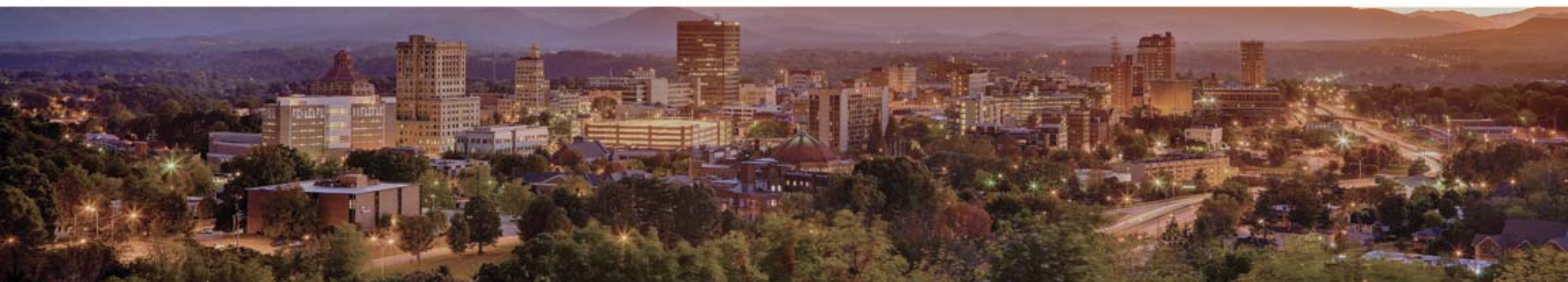




August 18, 2016  
*FS-1604A US 70 Improvements, Johnston County*

VHB Engineering NC, P.C.



# *Agenda*

- Project Description and Location
- Purpose and Need
- Background Transportation Plans
  - Local Plans
  - Legislation
  - Adjacent STIP Projects
- Existing Conditions
  - Environmental
  - Safety (Collisions)
  - Traffic
- Alternative Development
- Typical Cross-Section



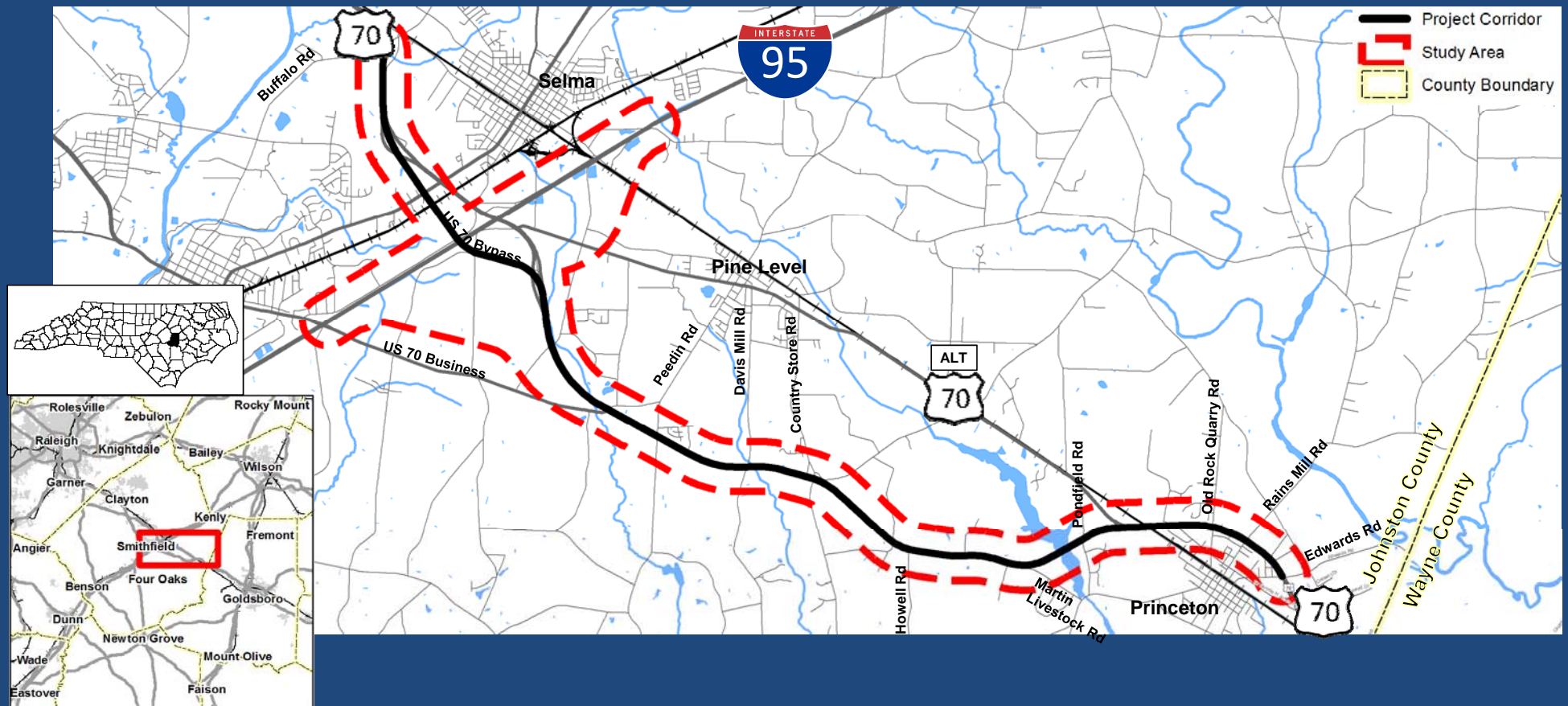
# *Project Description*

## Feasibility Study

- Provide an upgraded facility to meet interstate design standards from SR 1003 (Buffalo Rd.) near Selma to SR 2372 (Edwards Rd.) in Princeton
- Upgrade existing facility (will consider new alignment locations if warranted)
- Base components to be considered
  - Interchanges to be studied at key crossing roads
  - System interchange between US 70 and I-95 to be considered as one of the alternatives
  - Grade separations to be studied at other crossing locations
  - Frontage road system for access



# Project Location



## *Purpose and Need*

### Enhance Mobility and Connectivity

- Upgrade US 70 to interstate standards to improve regional mobility and provide better connectivity between Raleigh and Morehead City
  - Secondary benefit of improving safety along rural sections with uncontrolled access
- Promote economic development for surrounding communities



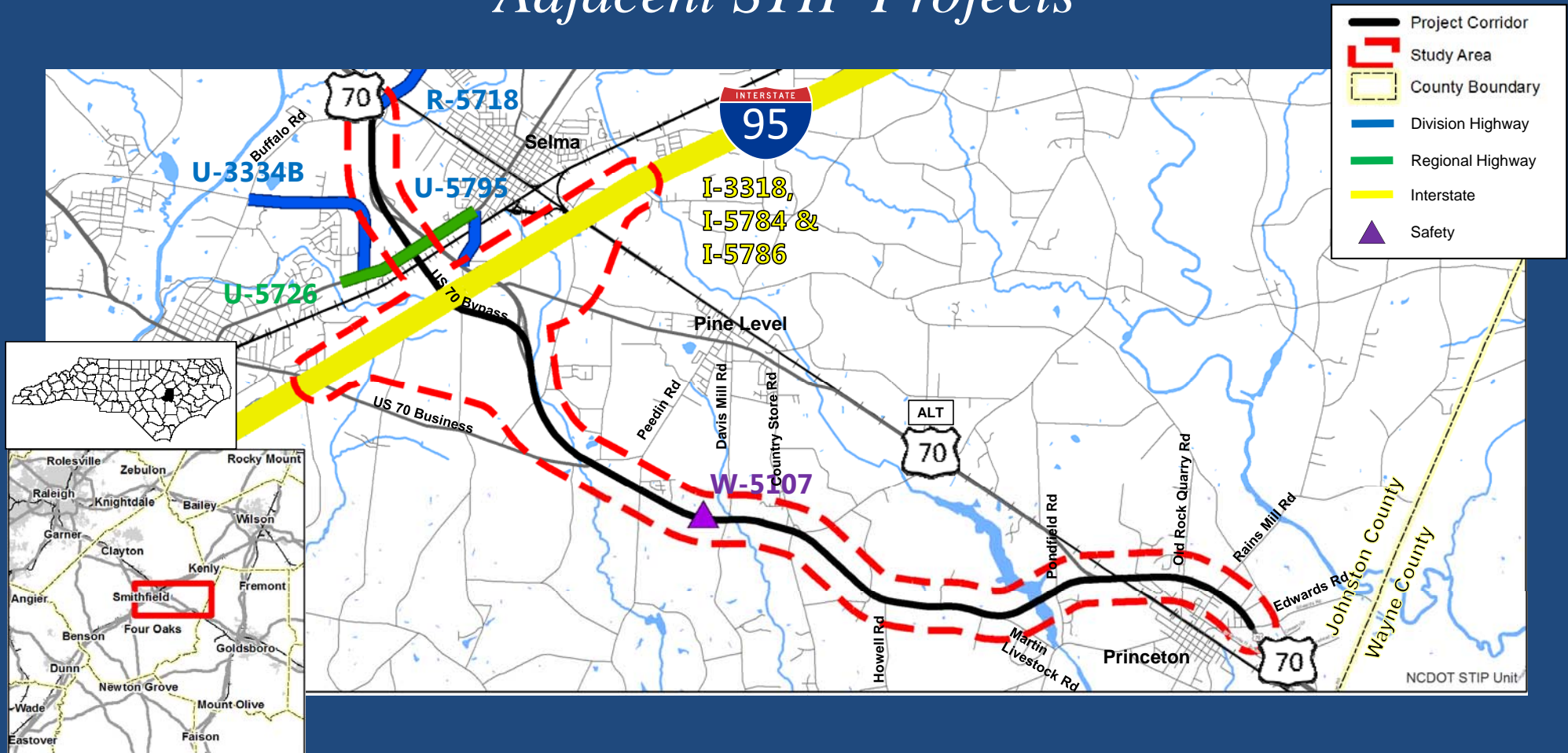
## *Background Transportation Plans*

- All transportation plans are consistent with an upgraded future facility
- Most plans specify upgrade to a “freeway facility” or to implement “controlled access”
  - NCDOT Strategic Transportation Corridors – *upgrade to freeway standards*
  - Johnston County Comprehensive Transportation Plan – *convert US 70 to a 4-lane continuous freeway*
  - Town of Princeton Thoroughfare Plan – *widen to six lanes with controlled access with interchanges*
- Upper Coastal Plain Rural Planning Organization (UCPRPO) supports a feasibility study to improve the corridor (January 2016)
- Military Corridor Transportation Improvement Act of 2015 (HR 1844)
  - Bill introduced and signed into law in 2015 designating several eastern NC highways as “future interstates”
  - US 70 is among those designated for conversion to interstate





# Adjacent STIP Projects



## *Adjacent STIP Projects*

### R-5718

- Division led project to widen Buffalo Road to three lanes from US 70 to Old Beulah Road

### U-3334

- Division led project to extend SR 1923 (Booker Dairy Road) as a two-lane road

### U-5795

- Division led project to widen SR 2302 (Ricks Road) to three lanes from US 70 to US 301

### U-5726

- Regional project to implement access management improvements along US 301, between Booker Dairy Road and Ricks Road

### I-3318, I-5784, & I-5786

- Improvement to I-95 through pavement and bridge rehabilitation

### W-5107 (Under Construction)

- Safety improvement project along US 70 from Firetower Road to east of Davis Mill Road (2.7 mi); near Pine Level
- Interchanges at SR 2308 (Peedin Road Extension) and SR 2310 (Davis Mill Road)
- Median break closings





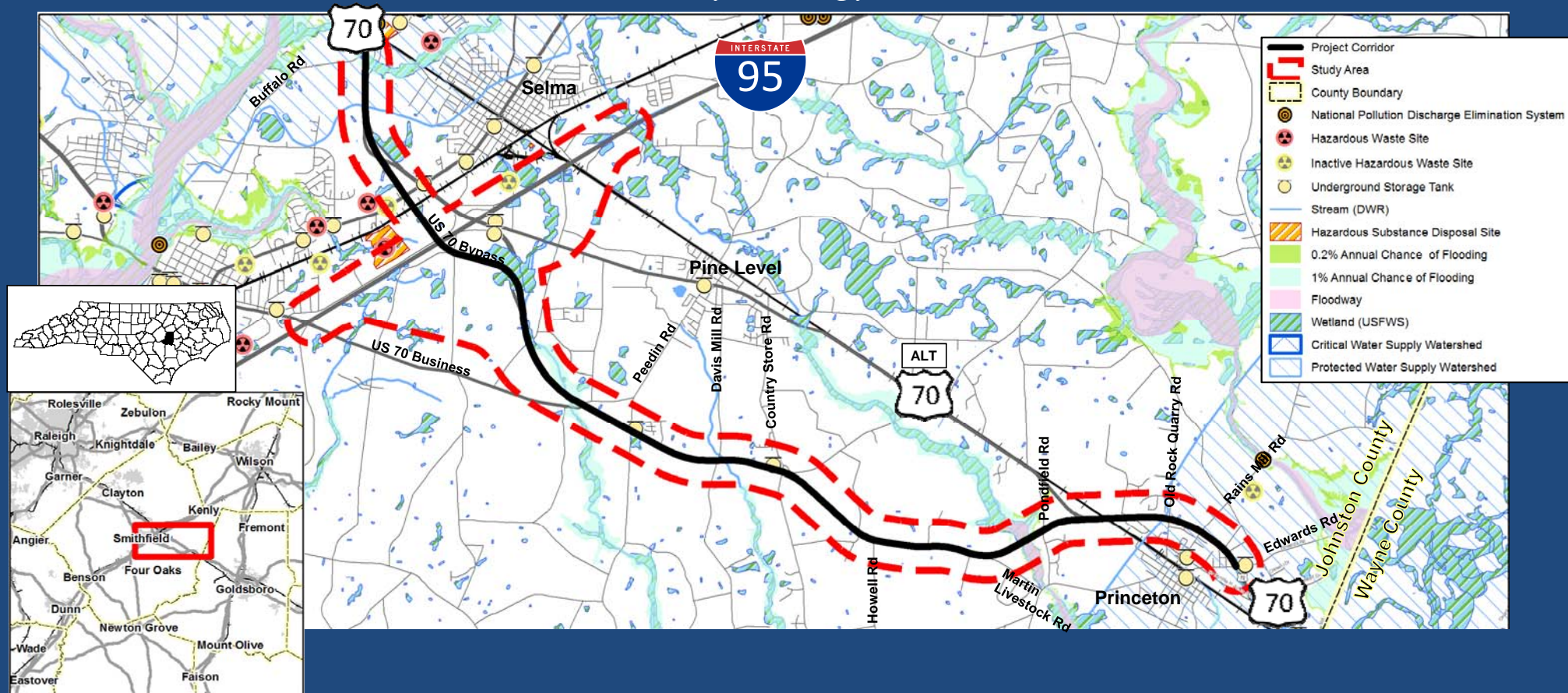
## *Existing Conditions*

- Proposed Project Length
  - Approximately 12 miles
- Existing four-lane divided facility
- Existing median width – 30 ft to 46 ft
- Speed Limit – 55 mph, 60 mph
- Some areas with access control
  - Buffalo Road Interchange
  - US 70/US 70 Bypass convergence points
  - W-5107 interchange areas



# Existing Conditions

## Environmental Features –Hydrology and Hazardous Materials



# *Existing Conditions*

## *Environmental Features - Hydrology*

- Stream Crossings (DWR)
  - Mill Creek (near Buffalo Road)
  - Bawdy Creek (near Peedin Street)
  - Quicosin Creek (near Davis Mill Road)
  - Moccasin Creek (near Pondfield Road) – 303(d) impaired stream
- Numerous areas of designated wetland (USFWS-NWI)
  - US 70/US 70 Bypass interchange south of I-95 (Bawdy Creek)
- One Pond
  - West of Princeton near Pondfield Drive (Holts Pond, from Moccasin Creek)
- Floodplains
  - 100-yr and 500-yr at Holts Pond/Moccasin Creek
  - 500-yr at Bawdy Creek and Mill Creek
- Public Water Supply Water Sources
  - Smithfield Moose Lodge



# *Existing Conditions*

## *Environmental Features – Hazardous Materials*

- Numerous gas stations with USTs within study area
  - BP at Peedin Road intersection
  - Citgo at Country Store Road
- No NPDES site locations in project study area
- Hazardous Materials Disposal Site
  - Skyware Global, located partially within study area, southwest of US 70, north of I-95
  - Currently in compliance with all regulations





# Existing Conditions

## Environmental Features – Community/Cultural



# *Existing Conditions*

## *Environmental Features – Community/Cultural*

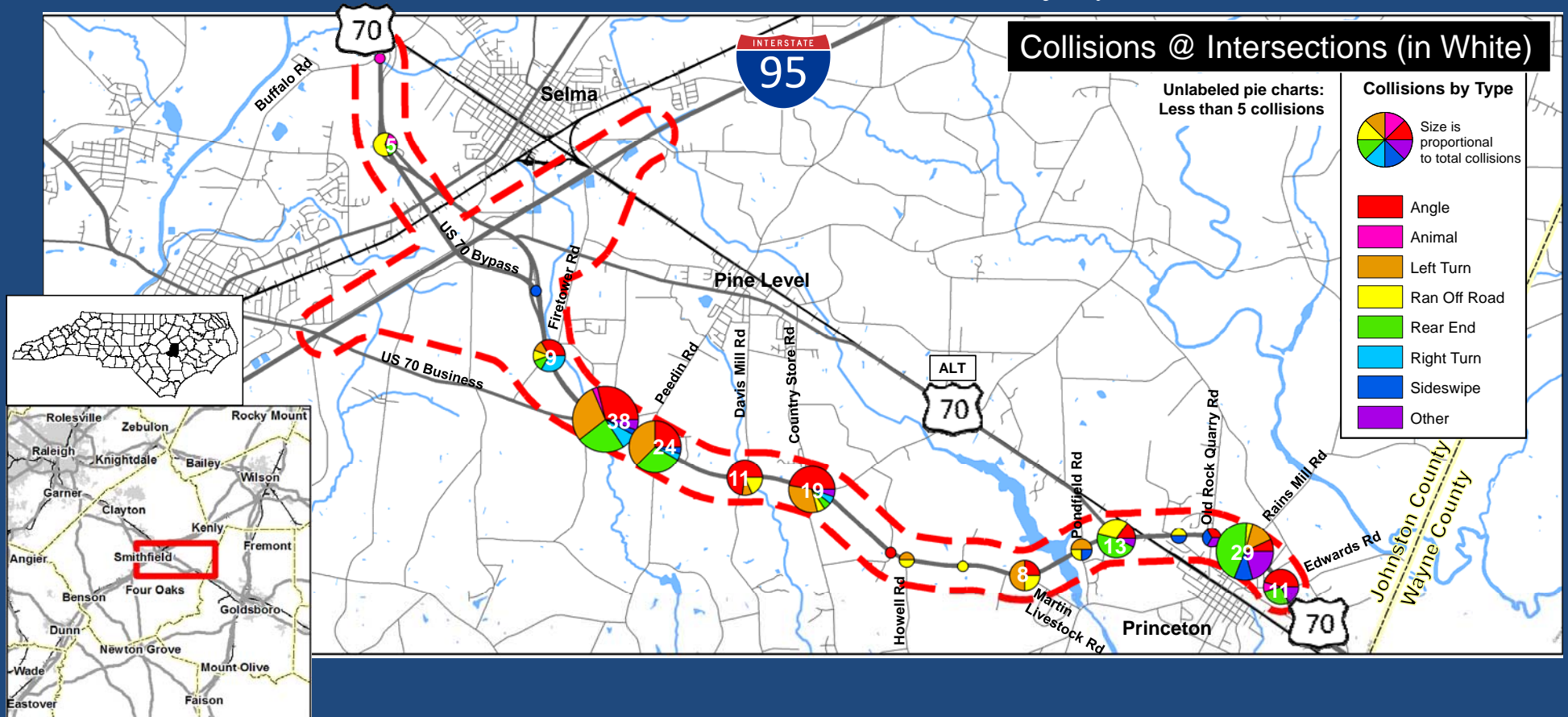
- Two NRHP designated properties within study area
  - Waddell-Oliver House, Selma
  - Princeton Graded School, Princeton
- Schools
  - Princeton High School
  - 2 daycares
- Six churches
  - Hephzibah Baptist Church near Country Store Road
  - Princeton Church of God
- No hospitals or fire departments
- No parks
- One Cemetery, near I-95 overpass





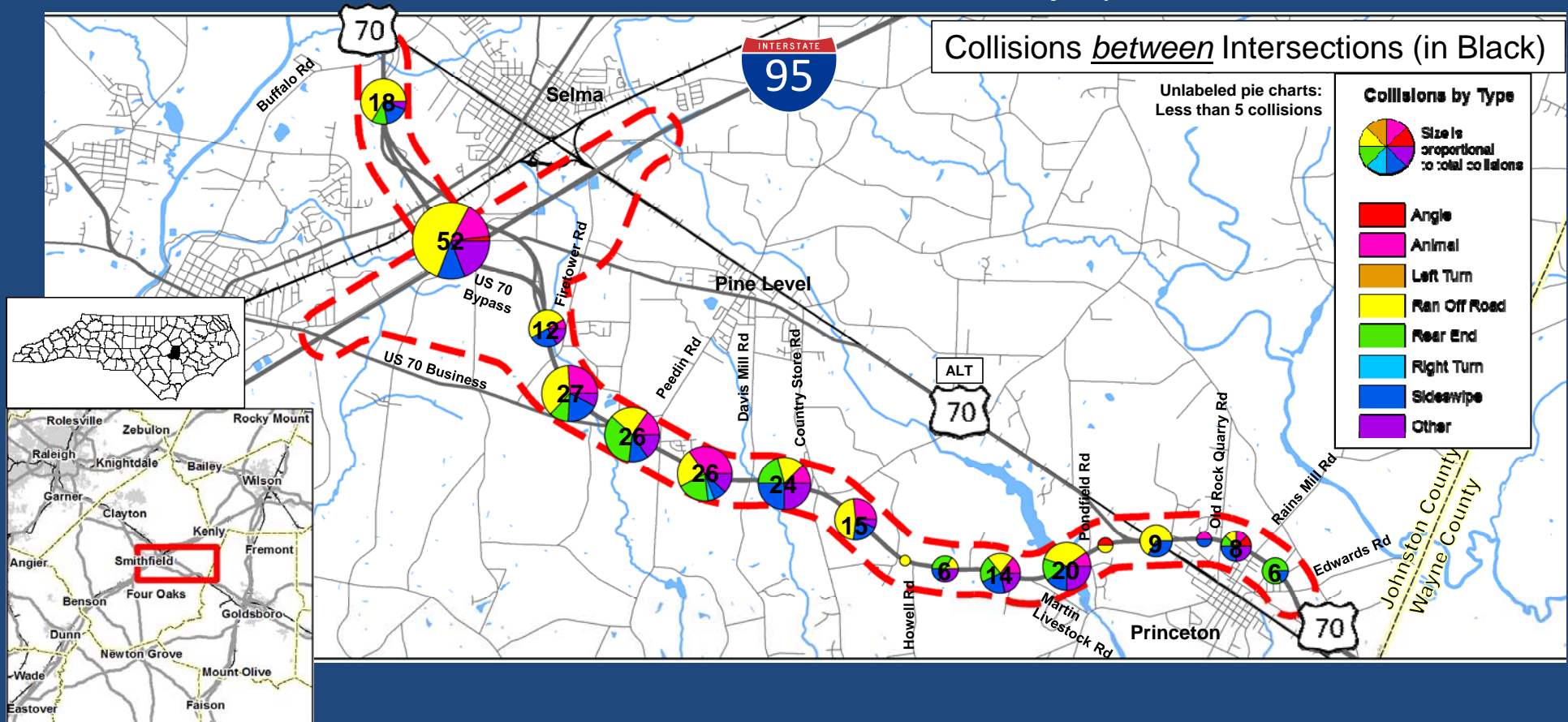
# Existing Conditions

## Environmental Features – Safety

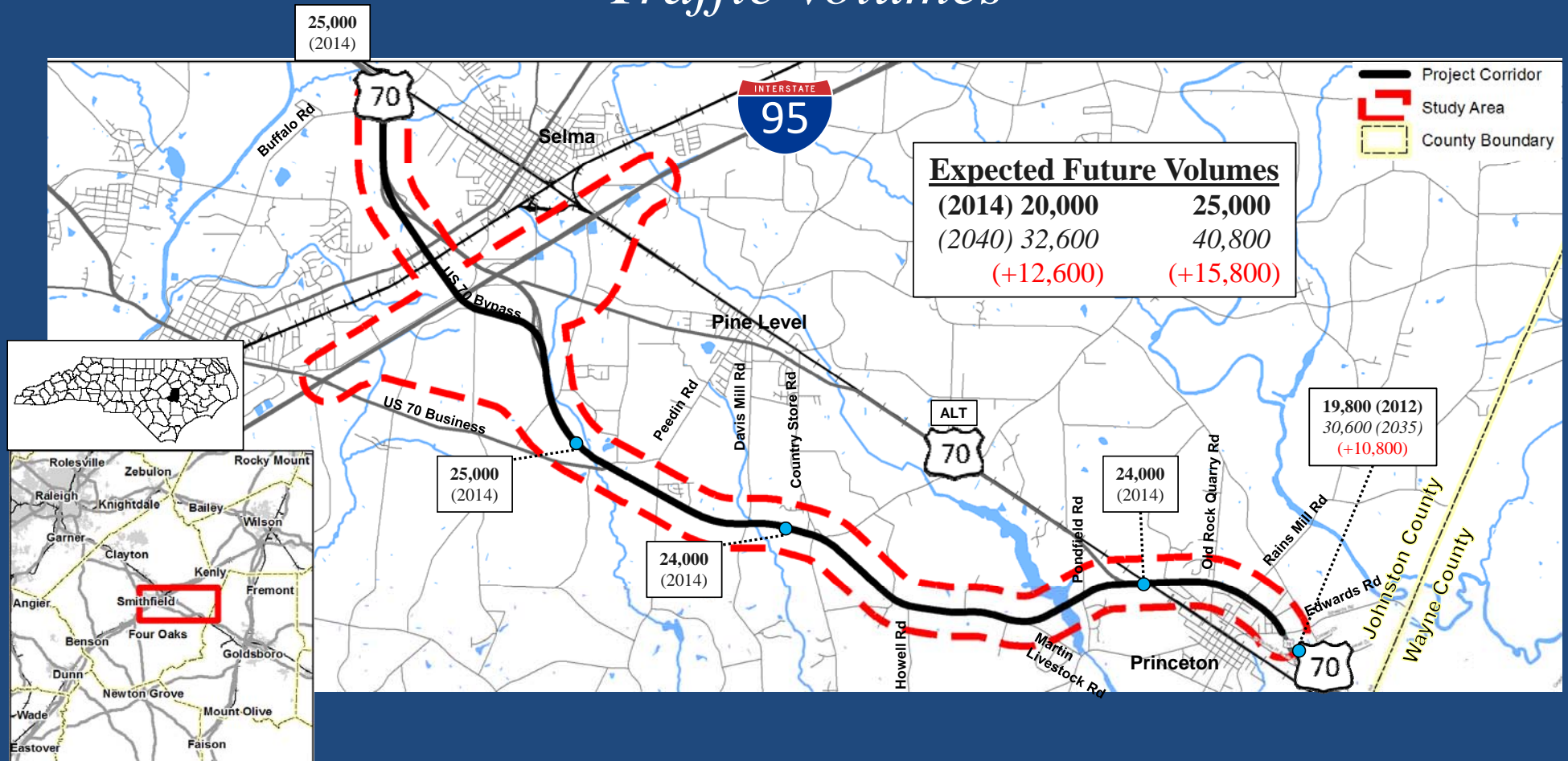


# Existing Conditions

## Environmental Features – Safety



# Traffic Volumes



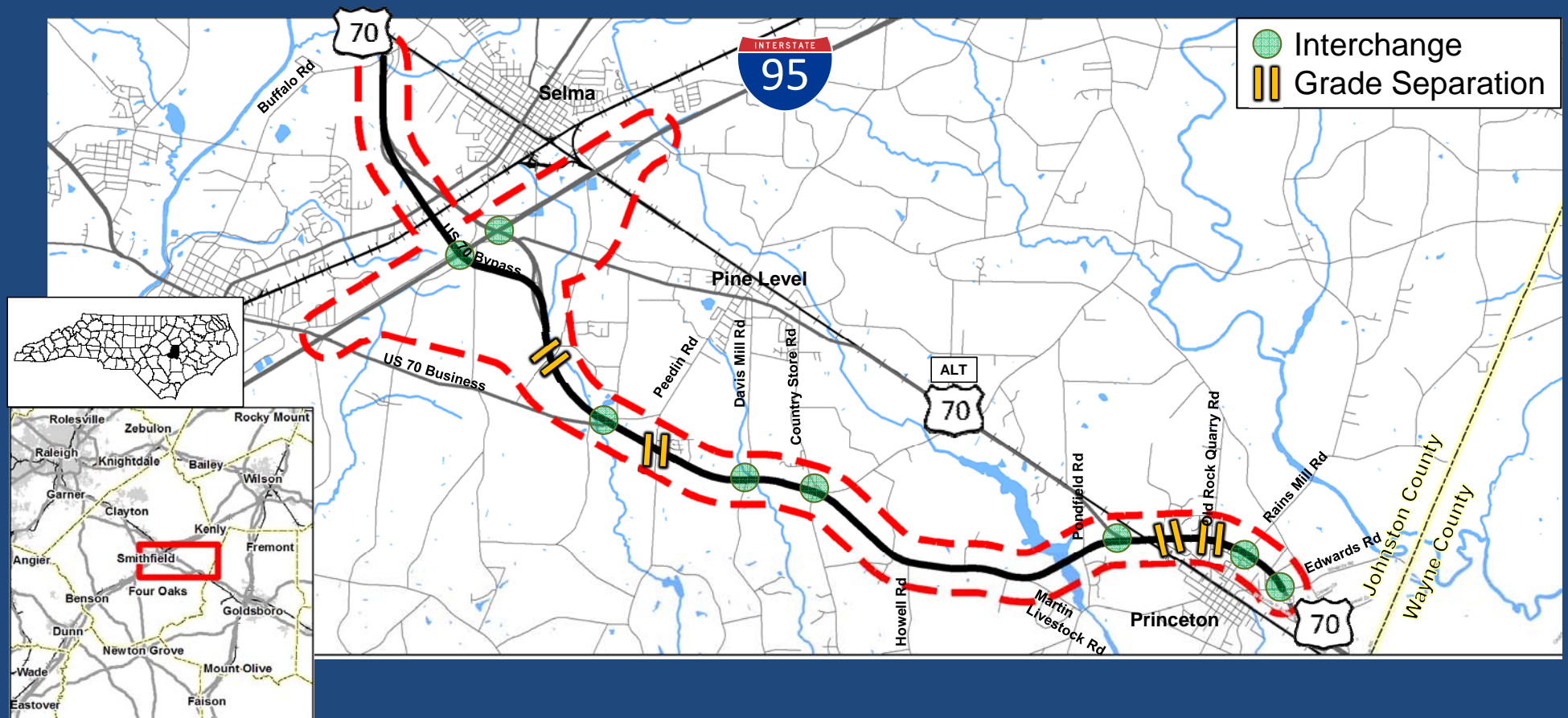
# *Alternative Development*

- Upgrade to interstate design standards
- Consider eight interchange locations
  - US 70/I-95
  - US 70 Bypass/I-95
    - Potentially combine I-95 interchanges into a single system interchange
  - Peedin Road Extension (W-5107)
  - Davis Mill Road (W-5107)
  - Country Store Road
  - US 70 Alt
  - Rains Mill Road
  - Edwards Road
- Consider five grade separation locations
  - Firetower Road
  - Creech's Mill Road
  - Dr. Donnie H Jones Jr. Boulevard
  - Old Rock Quarry Road/Barden Street
  - 1 undesignated
- Frontage road system for access considerations



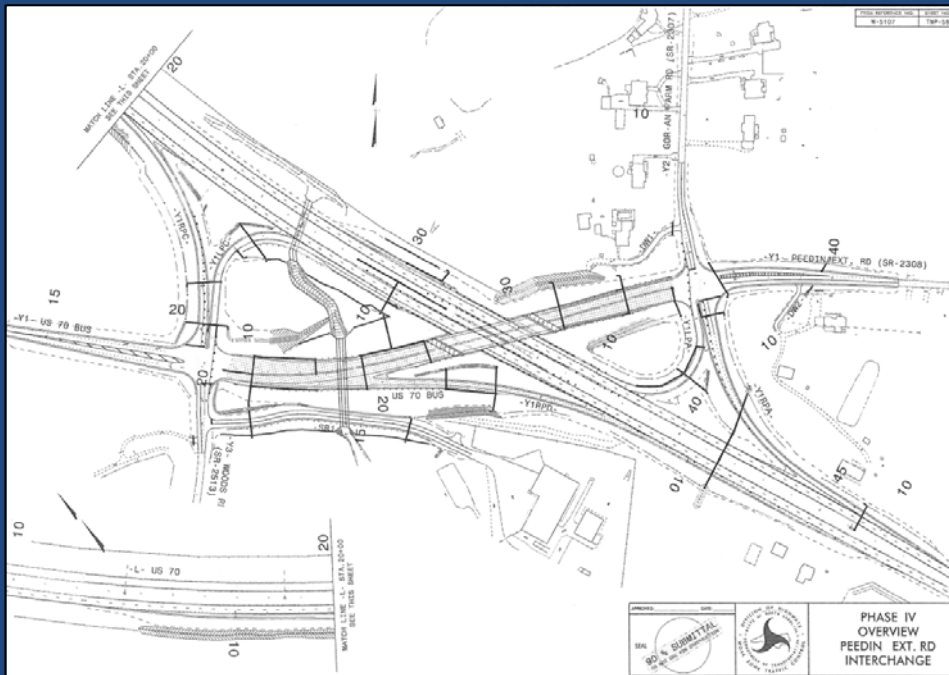


# Alternative Development



# Alternative Development W-5107

Peedin Road Extension



Davis Mill Road





### Alternative Development Proposed Typical Section



**\*Preliminary – Typical Section Subject to Change**

## *Project Schedule*

- Traffic Forecast (from TPB) – Sept 2016
- Design Review Meeting – April 2017
- Draft Report – Oct 2017
- Final Report – Dec 2017



## *Questions/Comments*

What is **YOUR** vision for US 70?

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