

# Welcome

*Tricia Chappell*

*Hurricane Planner VDEM*



# Hurricanes

*How Prepared Are We?*



# Hurricane Forecast

- Annual hurricane forecast serve to remind us that we need to continually prepare for tropical weather events.
- If only one hurricane makes landfall during the season and it impacts the Commonwealth –

**That's a bad year!**

# Preparedness Initiatives

- Delmarva & Virginia Hurricane Evacuation Studies
- Evacuation Route Planning
- State Shelter Program Development
- Special Needs Population Planning
- Pet/Animal Planning

# Hurricane Evacuation Studies Underway

Delmarva Study – Encompasses the 3 Virginia eastern shore jurisdictions

Virginia Study – Broken into 2 phases...

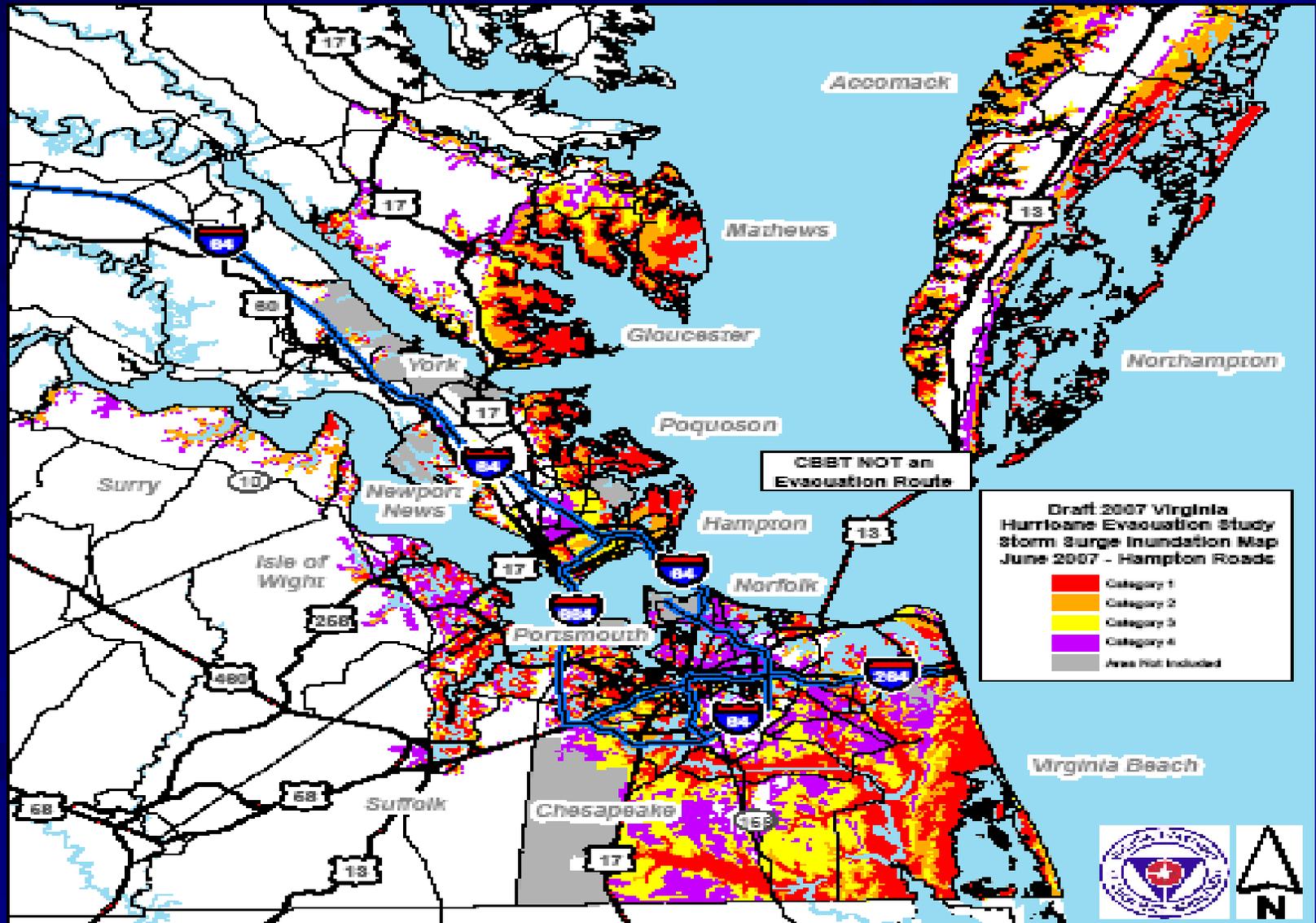
Phase 1 – “11” Southside & Peninsula hurricane risk localities

Phase 2 – “7” Middle Peninsula & Northern Neck localities that were directly impacted by surge flooding during Hurricane Isabel.

# What does HES give us?

- Digital Storm surge maps
- Behavioral Analysis
- Transportation Analysis
- Shelter Analysis
- Technical Data Report

# Updated Storm Surge Maps



# The results of the studies will impact local & state planning efforts

- Provide updated population numbers for people that live in storm surge zones
- Will identify how many people will need to evacuate the Hampton Roads area based on storm category
- Provide updated population numbers for evacuees that will seek “public shelter” to include SMS facilities.

# Transportation & Evacuation Planning

## *Work in Progress*

### ■ VA HES

- Updated Storm Surge Maps (*in progress*)
- ✓ – Behavioral Analysis
- Transportation Analysis (*in progress*)

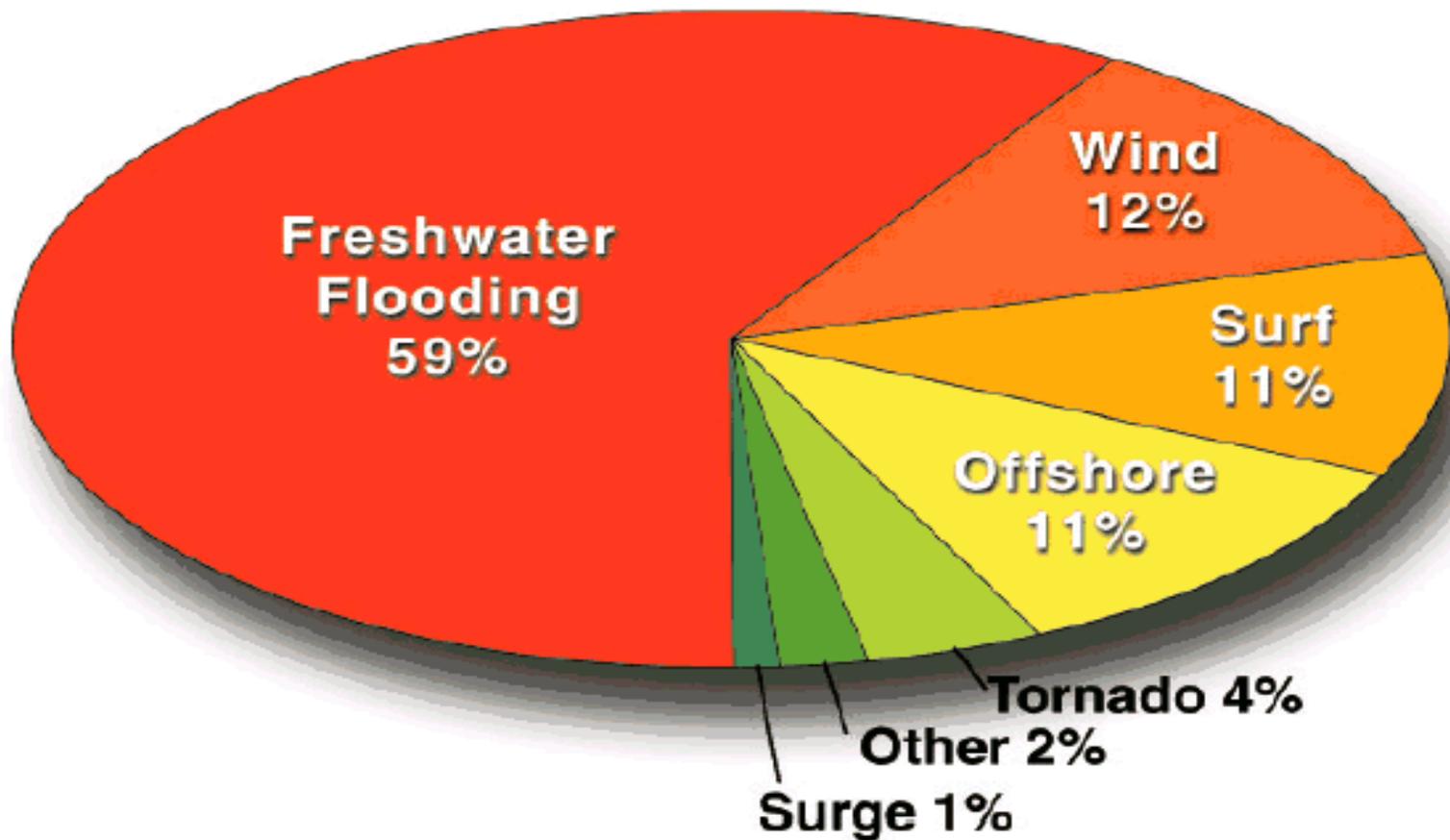
### ■ VTRC Evacuation Transportation Study (*in progress*)

### ■ ODU/VMASC (*pending*)



# Why we evacuate!

Leading Causes of Tropical Cyclone Deaths in the U.S 1970-1999



Source: Edward Rappaport—Chief, Technical Support Branch, Tropical Prediction Center

How many people would need  
to evacuate?

## Risk Population

People Live/Work or Vacation in Hampton Roads  
“storm surge” areas

# The decision to evacuate

- Governor determines if an evacuation is to be mandatory and when and how implemented
  - Governor can delegate authority to Local jurisdictions who determine which areas to evacuate based upon risk
- Phased evacuations
  - Phase 1 & 2
- Lane Reversal (Contra-flow) can be used for any category storm at the Governor's discretion

# Evacuation & Sheltering Coordination

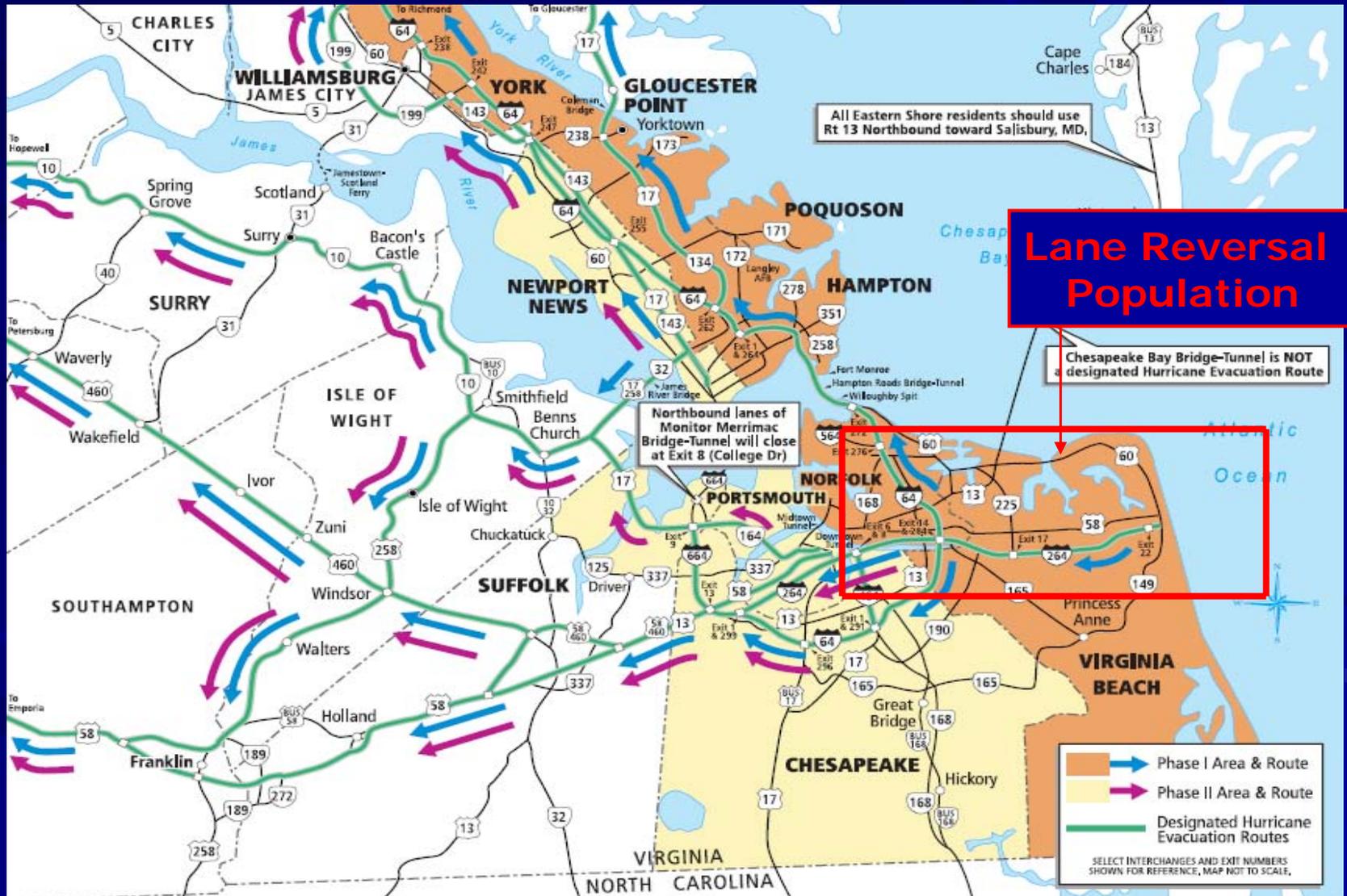
- Virginia Evacuation Coordination Team for Operational Response (VECTOR) - Comprehensive oversight team in VEOC consisting of VDOT, VDEM, DSS (sheltering), VSP, VaNG, Tourism Commission and others
- SOPs under development



# Evacuation Routes

- Major evacuation routes from Virginia's coastal area are:
- **Routes 58, 60, 460, 10, 17 and I-64** toward Emporia, Petersburg, Fredericksburg, Richmond and other inland locations
- **Not everyone will use I-64!**

# Hampton Roads Phased Evacuation Plan



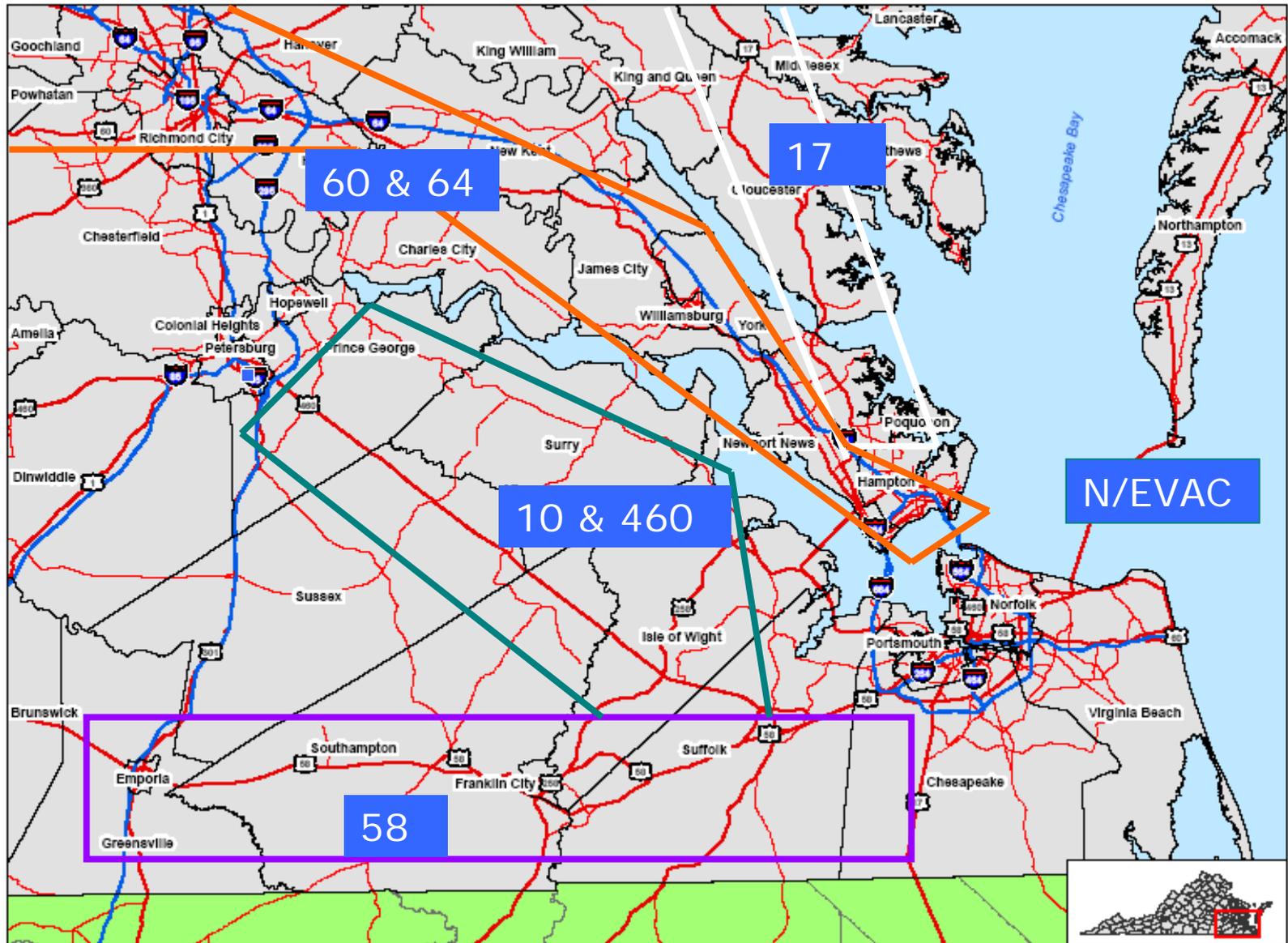
**Lane Reversal  
Population**

Chesapeake Bay Bridge-Tunnel is NOT a designated Hurricane Evacuation Route

Northbound lanes of Monitor Merrimac Bridge-Tunnel will close at Exit 8 (College Dr)



# Evacuation Route Corridors



# Lane Reversal Exercise- May '07

- 3 Goals for the exercise
  1. Test Communications
  2. Practice protocols and cooperation
  3. Close gates
- Exercise successful and for determining where adjustments or more work is needed
- '08 Exercise in the planning stages now



# State-Managed Shelters

- For those people seeking public shelter
  - ~10% of the total evacuating population
    - 40,000 evacuees
    - Includes transportation dependent



# Potential Shelter Survey

- Started with higher education group in mass
  - Group with the most potential for large spaces and on-site mass care capabilities
  
- 107 total sites reported
  - Higher education
  - Other state departments





C

B

A

# Rounds One & Two Assessment -Results-

- 63 buildings assessed to date

- 28 have been determined viable

- Potential capacity:

- General Population: 27,000

- Including 1,200 + Special Medical Needs

- Pets: 5,240 spaces

# Summary

- VA continues to enhance its evacuation planning implementing lessons learned from recent hurricanes including Special Medical Needs and Pets
- Designated state facilities will be utilized as shelters or refuges of last resort
- Planning activities with localities and neighboring states continue
- Completion of VA Hurricane Evacuation Re-Study prior to the 08' season

So back to the original  
question...

“How Prepared Are We?”

We've come a long way...

But there's much left to be done!

*Remember... the road to success is  
ALWAYS under construction!*



# Questions...Comments?

