

Session 32

Paul Clark

FL. Dept. of Transportation

Design for Freeway Contraflow and Hurricane Recovery

Topic Description

Value Engineering reviews of U.S. 98 in Franklin and Okaloosa Counties after Hurricanes of 2005. Utilized innovative methods and products to expedite rebuilding of these roadways.

Speaker Biography

Paul is the Statewide Traffic Incident Management and Road Ranger Program Manager for the Florida Department of Transportation. He has been with the Department since 1994 and in his current position since April of 2005. Prior to his current position he was one of the Department's five full time emergency managers coordinating and preparing for response to major events in the state of Florida.

Raised in Central Florida, Paul now lives in Tallahassee with his wife Jennifer and son Alex. He has recently become the Co-Chair of the Safety Task Force of the I-95 Corridor Coalition

Session 32

Michael Akridge

FL. Dept. of Transportation

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Topic Description

Value Engineering reviews of U.S. 98 in Franklin and Okaloosa Counties after Hurricanes of 2005. Utilized innovative methods and products to expedite rebuilding of these roadways.

Speaker Biography

Mr. Akridge is a USAF veteran who retired in 1986. He has since worked for the State of Florida in a variety of positions including Deputy Right of Way Manager, Property Management & Relocation: Assistant to the State Highway Engineer: and ITS Administrator, CVO/ETC and currently is the Deputy State Traffic Engineer, Incident Management and Commercial Vehicles.

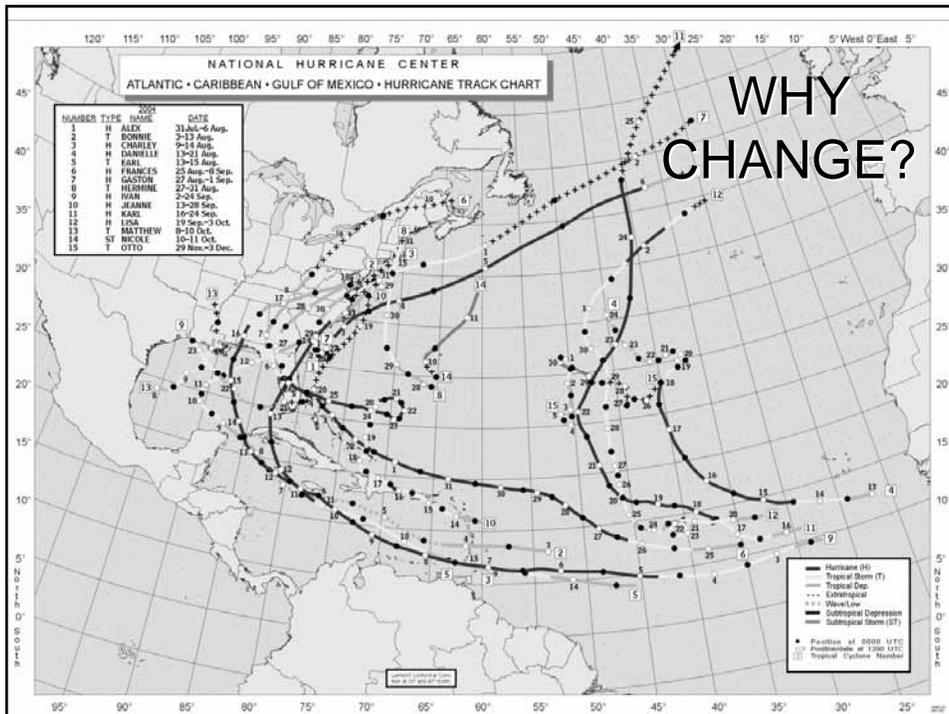
Mike took over the Deputy Engineer position for Incident Management in 2004 and started his CVO track as the Assistant to the State Highway Engineer in 1997, he later moved into the newly formed ITS Program Office as the Administrator for Commercial Vehicle Operations and Electronic Toll Collection. He serves as Florida's Commercial Vehicle Information Systems and Networks (CVISN) Program Manager. Mike also serves in a national capacity as the Immediate Past Chair of ITS America's Commercial Vehicle and Freight Mobility Forum and has served as the Co-Chair of the I-95 Corridor Coalition Commercial Vehicle Track. Mike currently sits of the Board of Directors as well as the Executive Board for the Heavy Vehicle License Plat (HELP) Inc. a public/private non-profit partnership and he chairs the Commercial Motor Vehicle Review Board for the State of Florida.

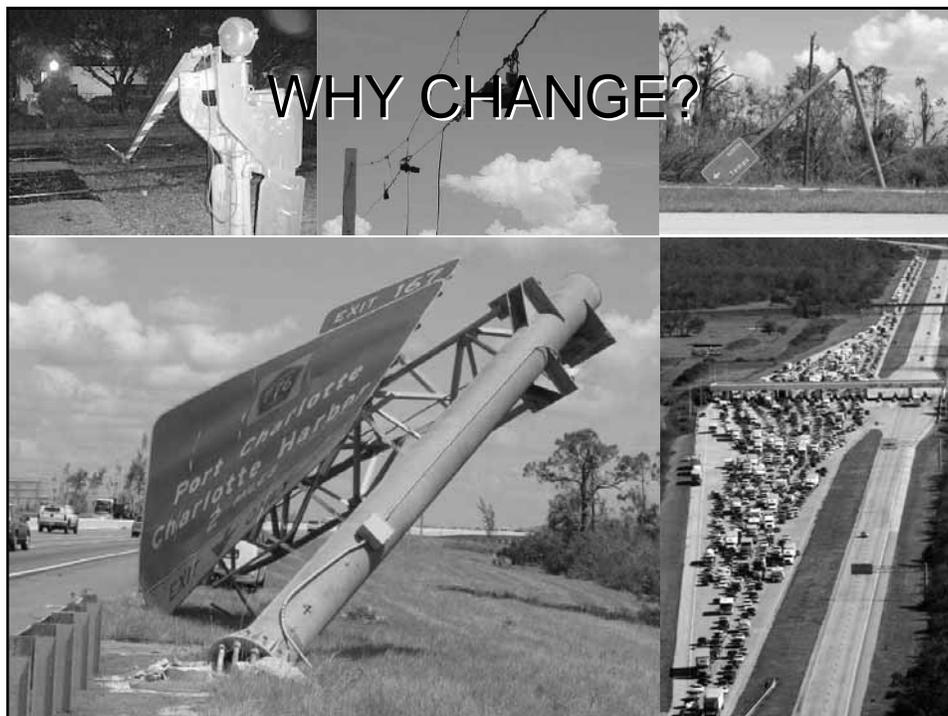
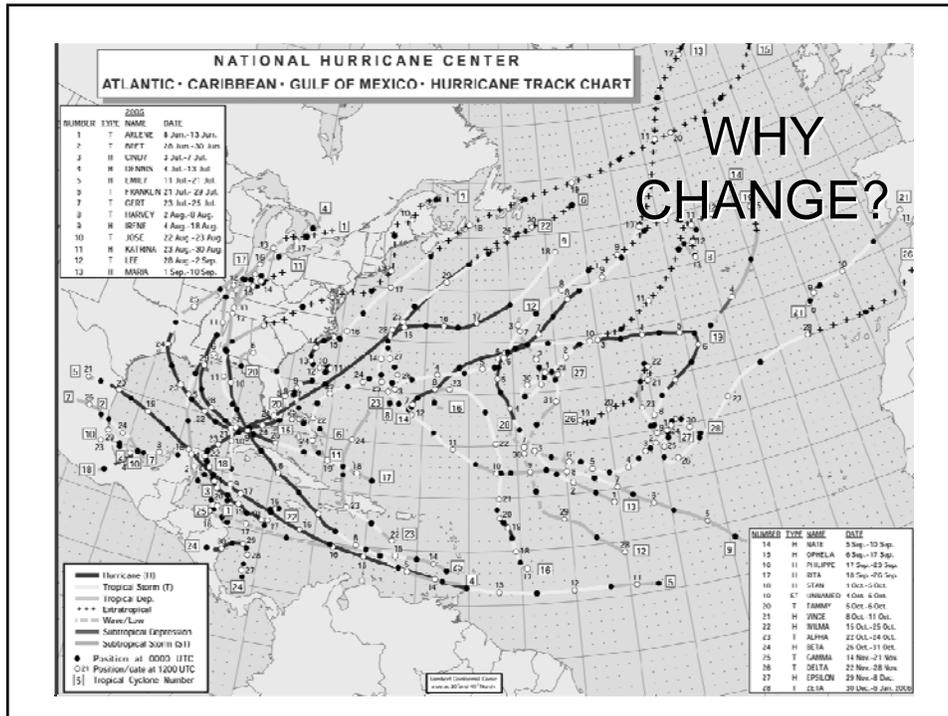
Mike has a Bachelors of Science Degree in Business from Tampa College, in Tampa Florida and received the designation of Certified Public Manager from Florida State University in 1991.

Mike and his wife Carmen have been married 32 years and have two grown children and two grandsons.

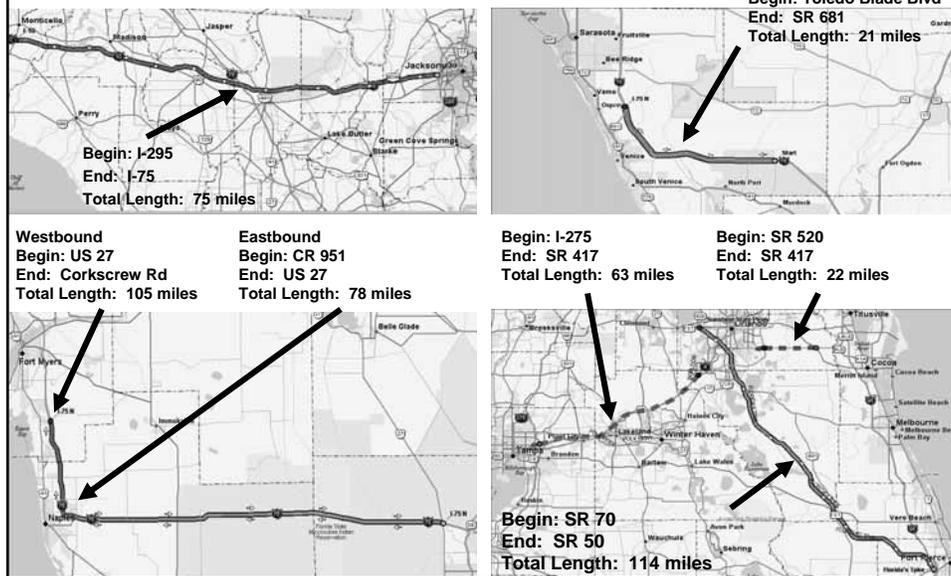
DESIGN FOR FREEWAY CONTRAFLOW AND HURRICANE RECOVERY

FICE/FDOT
DESIGN CONFERENCE 2006
Orlando, FL - August 1, 2006





Florida's Existing Contraflow Routes



Dos and Don'ts of Contraflow

- Contraflow Workshop February 2006
- To bring states together to discuss lessons learned and best practices from contraflow evacuation implementation
- To gather the best practices and lessons learned from other states and present the initial outcomes, "The Dos and Don'ts," to the group on day two
- Main reason was to learn from others mistakes so we can try to avoid them when we implement our plans

Dos and Don'ts of Contraflow

The following states presented on their state's plan:

Texas

Georgia

Louisiana

South Carolina

Mississippi

North Carolina

Alabama

Virginia

Florida

All of these states have contraflow plans and the majority of them have implemented them in recent years

Outcome

The Do's and Don'ts of Contra Flow



© Lap T. Hoang

*State Traffic Engineer,
Florida DOT*

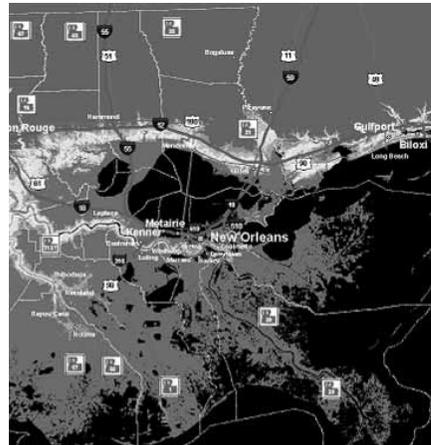
Do Have A Plan

- Be flexible
- Have a traffic plan
- Do outreach
- Define both ends
- Must include . . .
- Should consider . . .
- Motorist info



Be Flexible

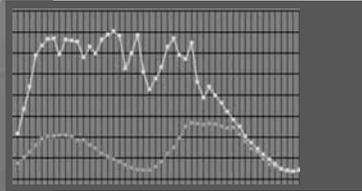
- Political decision vs Engineering decision
- Plan for unexpected



Traffic Plan



- Clear chain of command
- Define route
- Handle logistics
- Create care plan
- Limit public choice
- Use ITS information



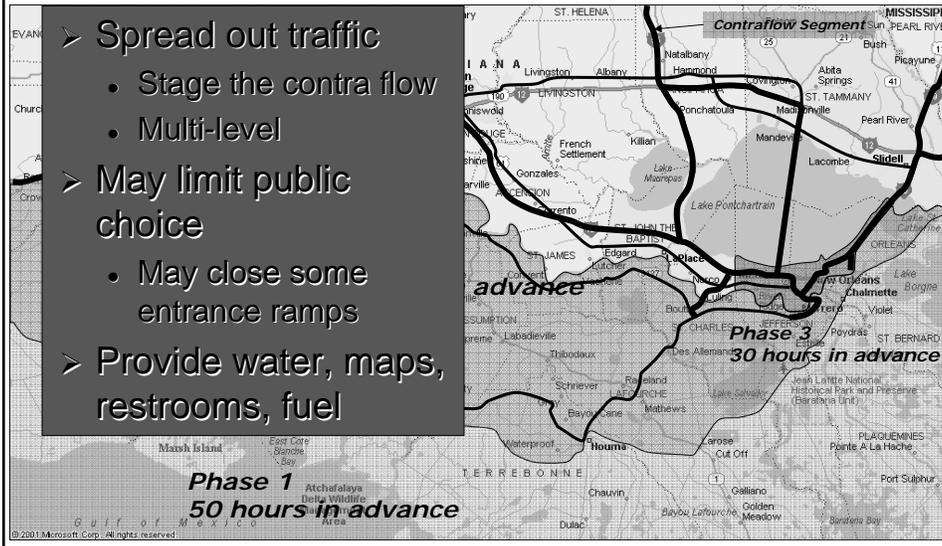
Define Both Ends

- Entry = Exit
- Consider exit location
 - shelters
 - food
 - gas



Should include

- Spread out traffic
 - Stage the contra flow
 - Multi-level
- May limit public choice
 - May close some entrance ramps
- Provide water, maps, restrooms, fuel



Should include

- Stranded motorists
 - Service patrols
 - Take care of stranded motorists
- Routes for emergency vehicles



Motorist Info

- Signs
- Barricade
- ITS



Should include

- Infrastructure improvement
 - Gates
 - Building crossover
 - Guard rail end treatments
 - Median openings
 - Reflective buttons



After action review



Don't

- **Don't** underestimate resource requirements
- **Don't** forget to pre-stage water, gas, rest rooms
- **Don't** be slow to react
- **Don't** contraflow on reentry
- **Don't** give the public unlimited choices
- **Don't** underestimate human behavior
- **Don't** use contraflow if you have a good evacuation route

Don't

- **Don't** underestimate resource requirements



Don't

- **Don't** forget to pre-stage water, gas, rest rooms



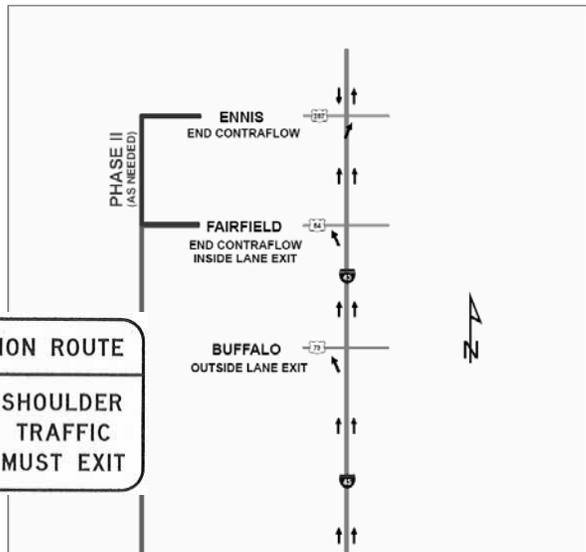
Don't

➤ **Don't** be slow to react



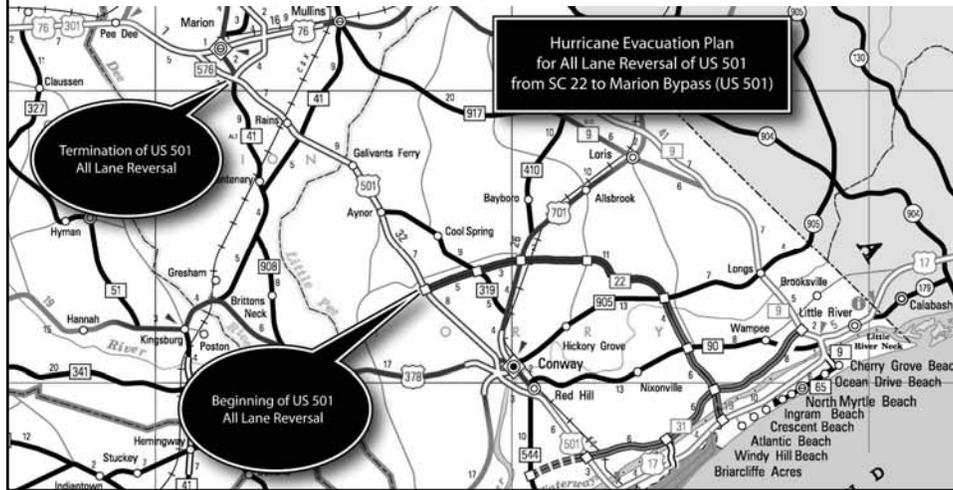
Don't

➤ **Don't** contraflow on reentry



Don't

➤ **Don't** give the public unlimited choices



Don't

➤ **Don't** underestimate human behavior



Don't

- **Don't** use contraflow if you have a good evacuation route



The Infrastructure Review Process

- Learning from the Workshop
- Assessed the practices to determine feasibility
- Applied these practices to Florida's routes
- Presented to the Executive Committee to determine our next steps

Infrastructure Improvement Recommendations

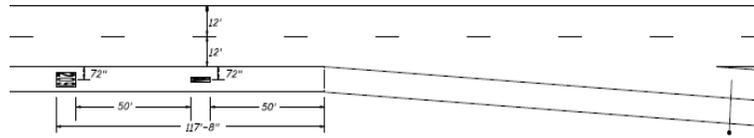
Must Do

- Two-lane Crossover
- One-lane Crossover
- Flip-down Signs
- Guardrail End Modification

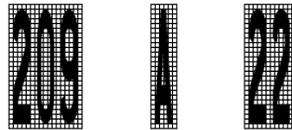
Should Do

- Closed-circuit Television
- Dynamic Message Sign
- Drop Gate
- Paint for Exit Numbers
- Highway Advisory Radio
- Citizens Band Wizard

EXIT NUMBERS



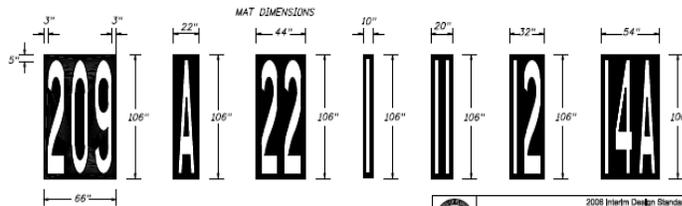
LAYOUT FOR 1, 2 AND 3 DIGIT NUMBERS AND LETTERS



MESSAGE SIZE AND SPACING

NOTES:

1. Messages shall meet requirements of Specification Section 971-7 and Section 711.
2. The thickness of the preformed message shall be 125 mils.
3. The message shall consist of white letters and numbers with black contrasting material. The black material shall meet the mat dimensions shown and have a minimum skid resistance value of 55 BPN.
4. The "EXIT NUMBER" position remains the same (117'-8") from the beginning of taper regardless of the number of lines of information.



2008 Interim Design Standard
SPECIAL MARKING AREAS

Table 3
Sheet No.
8 of 14
17346

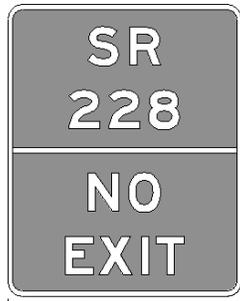
EXIT NUMBERS



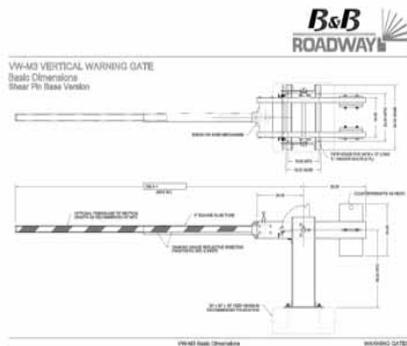
EXIT NUMBERS



FLIP DOWN SIGNS



DROP GATES



HAR and CB Wizard



ROUTE INFORMATION

Motorist Advisory

CONTRAFLOW

Plan for One-Way Evacuation of Interstate 10

A partnership of:

- FLORIDA DEPARTMENT OF TRANSPORTATION
- FLORIDA DEPARTMENT OF EMERGENCY MANAGEMENT

Contraflow Route for I-10

The contraflow route for I-10 is available for motorists of Lane and 50 lanes eastward. It begins at I-295 and continues west to 50 miles, ending at I-75 near Lake City.

If this contraflow plan is activated, an eastbound I-10 traffic route will be in place. All eastbound I-10 traffic along the route will stop for several hours. This will allow the majority of the eastbound lanes to be used for traffic, and the westbound lanes to be used for I-10 contraflow traffic.

Alternate Route

Motorists traveling an alternate route west must travel to the alternate route via I-10.

Beginning the Contraflow

The I-10 contraflow route begins at approximately 40 miles east of Lake City, approximately 10 miles east of I-295. There, the westbound I-10 lanes transition to the contraflow lane using a lane-use controller in the highway median. Eastbound traffic on I-10 that uses an I-10 exit ramp must exit on I-10 in the right-hand lane. Exit ramps to I-10 exist for I-295 (eastbound only). Also, there is an exit ramp for I-295 (westbound) from I-10 contraflow lanes.

Exiting the Contraflow

At the I-75 interchange south of the contraflow section, lanes merge with the northbound I-75 on-ramp. Depending on traffic conditions, westbound I-75 vehicles may be allowed to take a second exit to I-75 southbound.

On the Radio

Refer to the following radio channels for route and general information from the Florida Public Safety Network:

- Interstate: 561.25 MHz
- Emergency: 561.75 MHz
- Interstate: 561.75 MHz
- Emergency: 561.75 MHz

Facilities Along the Route

Rest, fuel, and lodging is available at I-10 exits for US-29, US-295, SR-50, SR-10, and SR-100.

In Deane County and in Sevier County, there are rest areas on both sides of I-10 and they will be open to motorists.

Local Agency Phone Numbers

Deane County (Sevier County) Emergency: 800-833-8333
 Deane County Sheriff's Office: 800-833-8333
 Deane County Emergency: 800-833-8333
 Sevier County Emergency: 800-833-8333
 Sevier County Sheriff's Office: 800-833-8333
 Sevier County Emergency: 800-833-8333

CONTRAFLOW LEGEND

- Highway Mileage
- Rest Area
- Emergency (911 or 911)
- Interchange
- Exit Ramp
- Exit Ramp

CONTRAFLOW ROUTE

www.one-way-florida.com

QUESTIONS

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