Annex B - Appendix III

EVACUATION

Virginia Hurricane Lane Reversal Plan Summary

I. PURPOSE

The purpose of the Hurricane Lane Reversal Plan is to provide the framework and guidelines for an evacuation of the Hampton Roads, Virginia area. This plan will be used by local emergency service coordinators, state and local police, and other agencies involved in planning, coordinating, and executing an evacuation. The objective of this plan is to facilitate a safe and efficient evacuation prior to the landfall of tropical storm winds.

II. AUTHORITIES & REFERENCES

The Hurricane Lane Reversal Plan was prepared in accordance with relevant plans and programs of the state government and VDEM. It is issued in accordance with the provisions of the Commonwealth of Virginia Emergency Services and Disaster Law. The plan's content is consistent with the following sources:

- Commonwealth of Virginia, Emergency Operations Plan *(COVEOP)*, December 2009
- Governor's Executive Order 102 to integrate NIMS in*to plans* and procedures, 2005
- Governor's Executive Order 44 to establish preparedness initiatives in state government, and directing all executive branch agencies to include preparedness planning, including continuity of operations planning, in their core missions and strategic plans, January 2007
- The Federal Civil Defense Act of 1950 *(Public Law 920, 81st U. S. Congress)* as amended by Public Law 96-342 *(September 1980)*
- The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended
- The National Response Framework

III. SCOPE & APPLICABILITY

The Virginia Hurricane Lane Reversal Plan is applicable to evacuation events occurring in the Hampton Roads area and can be implemented in advance of any storm ranging in strength from tropical storm force to a Category 5 hurricane. However, the timeline described herein is based upon evacuation data associated with a Category 3 hurricane. The plan also serves to establish the traffic control concept, specify mandatory tasks, and provide the basis for coordinating those tasks expected to be accomplished by VDOT, VSP, VDMA, and others. Guidelines and protocols for an I-64 lane reversal are incorporated into this plan.

Using the Hurricane Evacuation Study Transportation Analysis, Commonwealth of Virginia Coastal Jurisdictions, it is projected that the worst case scenario is a Category 4 hurricane. Which translates to nearly **900,000 people** in approximately **400,000 vehicles** may evacuate the Hampton Roads area in advance of a tropical storm or hurricane weather event.

IV. POLICIES

State-directed emergency transportation operations will be executed in agreement with *(and will remain responsive to)* regional and national policy directives, controls, and procedures. In addition, this plan will comply with the National Incident Management System *(NIMS)*.

The emergency management of transportation within the Commonwealth is the responsibility of state and local government. All state departments and agencies with transportation-related responsibilities will provide emergency services within their modal scope of operations. Each state department and state agency will coordinate with each other through Transportation Operations Center *(TOC)* in order to manage transportation resources efficiently and complete task assignments. The Secretary of Transportation will resolve any issues of conflicting interests.

During an emergency, the state will depend upon private industry to perform voluntarily and under each company's own management. Intervention into direct operations under the Commonwealth's emergency powers will be handled in a manner consistent with federal regulatory controls and only to the degree normal regular processes are inadequate to meet essential emergency demands.

V. PLANNING ASSUMPTIONS

The Hurricane Lane Reversal Plan is based on the planning assumptions and considerations presented below:

1) The most likely large-scale evacuation scenario to plan for is a major hurricane threatening the metropolitan Hampton Roads area.

2) People located in threatened areas will evacuate; including residents of the immediate coastal areas, residents in low-lying areas prone to flooding, and any resident of a mobile home.

3) Residents will monitor the media in order to receive emergency information.

4) The majority of residents will shelter in-place, monitor emergency broadcasts, and only evacuate after receiving specific evacuation instructions from public officials.

Planning Assumptions - Continued

5) Residents will have family emergency and communications plans. Residents should be prepared to be self-sufficient for a period of up to 3 days.

6) Public and private school systems, colleges, and universities have emergency plans and procedures in place to adequately protect, shelter, and/or evacuate students and employees during normal school hours. Those plans will be coordinated with the appropriate agencies.

7) Any ordered evacuation of local military bases will follow the timing and routing of the evacuation protocols in this plan. Accordingly, VDOT will work with affected state and federal agencies to communicate the elements of this plan. The State will coordinate and operate state-managed shelters outside of the Hampton Roads area during an evacuation.

8) Forty-eight hours before the onset of tropical storm force winds, the plan encourages the public to evacuate using the routes of their choice.

9) This plan is designed to maximize outbound roadway capacity. All appropriate outbound roadways are used and site-specific traffic control enhancements are implemented to modify critical roadway intersections.

10) All interstate maintenance and construction activities, which reduce overall capacity of the roadway, will be suspended throughout any evacuation period.

11) To facilitate the increase in traffic during an evacuation, the Governor may implement the I-64 lane reversal plan. The decision to do so must be made no later than **36 hours** prior to the onset of tropical storm force winds.

12) Many people will evacuate towards the Richmond area, particularly if the I-64 lane reversal plan is implemented.

13) Due to wind restrictions, the Chesapeake Bay Bridge Tunnel is not a designated evacuation route**.**

14) The I-64 eastbound tunnel of the Hampton Roads Bridge Tunnel *(HRBT)* will be closed to all eastbound traffic during an evacuation.

15) Lane reversal procedures include the use of all I-64 lanes west of 4th View Street flowing westbound towards I-295 in Richmond.

VI. ROLES & RESPONSIBILITIES

The concept of operations of the hurricane evacuation management and the lane reversal operation will follow the NIMS process. The incident command structure consists of emergency support functions *(ESF-1 through ESF-17)* led by a lead agency and one or more support agencies. ESF-1 is designated Transportation and is led by VDOT. ESF-13 is public safety and security, including law enforcement, and is led by VSP. DMA forces comprise ESF 16.
Figure 1 illustrates this command structure.

Figure 1: Statewide Emergency Command Structure

Roles & Responsibilities – Continued

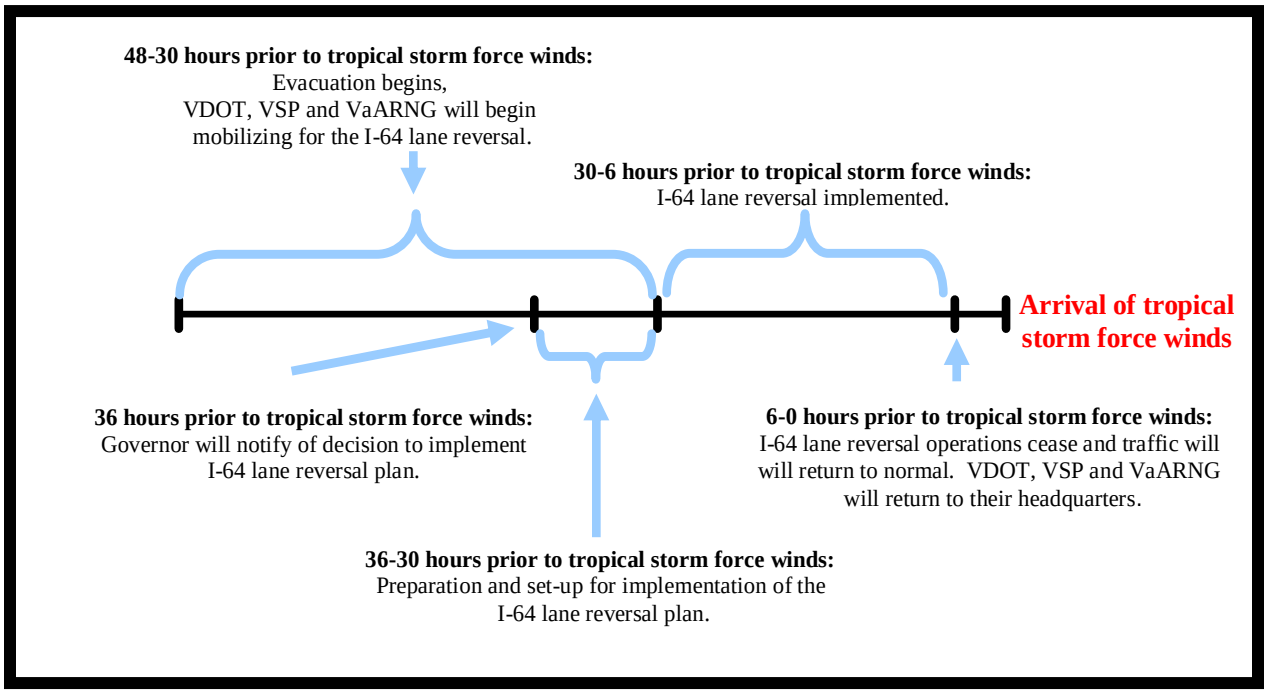
A. Governor

As it relates to a hurricane evacuation and more specifically lane reversal, the Governor has the following duties, upon which he/she will be provided recommendations from the VERT:

1) Declare a state of emergency
2) Call for voluntary evacuation
3) Authorize mobilization for possible lane reversal
4) Call for mandatory evacuation
5) Authorize hurricane lane reversal implementation

The decision to mobilize for a lane reversal operation shall occur no earlier than "**D-48 hours**" and no later than "**D-36 hours**" before the storm. The designation "**D-48**" is based upon "**D**" being the forecasted onset of sustained tropical storm force winds making landfall at which time everyone should have sought shelter. The decision to implement reversal will occur no later than "**D-36 hours**" before the storm, resulting in no less than six hours of mobilization time. **Figure 2** illustrates this timeline.

Figure 2: Hurricane Evacuation Timeline



Roles & Responsibilities – Continued

B. Virginia Department of Transportation *(VDOT)*

VDOT is the lead Virginia agency for emergency operations involving transportation. The Secretary of Transportation, as the chief executive, will monitor and coordinate the activities of state departments and agencies with transportation-related duties and responsibilities.
VDOT has five Transportation Operations Centers *(TOC's)* that serve the following regions: Richmond, Hampton Roads, Northern, Northwestern, and Southwestern. These regions encompass all nine VDOT districts. The Richmond and Hampton Roads TOC's control and monitor the section of I-64 used for the Hurricane Lane Reversal Plan.

Local VDOT offices, including VDOT Residencies and Area Headquarters, constitute a major manpower and equipment resource in their respective localities. VDOT offices routinely coordinate their emergency planning and response activities directly with local governments. Local offices and residency shops must also remain capable of developing and reporting post-disaster damage assessment information. All disaster-related damages to highways, roads, and bridges are reported to VDOT's Transportation Operations Center *(TOC)* in Richmond, using standard procedures.

In support of the hurricane lane reversal plan, VDOT will:

1) Facilitate *(in coordination with VSP and affected local governments)* traffic movement during a large-scale evacuation and re-entry.

2) Provide ground transportation, back-up communications, and other available resources, as needed in support of VEOC operations.

3) Implement traffic advisories on various traveler information media *(e.g., signs, 511, etc.)*.

4) Coordinate with United States Coast Guard for bridge lockdown.

5) Provide manpower and materials to provide traffic control during evacuation and hurricane lane reversal plan.

6) Monitor traffic conditions during the evacuation.

7) Provide information on motorist services through public information, 511, the media and dynamic message signs.

Roles & Responsibilities - Continued

8) Expanded service patrols for the entire corridor.

9) Provide regular and heavy-duty wreckers to cover designated zones for expeditious clearing of incidents.

10) Provide local access from reversed lanes for services such as gas, food and supplies.

11) Operate and maintain Transportation Operations Center *(TOC)*, and keep it informed of all significant information, actions, and plans.

12) Appoint a VDOT Incident Commander *(IC)*, who will take the lead in aggressively pursuing the VDOT goal of opening the affected roadway*(s)* as quickly and safely as possible.

13) Enable rapid but safe highway cle*aranc*e for oversized and overweight vehicles.

Transportation Operations Center *(TOC)* d*uti*es include:

1) Provide overall manageme*n*t of the evacuation.

2) Monitor traffic conditions.

3) Provide the incident command staff.

4) Serve as liaison with other agencies.

5) Serve as liaison with resources from other VDOT Districts.

VaTraffic is an integrated data management platform that collects, monitors, updates, and disseminates roadway information to help manage a variety of activities, both planned and unplanned. VDOT staff will use VaTraffic to direct information to the 511 Integrated Voice Recognition *(IVR)* system and web site to provide pre-trip and en-route traveler information to the public and other interested users within VDOT.

C. Virginia State Police *(VSP)*

VSP has the responsibility for directing the safe evacuation and re-entry of drivers when an emergency calls for such measures. VSP has developed a plan for their role in the hurricane lane reversal plan. Working with VDOT, VSP will monitor traffic flow, implement traffic enhancements, provide law enforcement, and offer motorist assistance.

Specific VSP roles in the Hurricane Lane Reversal Plan are:

1) Lead the ESF-13, Public Safety and Security, functions in the NIMS structure. Those duties include providing traffic enforcement.

2) Implement the VSP plan to support the hurricane lane reversal plan.

3) Provide an incident commander and supporting staff for the hurricane lane reversal plan.

Roles & Responsibilities – VSP Continued

4) Provide an incident command vehicle to facilitate the primary communications from field sites to command post during the hurricane lane reversal plan.

5) Provide primary communications from the interchange traffic control points to the incident command post.

6) Provide patrol officers to provide traffic control, patrol and security for the hurricane lane reversal plan.

7) Provide aerial surveillance, as needed.

The Commanding Officer of the Fifth Division shall bear overall responsibility for the execution of the VSP plan.

D. Supporting Transportation Agencies

The following agencies regulate and support transportation activities within the Commonwealth of Virginia:

a. Virginia Department of Emergency Management *(VDEM)*

For the Virginia Hurricane Lane Reversal Plan, VDEM leads the ESF-5, Emergency Management and ESF-9, Search and Rescue, function in the NIMS structure. VDEM also coordinates incident management, incident action planning, financial resources, issues mission assignments, and search and rescue.

Specific VDEM roles in the hurricane lane reversal plan are:

1) Provide an incident command vehicle to facilitate the backup communications from field sites to command post during the hurricane lane reversal plan.

2) Operate the Virginia Emergency Operations Center *(VEOC)* and provide interagency coordination of the VERT.

b. Virginia Department of Motor Vehicles *(VDMV)*

DMV maintains primary responsibility for the management of freight movement by trucks. Resources are procured from private trucking companies and others as needed. Support is provided by the Department of General Services *(Division of Purchases and Supply)*, DOAV, and VPA.

During the implementation of the VDOT Hurricane Lane Reversal Plan, DMV will coordinate and facilitate the transportation of essential goods and supplies over all modes in support of the VEOC. In an evacuation of the Hampton Roads area, DMV will coordinate through VDOT and be dispatched by VSP.

Roles & Responsibilities – VDMV Continued

In support of the VDOT Hurricane Lane Reversal Plan, DMV will:

1) Initiate, at the request of agencies such as VDOT, commercial load and vehicle restrictions in advance and after a hurricane. DMV will notify the commercial trucking companies of any such restrictions.

2) Supply, at the request of VDOT, vehicles *(passenger cargo, to include crated household pets)* for the pick-up of stranded motorists. DMV personnel will transport stranded motorists to pre-identified drop-off points along the evacuation route.

3) Provide a liaison officer to TOC once an emergency has been declared or sooner, if requested.

c. Virginia Department of Military Affairs

1) VDMA, in coordination with VDOT and VSP, will support evacuation and re-entry procedures during an emergency and provide law enforcement support for operations. VDMA has a plan for their duties in support of Hurricane Lane Reversal Plan.

2) VDMA will provide ground support for hurricane lane reversal plan operations by providing troops to assist with the interchange ramp closures and median crossovers. In the chain of command, they will report to VSP. In the absence of a VSP officer on-site, the VDMA staff will report to the VDOT supervisor.

VII. CONCEPT OF OPERATIONS

This section outlines the concept of operations for organizing and implementing an evacuation of the Hampton Roads area. Of critical importance to an effective and efficient evacuation is the balanced utilization of the transportation network as a whole. The plan must spread traffic flow safely over all available outbound routes. However, if outbound roadways and interstates become over-saturated during the initial voluntary evacuation stage, the Governor, through the VEOC and VERT Leadership, will implement the Hurricane Lane Reversal Plan.

The Hurricane Lane Reversal Plan employs two fundamental concepts: a voluntary evacuation of the Hampton Roads area, and an I-64 lane reversal plan to facilitate the high volume of traffic leaving the area. An explanation of each follows.

A. Evacuation Traffic Forecast

The Hurricane Evacuation Study Transportation Analysis, Commonwealth of Virginia Coastal Jurisdictions, projects that the worse case scenario is a Category 4 hurricane. Analysis of this scenario projects nearly 900,000 people in approximately 400,000 vehicles may evacuate the Hampton Roads area in advance of a hurricane weather event.

B. Voluntary Evacuation

The initial stage of an evacuation in the Hampton Roads area is voluntary. Ideally, residents and tourists will be informed no later than **48 hours** prior to landfall that severe weather is forecasted to affect the area, and they will be encouraged to evacuate to avoid possible life-threatening situations. At this stage, all evacuees will be allowed to travel on roadways of their choice to their self-selected destinations.

If a determination is made that the traffic flow will not permit the safe and efficient evacuation of all individuals within the predicted area of impact within the time available before the storm, the Governor or designee will implement the Hurricane Lane Reversal Plan to facilitate the evacuation flow. VDOT, VSP, and VDMA personnel will begin mobilizing and staging resources at the **48-hour** mark.

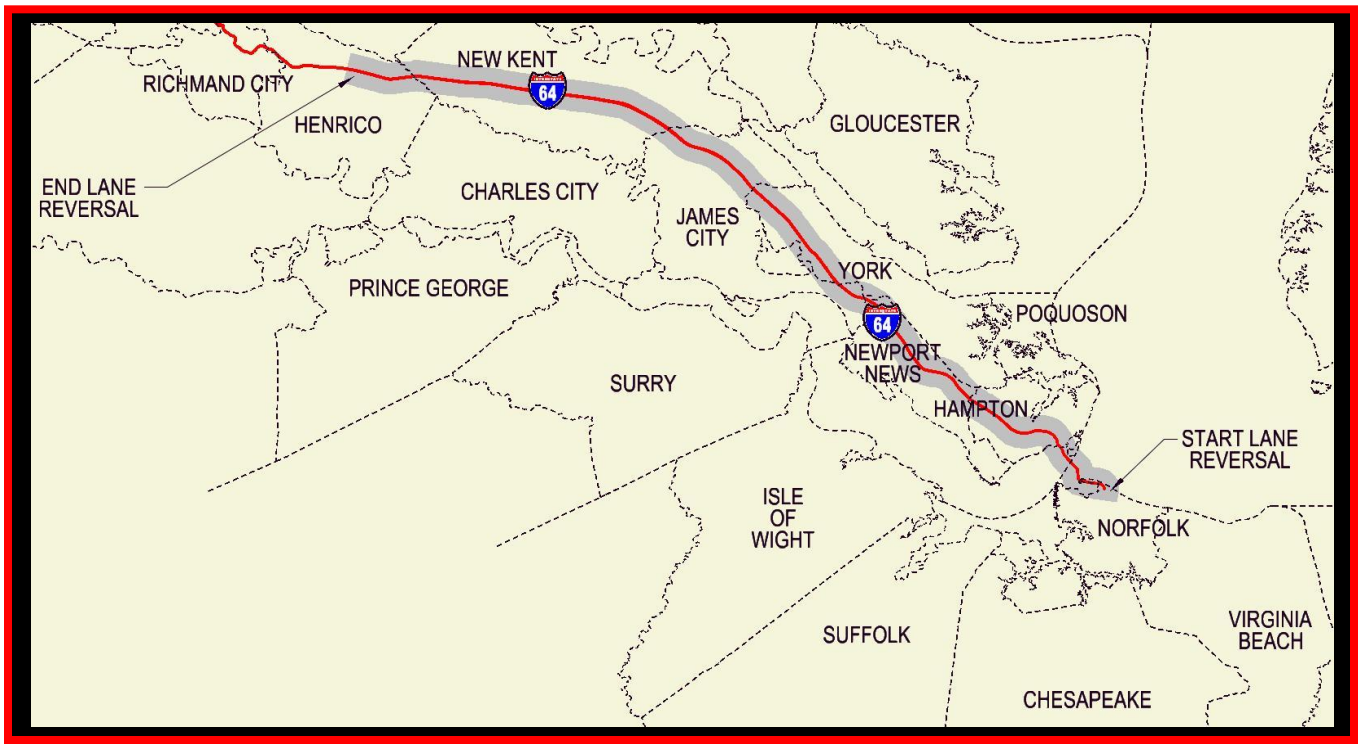
C. Virginia-North Carolina Border Traffic Diversion Plan

The Virginia-North Carolina Border Traffic Diversion Plan, while not an integral part of the reversal plan, is an agreement between the North Carolina State Highway Patrol *(NCSHP)*, VSP, and Chesapeake Police Department *(CPD)* to ensure that Route 168 will not be overwhelmed by evacuation traffic. The primary objective of this agreement is to prevent gridlock on Route 168 and I 64.

D. I-64 Reversal

The Governor authorized VDEM to develop an evacuation plan using all interstate lanes west of the Hampton Roads Bridge Tunnel on I-64, flowing in a westbound direction toward I-295 in Richmond. If, during the voluntary evacuation stage, the increased amount of vehicular traffic flow hinders traffic, the Governor may decide to implement this I-64 reversal plan.

Figure 8: Hurricane Lane Reversal Plan Limits



Concept of Operations – Continued

The Governor must make the decision to mobilize resources for the Hurricane Lane Reversal Plan approximately **48 hours** prior to the landfall of tropical storm force winds in the Hampton Roads area in order to achieve the maximum effect. Evacuation procedures, including the I-64 lane reversal, will cease at the landfall of sustained tropical storm force winds. At that time, VSP, VDOT, and VDMA will instruct their personnel to return to their headquarters for safety and to prepare for the recovery phase. **Figure 9** gives the timeline for mobilization and complete execution of the lane reversal.

E. Assumptions

Traffic control assumptions for the I-64 lane reversal procedures include:

- Closure of selected bridges and tunnels at the onset of 45 mph winds.

F. Mobilization

An interagency team consisting of VDOT, VSP, VDEM, VDMA and DMV is available for mobilization and deployment of staff and resources to the field once the Governor gives the authorization.

VIII. TERMINATION OF LANE REVERSAL OPERATIONS

Evacuation procedures and the lane reversal operations will cease six hours before the arrival of sustained tropical storm force winds of 39 mph or greater are forecasted to make landfall in the Commonwealth. VSP, VDOT, and VDMA will instruct their personnel to return to their headquarters or designated shelter for safety and preparations for the recovery phase. The onset of 45 mph winds will close designated bridges and tunnels. The plan will restore normal traffic flow to the interstate after securing all reverse lane vehicle traffic before the arrival of tropical storm force winds.