



# US 70 Public Work Session

*New Bern/James City Area - Work Session*

## US 70 Corridor Planning for the Future

**Brinson Elementary School  
Thursday, January 31, 2008**



## Agenda

**Sign-in, View Maps,  
Talk to Project Team**

**Public Q & A Session**

**Breakout Groups**

- **Access Management  
Concepts & Plans**
- **Freeway Plans**



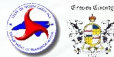
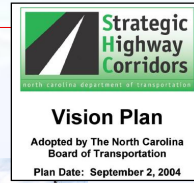
*One Vision : One Voice*

2  Kimley-Horn  
and Associates, Inc.



## What is US 70?

- **Strategic Corridor**
  - 45% NC traffic occurs on 7% State's system
- **Commercial Main Street**
- **Major Truck Route**
  - NC Ports: Increased truck traffic with growth at Morehead and Radio Island



One Vision : One Voice



## Commission Vision Statement

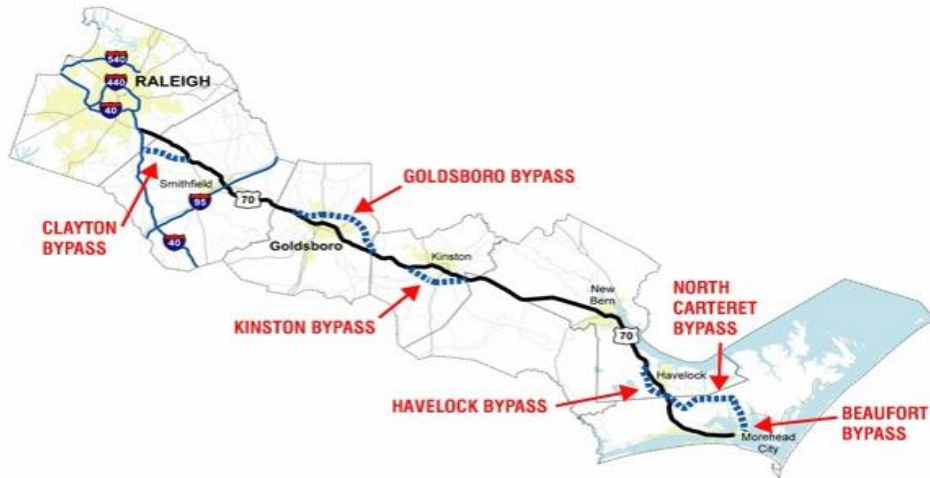
"To partner with local, regional, and state government agencies to effectively support initiatives **enhancing safety, mobility and economic vitality** along the Highway 70 corridor through **land use planning, transportation improvement, and economic development strategies.**"



One Vision : One Voice



## A Closer Look at US 70 Corridor



One Vision : One Voice

5

Kimley-Horn and Associates, Inc.



## US 70 Today

- **Traffic: 12,000 – 54,000 vpd**
  - New Bern: 45,000 vpd
  - Trent River Bridge: 54,000 vpd
  - James City: 49,000 vpd
  - Grantham: 37,000 vpd
  - Thurman: 28,000 vpd
- **57 signals**
- **264 median openings**



One Vision : One Voice

6

Kimley-Horn and Associates, Inc.



## US 70 Website

Keep up-to-date with  
US 70 news and  
plans at our  
website:

[www.super70corridor.com](http://www.super70corridor.com)



One Vision : One Voice



## US 70 Corridor

Creating Super 70 with One Vision: One Voice

- ★ NEWS/HOT TOPICS
- ★ WHAT IS SUPER 70?
- ★ CORRIDOR STRATEGY
- ★ CORRIDOR PROJECTS
- ★ MEETINGS
- ★ PARTICIPANTS
- ★ EDUCATION
- ★ RESOURCES
- ★ PLANS & MAPS

### JOHNSTON COUNTY JOINS THE SUPER 70 COMMISSION

On Nov. 5, 2007, the Johnston County Board of Commissioners voted to join the US 70 Corridor Commission. With their membership, the Commission now represents all six counties on US 70 between I-40 and the Port at Morehead City.



For questions, comments, or more information on the Commission, send us an [email](mailto:super70corridor@kimley-horn.com).

© 2007 Kimley-Horn and Associates, Inc.  
[www.kimley-horn.com](http://www.kimley-horn.com)

Visitors: [www.kimley-horn.com](http://www.kimley-horn.com)

### COUNTY PUBLIC WORK SESSIONS UNDERWAY

Starting in November, the US 70 Corridor Commission is holding a series of public work sessions in each member county. The purpose of the work session is to engage the general public in a meaningful discussion about the US 70 Corridor and Commission activities. Participants will get the opportunity to provide quality feedback regarding the problems, issues, and solutions associated with the corridor.

Attendees will have a chance to:

- View a presentation about the US 70 Corridor Commission
- Review corridor safety, mobility, and economic development data
- Review access management plans for their County
- Review conceptual freeway plans for the corridor from I-40 to the Port at Morehead City
- Get progress reports on US 70 projects and bypasses
- Talk to Commission members and representatives about your concerns and ideas

The schedule for the County work sessions are:

- Carteret County - held November 15, 2007 (see [Meetings](#) page for download)
- Craven County: Havelock Area - Thursday, January 17, 2008, 6:00 p.m. - Havelock Tourist & Event Center
- Craven County: New Bern/James City Area - Thursday, January 31, 2008, 5:30 p.m. - Benson Elementary School
- Lenoir County (with Jones County) - February 2008
- Wayne County - February 2008
- Johnston County - February/March 2008

Stay tuned for updates on dates and location for the meetings. Meeting agendas and flyers are available on the [Downloads](#) page.

To be added to the Super 70 email list, send an email to [super70corridor@kimley-horn.com](mailto:super70corridor@kimley-horn.com) with "Add me to the Super 70 email list" in the subject line.



## US 70 Public Work Session

New Bern/James City Area Work Session

# Questions / Comments

[Access Management](#)

[Crashes](#)

[Standards](#)

[Ramp-Overs](#)

[Bypasses](#)

[AM Handbook](#)



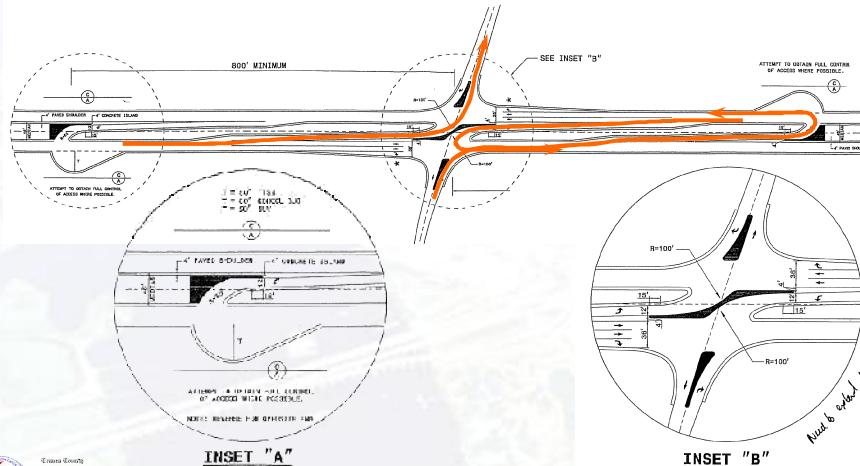
Kimley-Horn  
and Associates, Inc.





## Access Management Measures

### Mainline Directional Cross-over (Left-over)



One Vision : One Voice

9

Kimley-Horn and Associates, Inc.



## Access Management Measures

### Example Directional Cross-over (Left-over)



One Vision : One Voice

10

Kimley-Horn and Associates, Inc.



## Access Management Measures

### Minor St. Directional Cross-over (Reverse left-over)



One Vision : One Voice

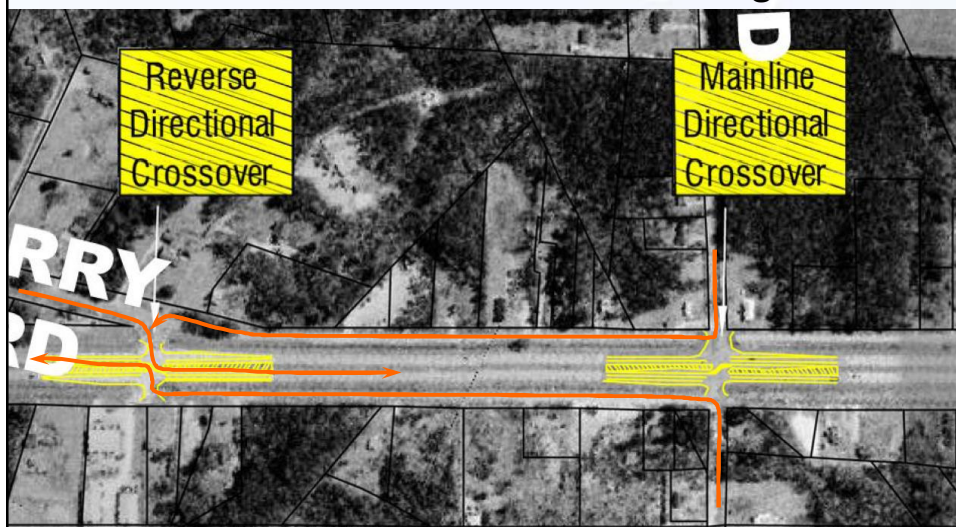
11

Kimley-Horn  
and Associates, Inc.



## Access Management Measures

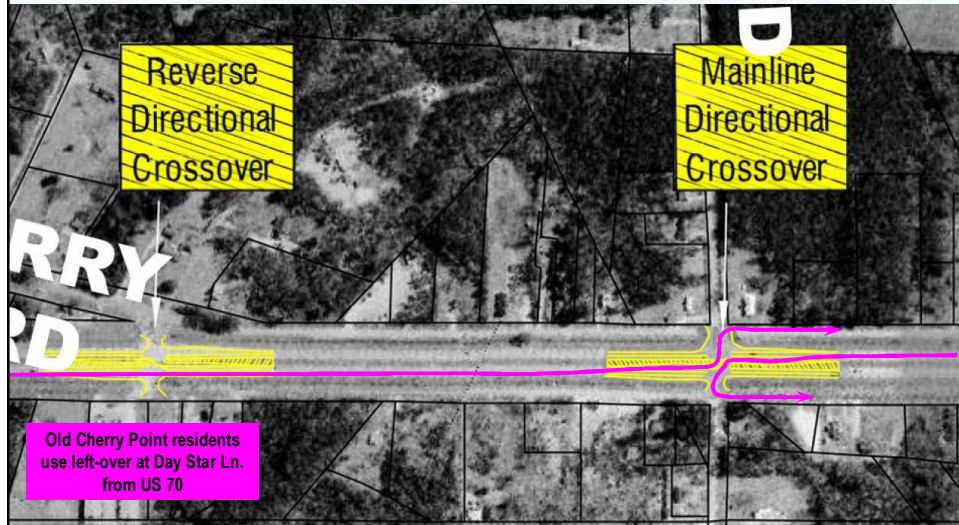
### Mainline/Reverse Cross-over Pairing





## Access Management Measures

### Mainline/Reverse Cross-over Pairing



## Access Management Measures

### Dual Mainline Cross-over Pairing

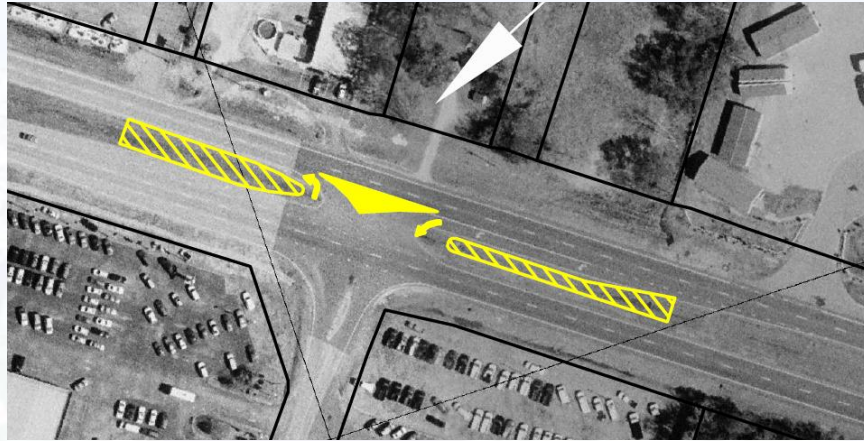






## Access Management Measures

### Channelized Left-in/Left-out (Pork Chop)



One Vision : One Voice

15



## Freeway Retrofit Strategies

### Alternate Interchanges

- **Compressed Diamond**
  - Example: US 501 and George Bishop Parkway, Myrtle Beach, SC



One Vision : One Voice

16





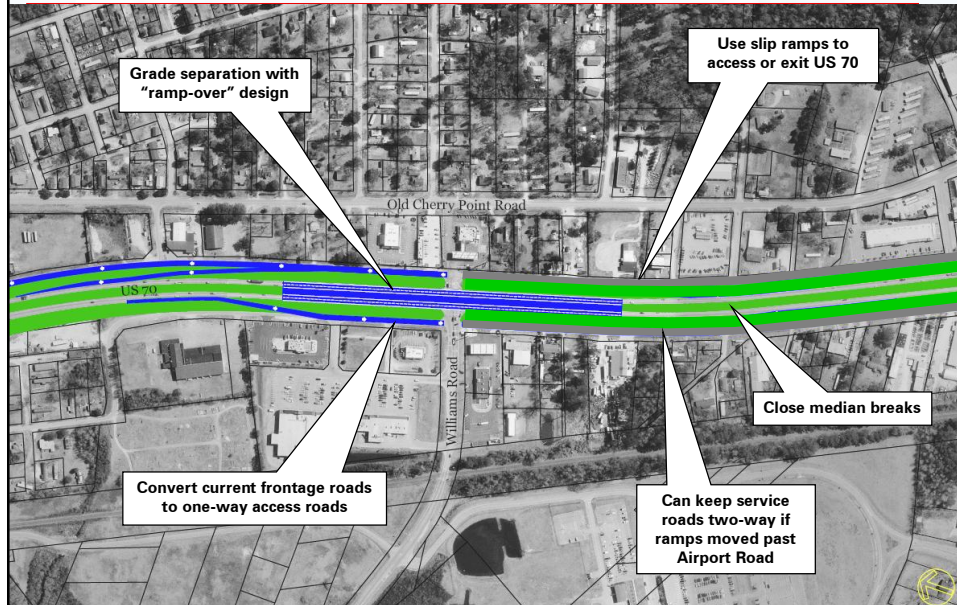


## Conceptual Designs – Compressed Diamond

### US 70 @ Williams Rd. – James City

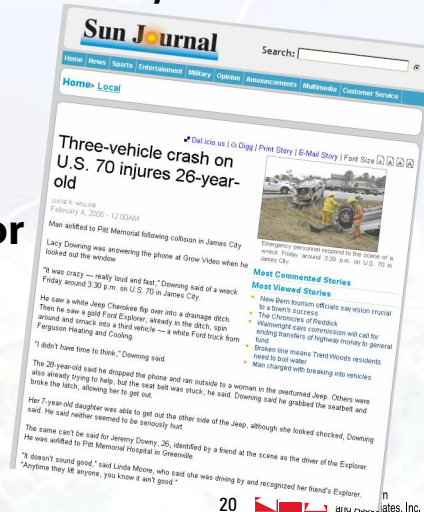


## Conceptual Designs – Compressed Diamond US 70 @ Williams Rd. – James City



## US 70 Today

- **4,534 Total Crashes (2001-04)**
  - 1,744 injury
  - 42 fatalities
- **Craven – 1,073 total (2<sup>nd</sup> highest county for Super 70)**
  - 369 injuries (2<sup>nd</sup>)
  - 6 fatalities (T-4<sup>th</sup>)



One Vision : One Voice

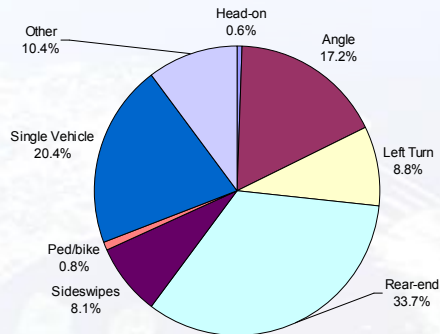
20

sunjournal.com

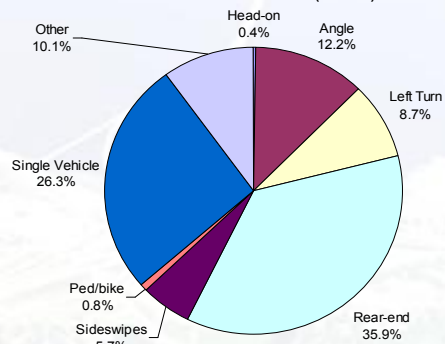


## Crash Comparison

US 70 Crashes - Clayton to Morehead City (2001-04)



US 70 Crashes - Craven Co. (2001-04)



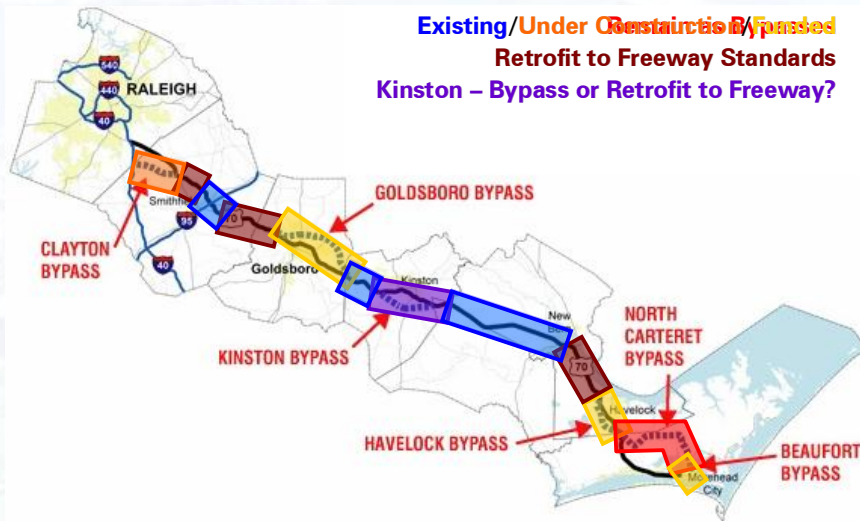
One Vision : One Voice

21



## Super 70 Freeway Plan

Existing/Under Construction Bypasses  
Retrofit to Freeway Standards  
Kinston – Bypass or Retrofit to Freeway?



One Vision : One Voice

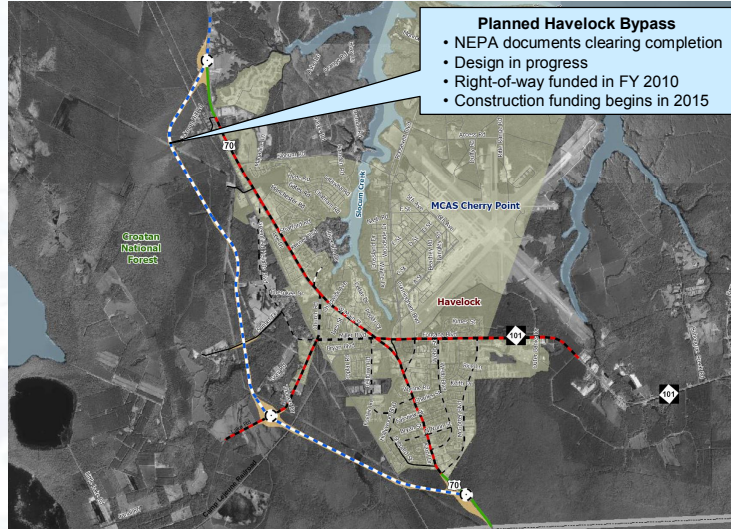
22







## Future US 70 Freeway

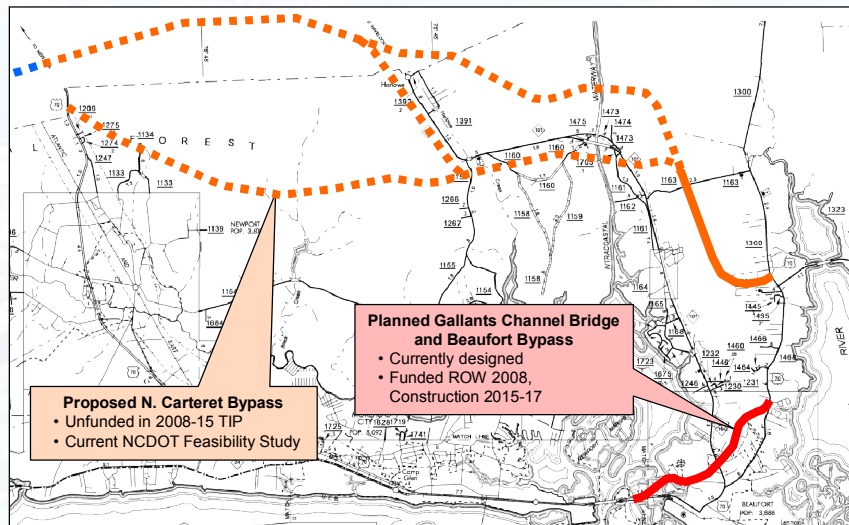


One Vision : One Voice

23



## Future US 70 Freeway



One Vision : One Voice

24

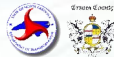




## Access Management Plan

### Goal: upgrade to **Expressway** standards

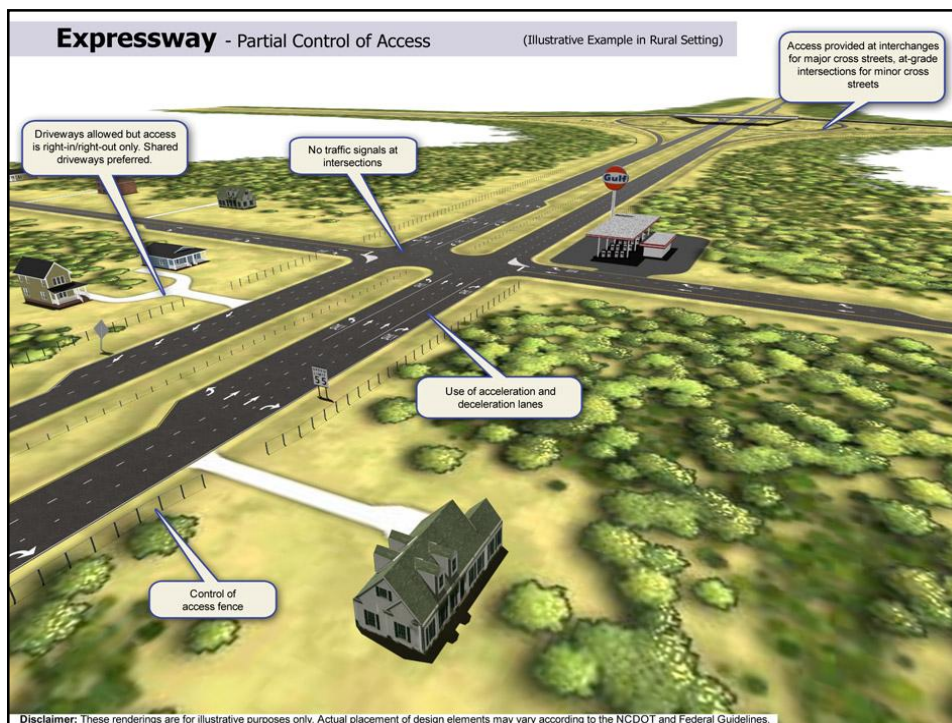
- Sections of US 70 could be retrofitted in the **near- to mid-term** with access management measures
- Reduction of most severe crashes
  - Rear-end: 35%
  - Angle: 24%
  - Left-turn: 10%

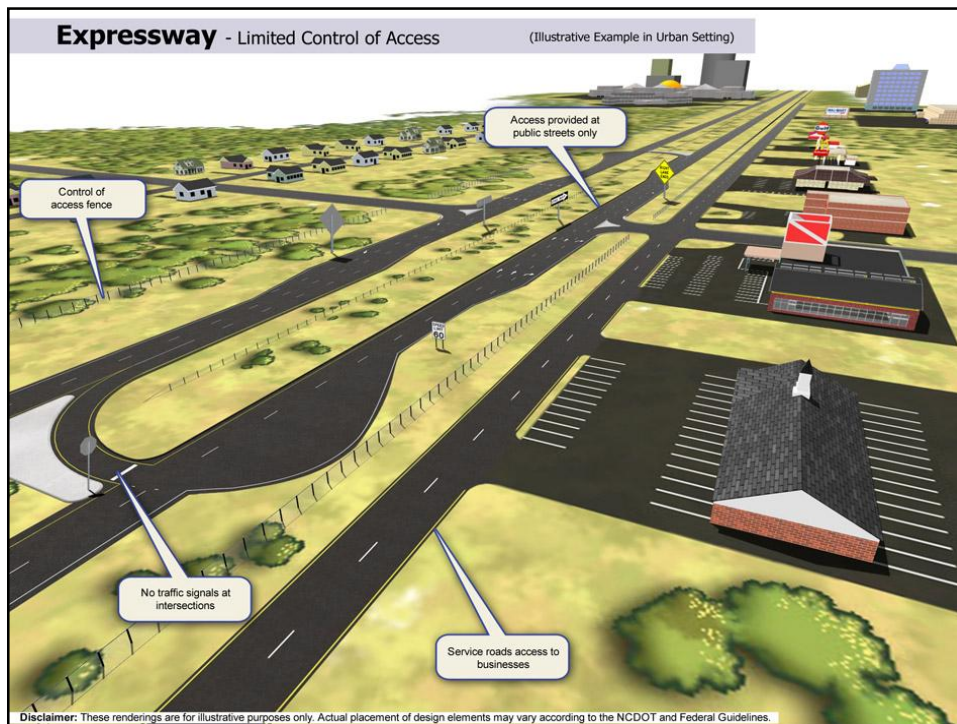


One Vision : One Voice

25

Kimley-Horn  
and Associates, Inc.





## What is a *Freeway*?

- **Functional Purpose: High Mobility, Low Access**
- **Design set by NCDOT Roadway Design Manual and AASHTO Green Book**
- **Posted Speed Limit: 55 mph or greater**
  - Rural design speed: 70 mph
- **Traffic Signals: Not Allowed**



One Vision : One Voice

28

Kimley-Horn and Associates, Inc.





## What is a *Freeway*?

- **Control of Access: Full**
  - **Driveways: Not Allowed**
  - **Only major cross street access provided, at grade-separated interchanges**
    - **Interchange spacing (min.)**
      - 1 mile urban, 2 miles rural
  - **Median Crossovers**
    - **Public-use Crossovers Not Allowed**
    - **U-turn Median Openings for Use by Authorized Vehicles Only when Need is Justified**



One Vision : One Voice

29



## What is a *Freeway*?

- **Cross-Section: 110-190 feet in width**
  - **Minimum four (4) 12' lanes**
  - **Median**
    - **70' standard**
    - **46' min w/o concrete barrier**
    - **22' min 6 lanes w/ concrete barrier**
    - **22' standard 4 lanes w/ concrete barrier**
    - **10' min 4 lanes w/ concrete barrier**
  - **12' Shoulders**



One Vision : One Voice

30





## Comparison – Expressway / Freeway

- Main differences for **Expressway** vs. **Freeway** standards
  - Minor streets can access highway at all-movement crossovers or with use of downstream median U-turn crossovers
    - Minimum spacing: 2,000 feet
    - Ultimate goal still no signals
  - Posted speed: 45 – 60 mph



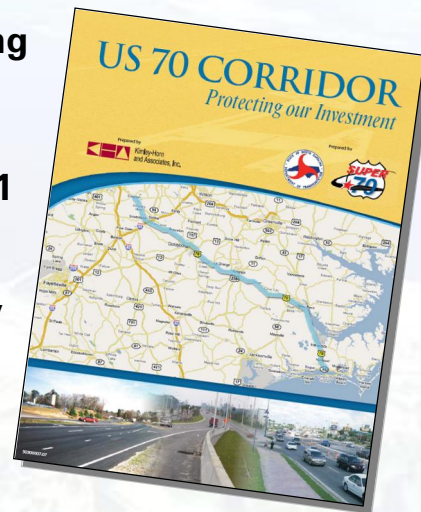
One Vision : One Voice

31



## Access Management Handbook

- Goes beyond engineering
  - Corridor challenges
  - Corridor vision
- Access Management 101
  - Lessons Learned
  - Toolkit
  - One-on-One Meetings w/ Planning Directors
- Land Use Policies
- Model Ordinance



One Vision : One Voice

32

