

VIRGINIA HURRICANE GUIDE



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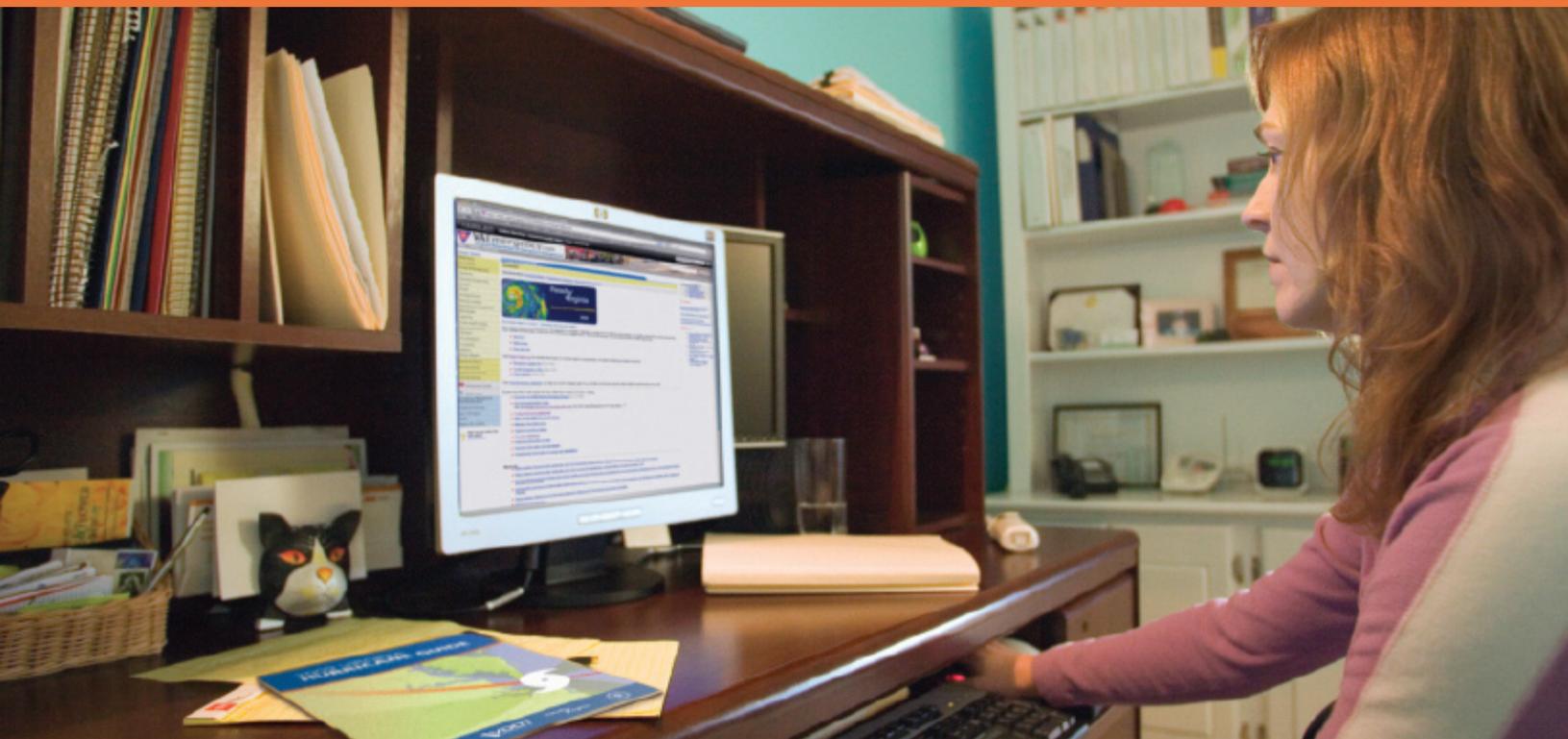
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STAYING IN PLACE VS. EVACUATION



An evacuation order does not mean everyone in the area needs to leave. Evacuation orders keep residents safe from storm surge and are intended for those living or working in low-lying areas vulnerable to storm surge or flooding. **Residents on higher ground do not need to evacuate to avoid storm surge.**

Mobile or manufactured homes and trailers are an exception. Lightweight structures are especially vulnerable to high winds. Emergency officials may order an evacuation for people who live in these dwellings to keep them safe from the impact of high winds.

Before, during and after a disaster, it is vital that you listen to local media for the most local, up-to-date information from emergency officials. Local media will broadcast critical instructions from local, state and federal government officials, such as:

- Evacuation orders for specific areas
- Details about evacuation routes
- Locations of evacuation shelters
- How to stay safe if not ordered to evacuate
- Where to find assistance
- Weather warnings and watches

Sometimes it is safer to stay at home. Some coastal areas on higher ground are not as vulnerable to storm surge as low-lying areas. Listen for local instructions. If you are ordered to stay where you are, or “shelter in place,” then go inside and remain there until emergency officials announce it is safe for you to leave.

- Use your family emergency plan.
- Locate your disaster supply kit. Make sure you have at least a three-day supply of water, food that will not spoil, a battery-powered radio, flashlights and extra batteries.
- Tune to a local radio or television station for additional information.
- Stay indoors and close all windows and doors.
- Bring pets indoors and make sure you have food and water for them.

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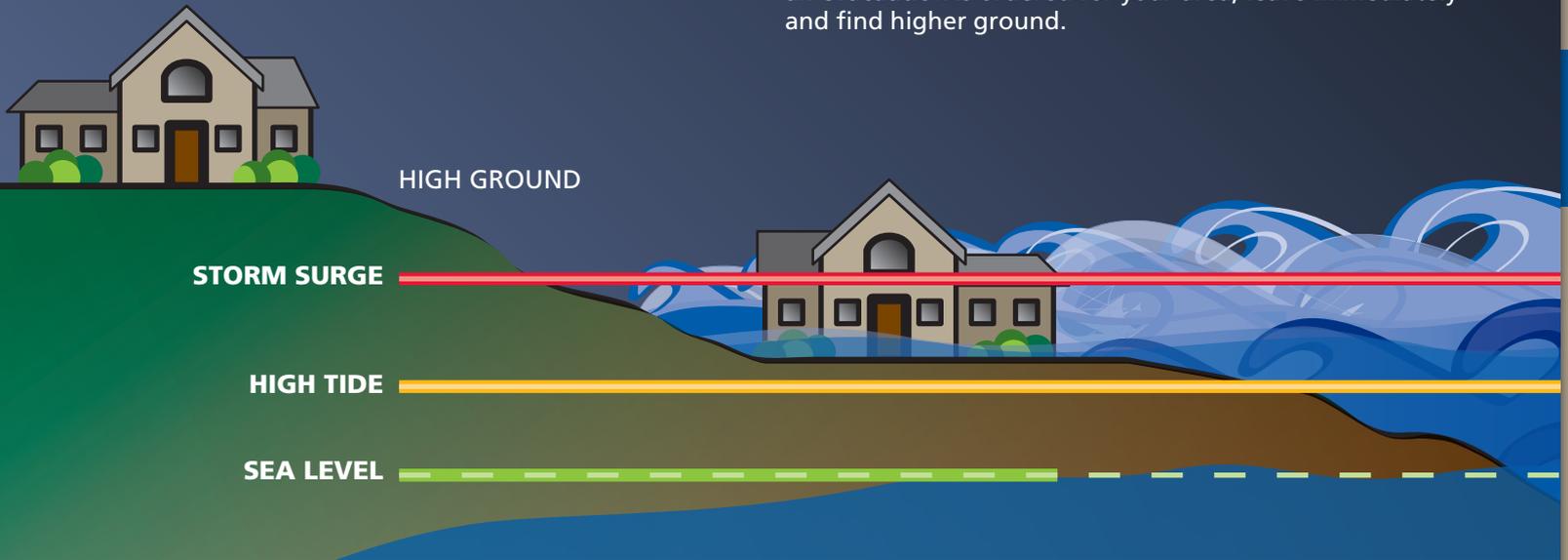
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STORM SURGE

Storm surge is water that is pushed toward the shore by storm winds, and it can increase the normal high tide by 15 feet or more. In addition, wind-driven waves on top of storm surge can cause severe damage in coastal areas. If an evacuation is ordered for your area, leave immediately and find higher ground.



The threat of storm surge is the reason emergency officials would order a large-scale coastal evacuation. The force of a hurricane's high winds pushing ocean or bay waters toward shore causes storm surge. Local officials may issue evacuation orders for areas that could be affected or isolated by storm surge. Although officials may ask people who live in areas vulnerable to storm surge to evacuate, most residents won't have to go far to be safe.

Every storm is different. Each storm's size, path, speed and factors such as ground saturation contribute to the damage a storm can cause. If emergency officials order an evacuation for your area, leave immediately.

Stay with family or friends who live on higher ground in the area. If you don't have family or friends nearby, go to a hotel, motel or local emergency shelter.

Hampton Roads residents can contact their local emergency management office to learn how storm surge can affect their property. General and local storm surge maps are available at www.vaemergency.com in the "Hurricane" section under "Threats and Emergencies."

Inland residents should keep in mind that although you are not at risk for storm surge, tropical storms could bring heavy rains and flooding far inland. Inland residents should listen to local media and have an escape route if a flash flood warning is issued for your area.

Heavy rains can cause river flooding and flash flooding anywhere in the state, regardless of storm intensity or track. All residents of Virginia should monitor storms that threaten the Commonwealth and be prepared for flooding, high winds and other possible impacts.

Keep in mind that floods can happen in any area. In fact, 25 percent of flood claims come from areas outside of high-risk flood plains, and most homeowners' insurance policies do not cover flood damage. Talk to your insurance agent about purchasing flood insurance for your property. Information about the National Flood Insurance Program is available at www.FloodSmart.gov.

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WHAT ARE WATCHES AND WARNINGS?

Historically, Virginia residents have suffered significant damage and loss of life from tropical storms, tropical depressions and hurricanes that made landfall in other states. Hurricane season lasts from June 1 to Nov. 30, and prime time for tropical-storm activity in Virginia is between August and late September.

All Virginians should understand the different types of watches and warnings:

TROPICAL STORM WATCH – The National Hurricane Center issues a tropical storm watch when tropical storm conditions, including winds from 39 to 73 mph, pose a possible threat to a specified coastal area within 36 hours.

TROPICAL STORM WARNING – The National Hurricane Center issues a tropical storm warning when tropical storm conditions,

including winds from 39 to 73 mph, are expected to affect a specified coastal area within 24 hours or less.

HURRICANE WATCH - The National Hurricane Center issues a hurricane watch to alert specific regions when hurricane conditions are forecast for the area within 36 hours. This watch should trigger your family's disaster plan and you should begin protecting your home and property from the storm. Monitor weather reports via television or radio to stay informed.

HURRICANE WARNING - The National Hurricane Center issues a hurricane warning when sustained winds of 74 mph or greater are forecast for the area within 24 hours. All precautions must be taken immediately. Your family should already be in the process of securing property and relocating to a safe place if you are ordered to evacuate. Monitor weather reports via television or radio to stay informed.

TROPICAL STORM

Winds: 39-73 mph

Wind Effects: scattered trees down, scattered power outages, some roads blocked due to downed trees and power lines. *For example, neighborhoods could lose power for several days.*



SAFFIR/SIMPSON HURRICANE SCALE

CATEGORY 1

Winds: 74 - 95 mph

Wind Effects: damage to mobile homes and some homes of frame construction. Numerous trees down and widespread power outages. Roads blocked due to downed trees and power lines. Loose outdoor items will become airborne projectiles. *For example, an area as large as a county could experience near total power loss.*



CATEGORY 2

Winds: 96 - 110 mph

Wind Effects: severe damage to the majority of mobile homes and homes of frame construction. Many trees down. Well-constructed homes will have damage to shingles, siding and gutters. Extensive damage to power lines and widespread power outages. Airborne debris could injure or kill. Damage could extend well inland. *For example, multiple localities could experience near total loss of power and water from several days.*



CATEGORY 3

Winds: 111 - 130 mph

Wind Effects: nearly all mobile homes destroyed. Severe damage to most homes, including structural collapse. Airborne debris will injure or kill. Severe damage to most low-rise apartment buildings with partial roof and wall failure. Damage could extend well inland. *For example, large portions of the affected area could experience total power and water loss for more than a week.*



CATEGORY 4

Winds: 131 - 155 mph

Wind Effects: catastrophic damage to residential structures. Most of the affected area will be uninhabitable for weeks or longer. Nearly all industrial buildings and low-rise apartment buildings severely damaged or destroyed. Nearly all trees and power poles downed. Damage could extend well inland. *For example, large portions of the affected area will experience total power and water loss for weeks and possibly months.*



CATEGORY 5

Winds: 156+ mph

Wind Effects: similar to Category 4.



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VDOT'S BRIDGE, TUNNEL AND FERRY CLOSURE PLAN



With help from the Virginia Department of Emergency Management and local governments, the Virginia Department of Transportation developed guidelines to safely close Hampton Roads area bridges and tunnels when necessary. These guidelines allow time to evacuate and close these roadways before they become unsafe for travel. Wind speeds, storm surge, rain bands and other conditions at each bridge and tunnel are evaluated to determine if and when to close. The following wind speeds, in combination with other factors, will determine the closure of VDOT bridges, tunnels and ferry services.

- The Midtown Tunnel and Jamestown-Scotland Ferry will close when an approaching tropical storm or hurricane produces sustained winds of 39 mph that are forecast to intensify.
- The Hampton Roads Bridge-Tunnel, Monitor-Merrimac Memorial Bridge-Tunnel, James River Bridge, Downtown Tunnel, Coleman Bridge and High Rise Bridge will close when an approaching tropical storm or hurricane produces sustained winds of 45 mph that are forecast to intensify.

In the event of an ordered evacuation, bridges and tunnels are planned to close after motorists are off the road. However, local weather conditions could dictate earlier closure of bridges and tunnels. Please tune to local television and radio broadcasts for the latest evacuation and facility closure information.

Real-time road closures and traffic conditions are available by dialing 511 or visiting www.511Virginia.org.

- **Note:** VDOT does not manage the Chesapeake Bay Bridge-Tunnel, which connects Virginia Beach to Virginia's Eastern Shore. The Chesapeake Bay Bridge-Tunnel is not an evacuation route. For closure information, visit www.cbbt.com.

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IF YOU NEED TO EVACUATE



You can use several routes to evacuate from the Hampton Roads area. Although Interstate 64 is the only route officials currently plan to use with reversed lanes, it is not the only way out of the area. Evacuees should become familiar with the designated evacuation route out of their community and plan to leave early to avoid significant traffic delays.

The Commonwealth has designated the following roads as evacuation routes:

- U.S. Route 460 west
- U.S. Route 58 west
- State Route 10 west
- U.S. Route 17 north
- U.S. Route 60 west
- U.S. Route 13 north, north of the Chesapeake Bay Bridge-Tunnel. The CBBT is not an evacuation route.
- Interstate 64

On the following pages, this guide will explain how an I-64 lane reversal would work, though it is important to remember there are other evacuation routes.

During an evacuation, emergency plans call for:

- VDOT Safety Service Patrols on I-64 to provide basic motorist assistance on the road or at the rest areas and comfort station
- Tow trucks on standby along I-64 to move disabled vehicles to the grassy shoulder area to keep travel lanes open
- Vans on standby to take stranded motorists to the closest available shelter
- Drinking water at the New Kent County safety rest areas, at the Jefferson Avenue comfort station on I-64 (mile marker 255) and at the Suffolk weigh station on U.S. Route 58

The Richmond Metropolitan Convention and Visitor's Bureau will have a toll-free number motorists can call for assistance to find lodging in the Richmond area and beyond. That number is (800) 370-9004 or (804) 782-2777.

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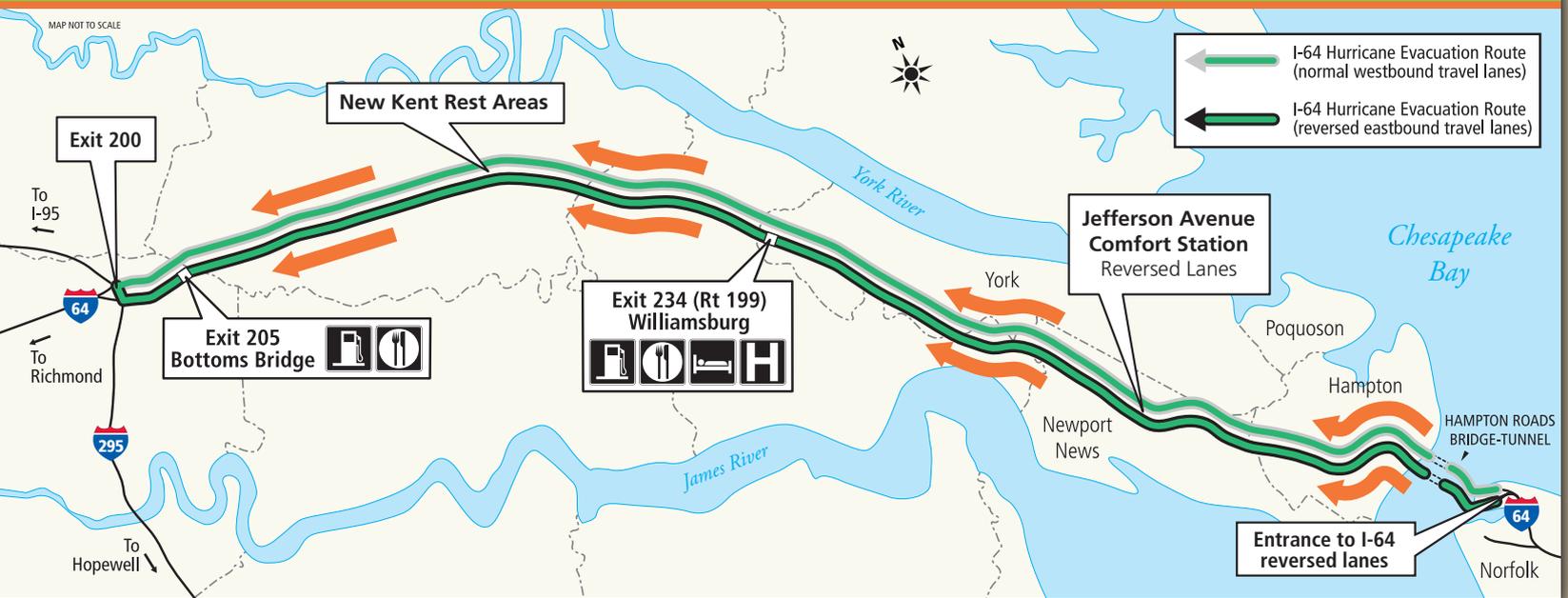
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HAMPTON ROADS EVACUATION ROUTES



BE AWARE OF THESE SIGNS DURING AN EVACUATION

WHEN WOULD VIRGINIA REVERSE TRAFFIC ON I-64?



While cities and counties issue standard evacuation orders, only the governor can issue the order for an I-64 lane reversal. The I-64 reversal plan begins just east of the Hampton Roads Bridge-Tunnel at mile marker 273 and ends at the Interstate 295 interchange east of Richmond at mile marker 200. (In addition to hurricanes, I-64 might be reversed for other emergencies at the discretion of the governor.)

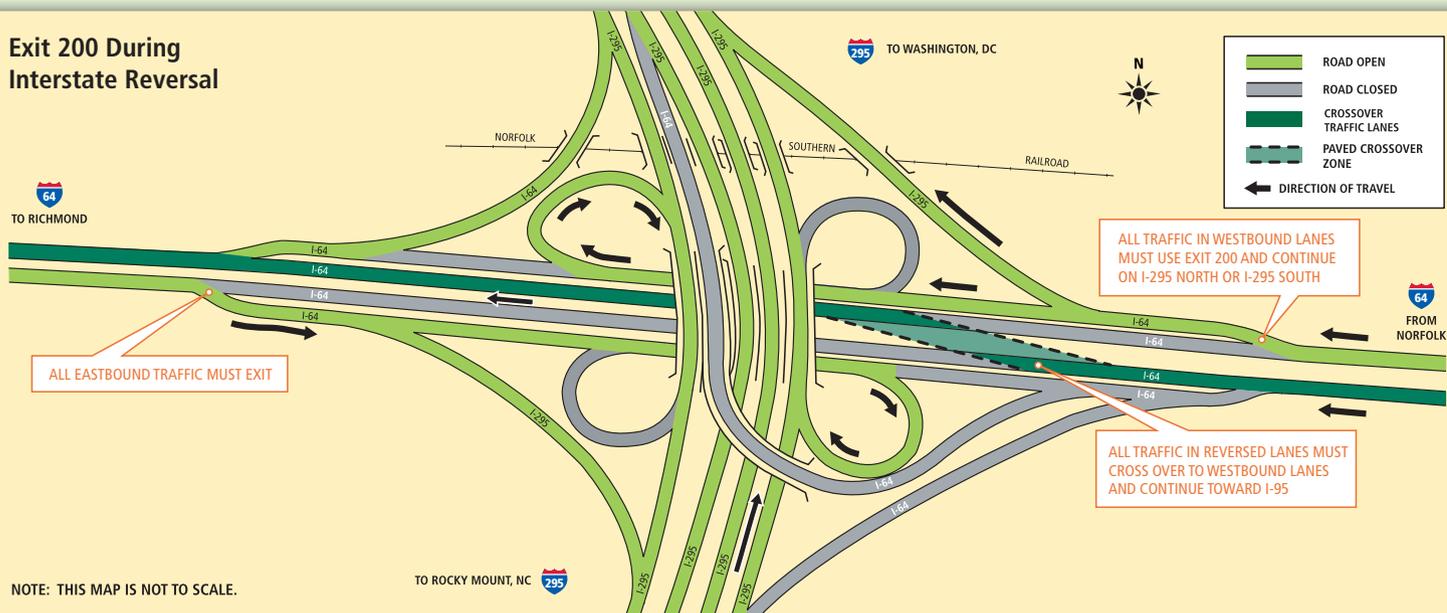
In the event of lane reversal on I-64:

- No traffic will be allowed to travel east on the interstate. All I-64 eastbound lanes and ramps between Norfolk and Richmond will be closed to eastbound traffic, from just east of the Hampton Roads Bridge-Tunnel to I-295 east of Richmond.
- **The entrance to the reversed lanes on I-64 is in Norfolk, just east of the Hampton Roads Bridge-Tunnel, at mile marker 273.** Motorists will continue traveling on the eastbound lanes until they exit I-64 or until they reach I-295 east of Richmond.

All traffic entering I-64 west of the Hampton Roads Bridge-Tunnel will travel in the westbound lanes.

- There will be only two possible exits for traffic traveling on the reversed lanes between Norfolk and I-295: Exit 234 in Williamsburg (Route 199) for gas, food, lodging and hospital and Exit 205 in Bottoms Bridge for gas and food. Without exiting, motorists can access a comfort station on I-64 near Jefferson Avenue (mile marker 255) and the safety rest areas in New Kent County.
- **Motorists exiting the reversed lanes at Exit 234 or Exit 205 cannot re-enter the reversed lanes. Once motorists exit the reversed lanes, they can re-enter I-64 using the normal I-64 westbound ramps.**
- All traffic traveling in the westbound lanes of I-64 can exit and enter the interstate as they normally would, though some entrance and exit ramps could be closed for traffic control.

Exit 200 During Interstate Reversal



NOTE: THIS MAP IS NOT TO SCALE.

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HURRICANE GATES AND REVERSING TRAFFIC ON I-64



Why did VDOT install the gates?

In the event of a hurricane or other disaster, the governor can order an interstate lane reversal to help evacuate Hampton Roads. Should this occur, all lanes on I-64 between Exit 273 and Exit 200 will carry westbound traffic. The gates along certain sections of I-64 help to reverse traffic if the governor orders an I-64 reversal. The gates were installed as a safety measure to prevent motorists from entering reversed lanes.

Why are two gates at each end of the ramp?

Gates are at each end to make sure the ramps are completely inaccessible when closed. This prevents motorists from driving along the shoulder to go around the gates. Having gates positioned at both ends of each ramp provides an additional measure of safety.

If the gates are down, how do I exit the interstate?

Only two exits will be available to motorists traveling on the reversed lanes. These two exits provide evacuees an opportunity to seek gas, food, lodging and medical care before they reach the I-295 interchange east of Richmond:

- **Exit 234** in Williamsburg (where services include gas, food, lodging and a hospital)
- **Exit 205** at Bottoms Bridge (where services include gas and food)

Motorists exiting the reversed lanes cannot re-enter the reversed lanes. Once a motorist exits the reversed lanes, they can re-enter I-64 using the normal I-64 westbound ramps.

A temporary comfort station will be located on I-64 at Jefferson Avenue (mile marker 255) to provide restrooms and water. Motorists cannot exit I-64 at Jefferson Avenue. Farther west, New Kent County safety rest areas will be open.

Who will monitor the exits and roadway during the evacuation?

VDOT, Virginia State Police and Virginia Army National Guard personnel will be on duty at each ramp, the Jefferson Avenue comfort station and the two safety rest areas on I-64 in New Kent County. VDOT Safety Service Patrol will assist motorists when possible.

What happens at the I-295 interchange?

- The I-64 reversal ends at the I-295 interchange east of Richmond.
- Motorists on I-64 west lanes must take Exit 200 and travel on I-295 north toward Fredericksburg and Northern Virginia or I-295 south toward Petersburg.
- Motorists on I-64 reversed lanes (normally eastbound) will cross over to I-64 west lanes and continue west toward the I-95 interchange. See Exit 200 map for more information.

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PUBLIC SHELTER INFORMATION



If emergency officials order an evacuation of your area, you must be ready to leave immediately. Decide **now** where you will go, what you will need to take with you and what route you will take.

If you need to evacuate, remember these tips:

1. Leave early. An evacuation will increase traffic on evacuation routes, and your trip will take longer than usual. Be prepared for delays. The sooner you leave, the sooner you will get to your destination and out of harm's way. You will also spend less time in traffic.

2. Stay local.

- If you have nearby family or friends who live outside of storm surge areas, ask if you could stay with them.
- If you can stay in a hotel or motel outside of storm surge areas, then there may not be a need to travel far inland. As a storm approaches, rooms may fill up fast, so make plans early.
- If you must stay in a public shelter, shelters on higher ground within the area may be open.

3. Public shelters are a last resort. Take your emergency supply kit. Public shelters provide basic necessities such as food, water and a small amount of space for your family to stay. Most shelters do not provide items such as cots, bedding or items for infants or those who have special medical needs. Relief organizations may provide some of these items after the storm has passed, but you should be prepared to provide these supplies for your family until help arrives.

4. Listen for local, up-to-date information. Emergency officials will provide information about open shelters through local media. Shelters can fill quickly, and officials will open new shelters as needed. If you need to go to a different shelter, toll-free call centers will be open during an evacuation to provide you with the most current information.

5. Plan now for your pets. Some emergency shelters will only accept service animals. Talk to your veterinarian or local humane society in advance about an emergency plan for your pets, or plan to stay with family or friends or at a pet-friendly hotel. Have copies of your pets' immunization records ready to go.

Whether your plan is to go to a family or friend's home, to a hotel or to a shelter, take your disaster supply kit with you. Gather essential supplies to support your family for at least three days, including:

- A three-day supply of special items for any elderly, disabled or infant members of your household
- Copies of important documents, such as insurance policies and birth certificates that will help you claim assistance after the disaster
- If you must stay at a shelter, bring blankets, pillows, linens and something to sleep on, such as a cot, air mattress or cushion

For more information about how to prepare your family for a disaster, visit www.ReadyVirginia.gov.

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EMERGENCY SUPPLY KIT LIST

Below is a list of items to collect before a storm threat. Try to have enough supplies to last at least three days. Should you need to evacuate, it is a good idea for each person to have their supplies in an easy-to-carry bag, such as a backpack or gym bag.

The Commonwealth has enacted a Hurricane Preparedness Sales Tax Holiday to help encourage residents to assemble their emergency supplies. It is held annually during the last week in May. Visit www.ReadyVirginia.gov for more information about creating an emergency supply kit.

Put these essentials in your kit:

- Food that won't spoil, such as canned goods and packaged foods
- Water, one gallon per person per day
- A working battery-operated radio and extra batteries
- A written family emergency plan

Once you have the essentials, you should add:

- Flashlights and extra batteries
- First-aid kit, including a list of allergies and extra contact lenses or glasses
- A written list of your prescriptions and the prescribing doctor(s) and at least a week's supply of medications
- Sanitation supplies: toilet paper, soap, plastic garbage bags and personal hygiene items
- Change of clothing, sturdy shoes and a blanket or sleeping bag
- Special items for infant, elderly or disabled family members
- Manual can opener for food (*if kit contains canned food*)
- Whistle to signal for help
- Plastic sheeting and duct tape to shelter where you are
- Wrench or pliers to turn off utilities
- Local maps
- Copies of important family documents, such as insurance policies, identification and bank account records in a waterproof, portable container
- Cash in small denominations, traveler's checks and change
- Emergency reference material, such as a first-aid book
- Household chlorine bleach and medicine dropper (*when diluted in water, bleach can be used to kill germs*)

- Fire extinguisher
- Sunscreen
- Matches in a waterproof container
- Paper cups, plates and plastic knives, forks and spoons, paper towels
- Paper and pencil
- Books, games, puzzles or other activities for children
- Specialty items such as baby food, diapers and medications

Don't forget to gather supplies for your pet:

- Medications, immunization records and a first-aid kit
- Sturdy leashes, muzzles, harnesses, carriers or cages to transport pets safely. Carriers should be large enough for your pet to stand comfortably, turn around and lie down. Include blankets or towels for bedding and warmth.
- Current photos of your pets in case they get lost
- Food, drinking water, bowls, cat litter/pan and can opener
- Information on feeding schedules, medical conditions, behavior problems and the name and number of your veterinarian
- Pet beds and toys, if easily transportable
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FOR MORE INFORMATION

Virginia Department of Transportation
www.VirginiaDOT.org/hurricanes

Traffic Info
Dial 511
www.511Virginia.org

Virginia Department of Emergency Management
www.vaemergency.com

VDEM Virginia Emergency Info
TOLL-FREE LINE 1-866-782-3470

Virginia Department of Social Services
General Assistance:
Dial 211
www.211Virginia.org

American Red Cross
1-800-733-2767
www.redcross.org

Federal Emergency Management Agency
www.fema.gov

FEMA Hurricane Hazards Fact Sheet
www.fema.gov/hazard/hurricane/index.shtm

FEMA Kids Page
www.fema.gov/kids

FEMA National Flood Insurance Program
1-888-CALL-FLOOD
1-800-638-6620
www.floodsmart.gov

Tips for preparing your family, business and animals for an emergency
www.ReadyVirginia.gov

YOUR EMERGENCY CONTACT NUMBERS:



Ready Virginia is a statewide public education effort to prepare Virginians for all hazards. State agencies and nonprofit organizations active in disaster preparedness have collaborated to create educational materials and an interactive Web site to teach residents and businesses the basic steps toward preparedness:

Get a kit • Make a plan • Stay informed

www.ReadyVirginia.gov

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