Tonight’s Agenda

• Presentation
  • What is the Arterial Preservation Program (APP)?
  • Why study the Route 220 corridor?
  • Improvement identification process

• Review boards and handouts
  • Boards: Proposed intersection-specific recommendations
  • Handouts:
    • Study Area Map
    • Innovative Intersection Information
    • Corridor Recommendations
Arterial Preservation Program

Background
What is the Arterial Preservation Program?

• The Arterial Preservation Program is designed to preserve and enhance the safety and capacity of the critical transportation highways included in the Arterial Preservation Network.

• Within the framework of the Arterial Preservation Program, VDOT is developing methodologies to consistently and programmatically evaluate the corridors through the use of Arterial Preservation Plans, creating a toolbox of safety, preservation, and enhancement strategies and identifying opportunities for implementation.
Why the Route 220 APP?

• Safety Concerns
• Operational challenges
• Preparing for future traffic and economic development reduces the need for expensive, disruptive “retrofit” projects
• Route 220 is anticipated to see additional commercial and residential development
• Preparing for planned growth allows us to preserve and enhance the Route 220 corridor while supporting economic development
Arterial Preservation Program

Route 220 Arterial Preservation Plan
Route 220 APP

- Route 220 from NC State Line to City of Roanoke
- Approximately 43 miles
- Limited access portions not included (i.e., Rocky Mount and Martinsville)
Route 220 APP Intersections
Improvement Identification Process

Development of Preliminary Concepts and Ideas

- Access Management Standards
- Safety Data
- Traffic Operations

Intersections
- Traditional capacity improvements
- Innovative Intersections
- Access management improvements

Roadway Segments
- Signing and pavement markings
- Rumble strips
- Shoulder improvements
Access Management

• Involves the location, spacing, and design of driveways, medians, median openings, traffic signals, and interchanges

• Benefits:
  • Increased Signal Spacing Benefits
    • Improves traffic flow
    • Reduces congestion
    • Improves air quality
  • Increased Driveway Spacing Benefits
    • Reduces number of potential conflicts
    • Increases roadway speeds
    • Reduces the rate of car crashes
Innovative Intersections

- Intersection designs which:
  - Improve safety
  - Reduce delay
  - Increase efficiency
- Can reduce delays and crashes as much as 50%
- Also known as:
  - Alternative
  - Non-traditional
  - Unconventional
  - Reduced Conflict

http://www.virgiadiot.org/innovativeintersections/
Safety Improvements

- Includes signage, rumble strips, guardrail, paved shoulders, delineators, beacons, markings, and vegetation removal

- Benefits:
  - Improves sight distance
  - Improves driver awareness
  - Guides drivers more effectively
  - Reduces conflict points
  - Improves compliance with traffic control devices and traffic laws
Proposed Intersection Recommendations

Route 220 at Henry Road

Recommendation: Unsignalized Continuous Green-T
Implementation: Mid-Term
Cost: $$
Proposed Corridor Recommendations

Roadway, Intersection, & Median Crossover Recommendations

1. US 220 at Crossover north of North Carolina State Line
   - Improve turn lanes to standard

2. US 220 at Crossover south of Reservoir Road
   - Consolidate and improve access spacing of crossover

3. US 220 at Reservoir Road
   - Lengthen southbound and eastbound right turn lanes

Roadway
- Flatten curvature along US 220
- Install rumble strips
- Install guardrail
- Construct paved shoulders
- Improve sign consistency
- Increase sign conspicuity
- Install advanced curve warning signs
Community Information

• Recommendations were identified along the corridor and are available tonight for your information

• Intersection-Specific Boards
  • Henry County – 1 Board
  • Franklin County – 2 Boards
  • Roanoke County – 2 Boards

• Corridor Recommendations
  • 11x17 sheets with median crossover recommendations

• Comment Sheets