK) gave the Statewide Hurricane Evacuation Plan presentation. This presentation provided the group with a basic understanding of the evacuation planning process that was used and progress that was made in Sussex County.

After the presentation, discussion began as people asked questions related to the presentation. Daniel Valle (American Red Cross) asked about the timeline of the hurricane evacuation in Sussex County. The presentation states that the Bay Bridge closes when winds reach sustained speeds of 40 MPH. However, at this point, all people also need to be off the street. Daniel asked what the evacuees who are diverted from the Bay Bridge should do if it is too dangerous for them to be on the roads. Gene responded by explaining that the 40 MPH wind speed serves as a reference point. During a hurricane, Delaware will be working closely with Maryland to make evacuation decisions based on this reference point. When winds reach 40 MPH, they want as many people as possible off the roads, and this goal will be able to be accomplished because Delaware and Maryland will be in "decision mode" well before these heavy winds reach land. Furthermore, the rain bands of the hurricane will cause the road network to fail. Thus, arrival of rain bands is another factor associated with the evacuation timeline. Gene also explained that the timeline, which now is based on the 40 MPH winds, has been adjusted through the planning process. Originally, the evacuation timeline was based on the hurricane phases defined by the National Weather Center. However, through coordination with Maryland, Sussex County decided to use hurricane levels, based on the anticipated arrival of 40 MPH winds as a basis for the evacuation timeline. By using this reference point, Delaware and Maryland will be working off the same timeline.

Daniel also suggested using letters instead of numbers for the hurricane levels, so the levels can be distinguished from the hurricane intensity (Saffir-Simpson scale) more easily.

Vince Kowal (NCC Land Use) asked if money is available for this plan, particularly for the installation of ITS devices. Gene responded by saying that ITS have become an important part of how DelDOT does business. He explained that DelDOT has invested millions in the ITS infrastructure, and now, fiber optics extend from Dover to the Pennsylvania State Line. He said that this deployment will continue because ITS use is necessary for Delaware's roads to continue functioning. Through the ITS planning, DelDOT knows where they want to place all the devices. However, because there is not enough funding to support full deployment, Gene requested the TMT's advice on prioritizing the proposed devices. This prioritization is very important now because of the budget problems facing DelDOT. Gene explained the deployment timeline. Originally, when Gene came to DelDOT in 1997, the goal for complete implementation was 6-10 years. At this point in time, Delaware is about halfway finished with this implementation. Gene estimates that in 6-10 more years, 80-90% will be complete.

Gene then explained the different issues that face New Castle County as part of their evacuation planning. In Sussex County, the majority of the evacuees are tourists, so they will be returning home.



MINUTES OF MEETING
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However, in New Castle County, the majority of the evacuees are residents, so in planning for an evacuation, the group needs to determine where these people will be going. After the group determines where the evacuees will go, they need to identify the evacuation routes. Defining the evacuation routes and planning a successful evacuation will be a challenge in New Castle County because of the high density of the county. Three critical interstates come together in New Castle County, a rail system runs through the county, and many intersections already are over capacity. Gene explained that regions could be used to evacuate more efficiently. He used the Sussex County Regional map to explain how evacuation regions work. In New Castle County, this process could be used by identifying how and when to evacuate people in pre-defined regions of the county. Such a process could be used to implement a phased evacuation. It would require the development of priorities for each region. In particular, critical intersections will need to be prioritized because there will be a significant number of critical intersections throughout the county. Gene also mentioned the possibility of using contraflow in New Castle County, but he emphasized the need for intensive planning if contraflow is to be used.

Gene hopes that all emergency personnel (police, fire, DeIDOT, etc.) will have a copy of the plan in their vehicles so they can respond to an incident quickly. He emphasized that the state has a great communication system between centers, and he would like to develop a successful communication system in the field as well.

Vince asked if we should work quickly to implement a rough plan within the next three weeks so the county will be prepared for this hurricane season. After the rough plan is drafted, further work can be completed to add detail to the plan.

Marcia Nickle (NCC Emergency Preparedness) explained that the Red Cross knows the maximum statewide capacity, but if an incident occurs in one county, they can shift resources between counties to respond as necessary. She asked if DeIDOT operates in a similar way. Does DeIDOT have enough resources for an evacuation, particularly with such intensive efforts required in Sussex County?

Gene explained that the TMC can predict when the system will fail. With this ability to monitor and predict traffic conditions, DeIDOT can spread resources across the counties if necessary. He also emphasized the importance of putting signals on the system. If a signal is on the system, it can be controlled by the TMC instead of a police officer, so as more signals are added to the system, more officers will be made available for other evacuation activities.

III. Review of Development of New Castle County Evacuation Annex Draft handout

Marcia asked if there are phases for writing the plan. In response, Gene suggested reviewing the Development of New Castle County Evacuation Annex Draft handout. He began by explaining the evacuation scenarios listed on the handout. In New Castle County, the scenarios include chemical and nuclear facilities, as well as hurricane evacuations. In planning for an evacuation, it will be important to lay out the land use areas (commercial, residential, etc.) to understand how an evacuation will work.



MINUTES OF MEETING
New Castle County TMT Meeting
May 3, 2006



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George Giles (City of Wilmington) stated that the City of Wilmington has some designated evacuation routes. Dave Carpenter (NCC Office of Emergency Management) said that the Delaware City Plant and the Salem-Hope Creek Nuclear Generating Station have evacuation plans. Marcia said that DeIDOT should know the radiological program's plans. She also said that the radiological evacuation routes need signage.

Gene mentioned that after the evacuation, they will need to plan for a re-entry/recovery phase. Vince stated that it will not be possible to keep people from coming back into New Castle County.

Gene said that Delaware should be proud of how the State responds to emergencies. For example, response to the recent C5 crash was effective. However, Delaware has not been tested with a mass evacuation. With this understanding, Gene suggested steps for moving forward. First, he asked if all the right people are at the table. Then he suggested discussing the problem areas of the county and coming to an agreement about the evacuation volumes to be used.

Involved Parties

Vince responded that Pennsylvania should be involved in these discussions. Gene mentioned that he has met with the DVRPC, and Pennsylvania is just beginning their evacuation planning, but the two states will keep in touch throughout the planning process. He also explained that he has been meeting with PennDOT District 6 and New Jersey DOT to discuss interstate issues. It should be possible to connect DeIDOT's TMC to PennDOT District 6's TCC using fiber.

Data

John Janowski (NCC Land Use) stated that NCC Land Use uses DeIDOT's data. The numbers are broken down by Traffic Analysis Zone (TAZ), so they can develop estimated volumes if necessary. Gene said that they should have turning movement counts because all the volumes will need to be broken up into movements. Dave suggested breaking into subgroups to discuss the data issues. One subgroup can determine the appropriate population and evacuation numbers to use, while another subgroup can work to map the jurisdictional boundaries, and a third group can investigate the need for shelters. The group discussing population and evacuation volumes will need to make predictions about how many people will leave the county when an incident occurs. Also, the group needs to obtain all existing plans, including evacuation plans for large facilities, such as the hospitals and the University of Delaware, and for the Tier 2 chemical facilities.

Ruth Campbell (Division of Social Services) commented on the Social Services' participation in the Sussex County evacuation planning process. She said that they were not at the table in planning for Sussex County's hurricane evacuation, and because they were not involved, she does not know if the shelters are placed appropriately along the evacuation routes. She emphasized that people are not going to continue driving out of the state, particularly if they are Sussex County residents. Gene responded by saying that the Sussex County TMTs worked with DEMA, who said that the shelters constantly change. DEMA advised that at most they would only need to house approximately 700



MINUTES OF MEETING
New Castle County TMT Meeting
May 3, 2006



James Gilliam Building, New Castle, Delaware

people in a shelter, so DEMA did not want to incorporate shelters into the evacuation plan. Marcia responded to this statement with concern by saying that if the canal bridges close when winds reach a sustained 40 MPH, evacuees traveling north will get stuck below the canal, and they will need shelter. Daniel said that the Red Cross primarily is interested in these people who get left behind. It was agreed that one of Dave's suggested subgroups would address this issue. Daniel asked if there is an estimate of what percentage of people will be able to get out during an evacuation. The group decided that this information will be determined from the subgroup working on traffic volume data. Gene followed up by explaining that the problem of people getting left behind or stuck is why we need to emphasize public education as part of the evacuation planning.

Vince said that traffic comes to a standstill during race weekend, and traffic will be even worse during a hurricane evacuation. Gene explained that the roads fail on race weekend because they are over capacity, so to manage traffic, behavior modification needs to be emphasized. George Giles said that the City of Wilmington moves 60,000 people twice a day in three hours. He said that it does not matter how long people sit in traffic; it is only important that they are moving. He said that the race weekend traffic moves slowly, but it moves. George emphasized the need to get information to the people. For example, the public should be told to travel to New Castle County, then stop, if such a message is appropriate. He went on to say that in 24 hours he can evacuate the city, but this plan is not good enough because then they will be stuck in the county. Dave summarized some of the critical locations throughout the county:

- ? SR 896/US 301 – provides western route to Maryland
- ? SR 1 – provides northern route to New Castle County
- ? Northwest of I-95 – will need to evacuate people in flood-prone areas

Based on these high priority areas, Dave asked if the group could obtain DMV information to perform a survey to help determine where people will go during an evacuation.

John asked if the plan will identify which New Castle County roads are vulnerable to flooding. Gene responded that the plan will document which roads will flood. This information will be incorporated into the state's GIS for incident management.

IV. Next Meeting

The group discussed whether to have future meetings during the day or in the evening. It was decided that at this point, the meetings will be held during the day. As the plan becomes more structured, meetings will occur in the evening to allow for involvement from the volunteer emergency responders.

Any questions or concerns can be directed to Gene at gene.donaldson@state.de.us or (302) 659-2404. Additionally, Edwards and Kelcey is providing consulting support and helping assist DelDOT in coordinating the efforts. Regis Wagner can be reached at rwagner@ekmail.com / (610) 701-7000.