US 58 Arterial Preservation Plan – Study Recommendations

September 4, 2019; 5:00 PM – 7:00 PM
South Hill, VA
Arterial Preservation Program

Background
Summary of Program Goals

• To preserve and enhance the capacity and safety of Virginia’s critical transportation highways:
  • Reduce congestion on arterial mainline
  • Minimize delays
  • Improve safety
  • Limit the number of conflict points
Implementation Strategies

• Integrate program priorities with local economic development goals
• Improve access management
• Educate communities on the benefits of improved mobility
• Inspire coordinated transportation and land use planning efforts
• Eliminate unwarranted traffic signals
• Implement innovative intersection configurations
Why This Matters

• Preparing for future traffic and economic development reduces the need for expensive, disruptive "retrofit" projects
• Route 58 is anticipated to see additional commercial and residential development
• Route 58 provides access to local destinations, the Port of Virginia, and tourist destinations
Arterial Preservation Program
Access Management Overview
Access Management

What is Access Management?
Access management involves the location, spacing, and design of driveways, medians, median openings, traffic signals, and interchanges.

Guiding Principles
• Limit the number of conflict points
• Separate conflict points
  • Reduce the number of median openings
  • Improve driveway design
  • Consolidate driveways to reduce frequency
• Look at conflict points from a network perspective
Conflict Points

**FULL UNSIGNALIZED MEDIAN OPENING**
- 32 TOTAL CONFLICT POINTS
  - Diverging/Merging
  - Crossing

**DIRECTIONAL MEDIAN OPENING**
- 10 TOTAL CONFLICT POINTS
  - Diverging/Merging
  - Crossing

**RIGHT-IN/RIGHT-OUT DRIVEWAY**
- 4 TOTAL CONFLICT POINTS
  - Diverging/Merging
  - Crossing
Access Management Guidelines

VDOT Spacing Standards (35-45 MPH Principal Arterial)
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
Innovative Intersection Videos

Restricted Crossing U-Turn (RCUT)

Continuous Green-T (CGT)
Arterial Preservation Plan
US 58 Corridor
Study Corridor

US 58 from Greensville-Brunswick County Line to Mecklenburg-Halifax County Line (65.7 miles)
Project Stakeholders / Working Group

- Town of La Crosse
- Town of Brodnax
- Town of Lawrenceville
- Mecklenburg County
- Brunswick County
- Southside PDC
- Town of Clarkville
- Town of Boydton
- Town of South Hill
- Town of Lawrenceville
- Town of Clarksville
Key issues identified in study corridor

- Safety concerns
  - Lack of adequate shoulders
  - Poor sight distance at intersections in certain locations
  - Higher levels of crashes in dense commercial and developed areas
  - Below standard turn lanes
- Operational challenges
  - High number of crossovers and access points
  - Delay in more developed areas
- Maintaining local access
- Future traffic growth
Recommended Concepts

• There are 88 crossovers and 75 intersections along the corridor

• Recommended concepts were prepared for each of the above and are available tonight for your review
How to Read the Figures

US 58 Arterial Preservation Plan
**US 58 Arterial Preservation Plan**

**Figure 11**

**Intersections & Median Crossovers**

**Mecklenburg County**

**Intersection 30: Washington St with US 58**
- Recommendation: See Figure 12
- Cost: $1.2M to $1.8M

**Intersection 31: US 58 BUS with US 58**
- Recommendation: See Figure 13
- Cost: $1.1M to $1.4M

**Crossover 21**
- Recommendation: Remove crossover
- Cost: $0.7M to $1.0M

**Intersection 32: Herbert Dr with US 58**
- Recommendation: Lengthen all existing turn lanes on US 58.
- Smart Scale Application: UPS 113297
- Cost: $2.1M

**Crossover 22**
- Recommendation: No recommendations
- Cost: Not Applicable
US 58 Arterial Preservation Plan
Figure 11
Intersections & Median Crossovers
Mecklenburg County

Intersection 30: Washington St with US 58
Recommendation: See Figure 12
Cost: $1.2M to $1.5M

Intersection 31: I-31 with US 58
Recommendation: See Figure 13
Cost: $1.1M to $1.4M

Crossover 21:
Recommendation: Remove crossover
Cost: $0.2M to $0.3M

Intersection 32: Hermit Dr with US 58
Recommendation: Lengthen all existing turn lanes on US 58, Smart Scale Application-UPS 113297
Cost: $2.1M

Crossover 22:
Recommendation: No recommendations
Cost: Not Applicable
Route 58 Arterial Management Plan

Figure 12
Intersection #80: US 58 and Washington St
Macklinburg County

Recommendations: Reconfigure intersection of US 58 and Washington St to Continuous Green-T (CGT). Construct U-turn area west of main intersection to permit southbound movements from Washington St to cross US 58. Extend eastbound right-turn lane to U-turn area and reconstruct existing turn-lanes on US 58 to VDOT Design Standards.

Improvement Type: Safety, Travel Time Preservation

Traffic Operations:
- Reduced delay times for vehicles traveling eastbound on US 58 from southbound Washington St
- Reduced conflict points where vehicles cross paths. Reduced risk of angle crashes from Washington St onto US 58

Cost: $1.2M to $1.9M

Standard Movements

Re-routed Movements
Public Input

• View boards around the room

• Look up specific locations in recommendations packet

• Speak with consultant and VDOT staff

• Provide written comments
Next Steps

• Review meeting input and finalize study report
  • Report will be available on VDOT project website once complete

• Work with Town & County officials to implement solutions
  • Identify priorities & seek funding
  • Concepts do not advance without local support
  • No date has been established for construction
  • Recommendations will be implemented as opportunity and funding permits
How to find more information

• Arterial Preservation Program Website
  http://www.virginiadot.org/programs/vdot_arterial_preservation_program.asp

• Innovative Intersections Website
  http://www.virginiadot.org/innovativeintersections/

• US 58 Arterial Preservation Plan Website
US 58 Arterial Preservation Plan – Final Recommendations

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