



**Route 28 Corridor Safety and Operations Study  
Public Information Meetings**

July 20 and 22, 2015

## Phase 1 – Short-term



- Short-term improvements
- Ability to implement quickly
- Cost effective

## Phase 2 – Long-term

- Wider scope of alternatives
- Currently being planned by Prince William County and City of Manassas

## Route 28 – Centreville Road

- From South of I-66
- To Liberia Avenue

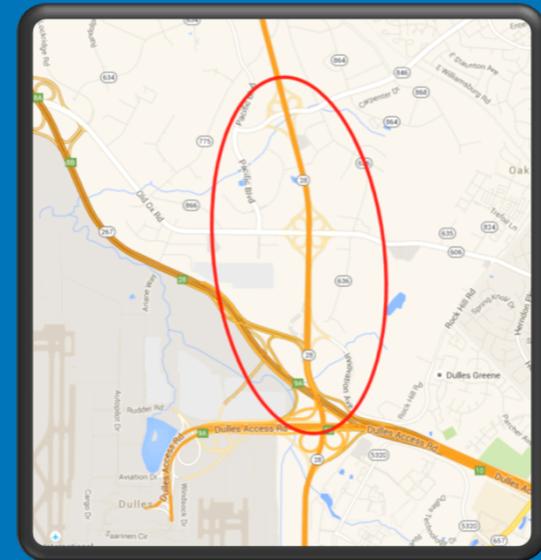
## Localities/agencies included:

- Fairfax County
- Prince William County
- City of Manassas Park
- City of Manassas
- Virginia Department of Transportation

# NVTA Route 28 Widening and Improvement Project

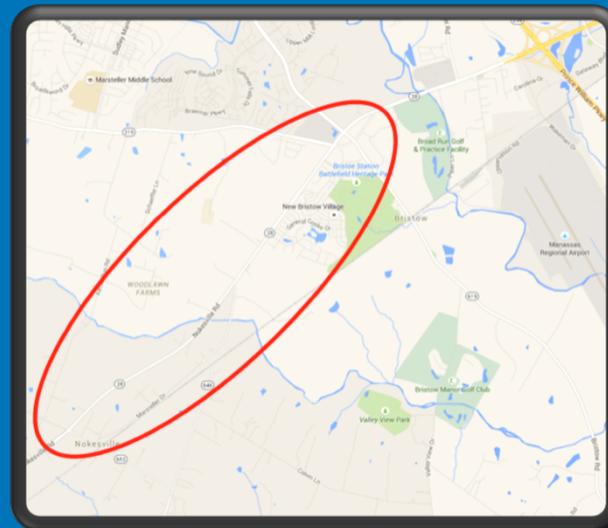
– In Loudoun:

- Route 28 South widening from Sterling Boulevard to the Dulles Toll Road, providing “hot spot” improvements



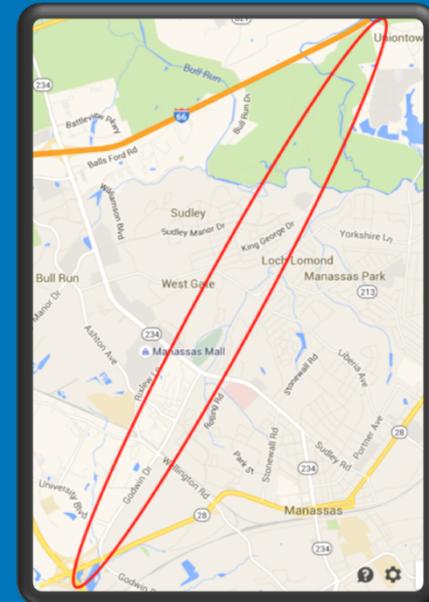
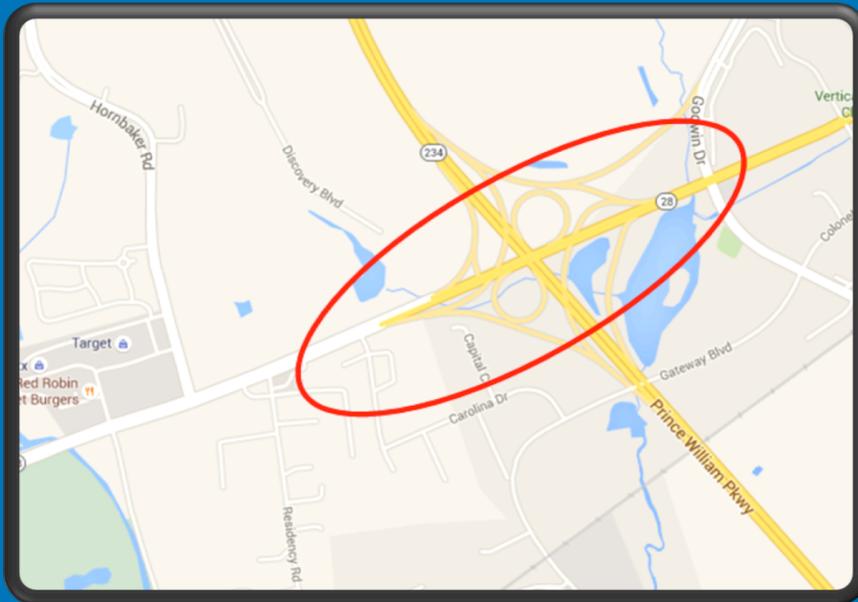
## In Prince William (4 ½ miles):

- Route 28 widening from Linton Hall Road to Fitzwater Drive
  - Includes the realignment of Vint Hill Road
- Route 28 widening from Route 234 Bypass (PWC Pkwy) to Linton Hall Road



## In the City of Manassas:

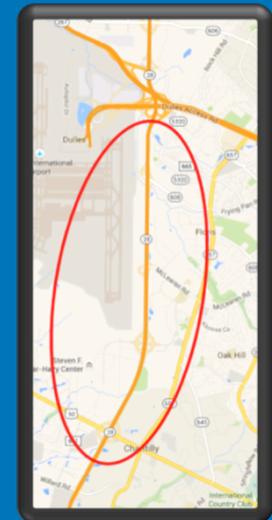
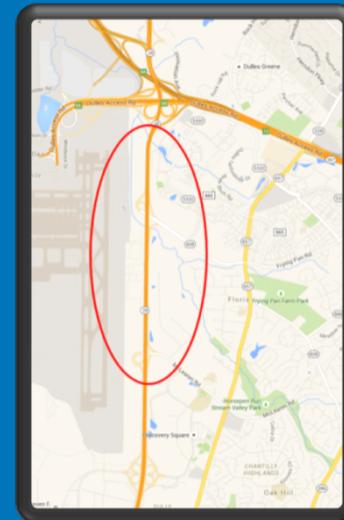
- Route 28 widening from Godwin Drive to the Southern City/Prince William County limits
- Route 28 (Manassas Bypass) Study



# NVTA Route 28 Widening and Improvement Project

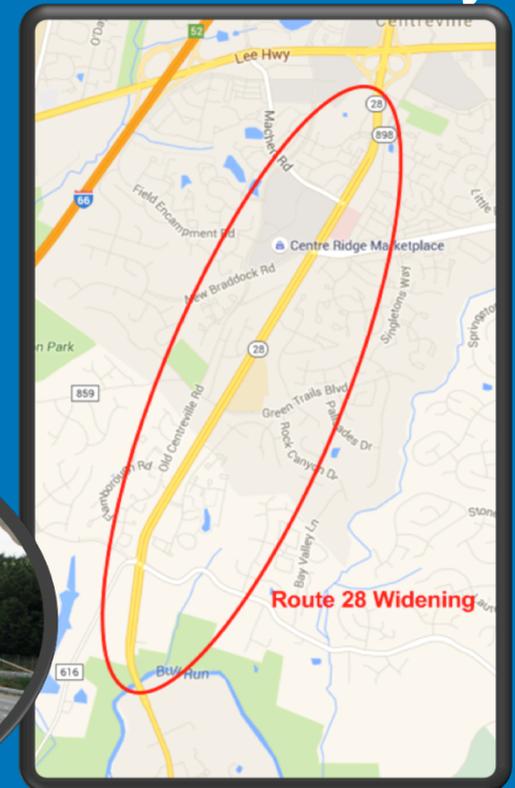
## – In Fairfax:

- Route 28 North widening from McLearen Road to the Dulles Toll Road
- Route 28 South widening from the Dulles Toll Road to Route 50; and



# NVTA Route 28 Widening and Improvement Project

- Route 28 widening from Prince William County Line to Route 29
  - From 4 lanes to 6 lanes
  - Both directions
- Planned to be in place by 2020



Identified over 100 safety and congestion related candidate improvements

- Screened by local agencies
- Screened by Steering Committee

Identified five (5) for advancement to design

Series of immediate action items

## Candidates for further advancement:

1. Additional northbound lane(s) - Rt 28
2. Sidewalk/path - eastside near Bull Run Bridge
3. Sidewalk/path – westside, Spruce Street to Leland Road
4. Southbound left-turn bay extension at Liberia Avenue
5. Roundabout intersection at Ordway/Compton

## Study Analysis elements:

- Developed traffic forecast model for design year 2020
  - Widening of Rt 28 from Upperridge to Bull Run Bridge, in base
- Performed traffic analysis
- Developed benefits using HSIP process
- Developed preliminary design sketches
- Developed cost estimates
- Developed cost-benefit ratio and recommendations



## Route 28 Widening

- Travel time under existing conditions
  - Expected improvement of 15 minutes (33%) in corridor for AM northbound peak
  - From existing average travel time of 45 mins. to 30 mins.
    - Liberia Avenue to New Braddock Road
- Projected Benefit
  - Additional capacity
  - Needed to keep pace with projected growth
  - 2020 travel time with planned additional development
    - 4 minutes better than existing (9%)

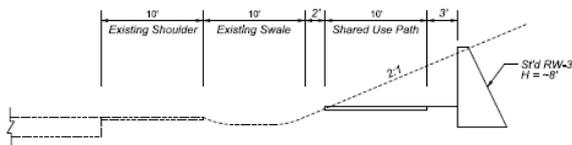
## Design overview

- Shift curb line, use median area, 700' in length
- Removes portion of 2-way left turn lane area
- Little to no impact on PWC Park
- Cost = \$1.1M
  - Construction \$870,000
  - Engineering \$250,000
  - Right-of-way \$0

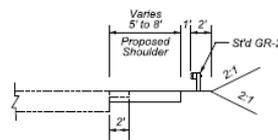
## Benefits

- High safety value
- Pedestrian/Bike system continuity

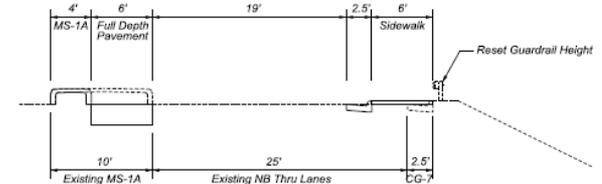
# Sidewalk/path - Eastside near Bull Run Bridge



**Section A-A**



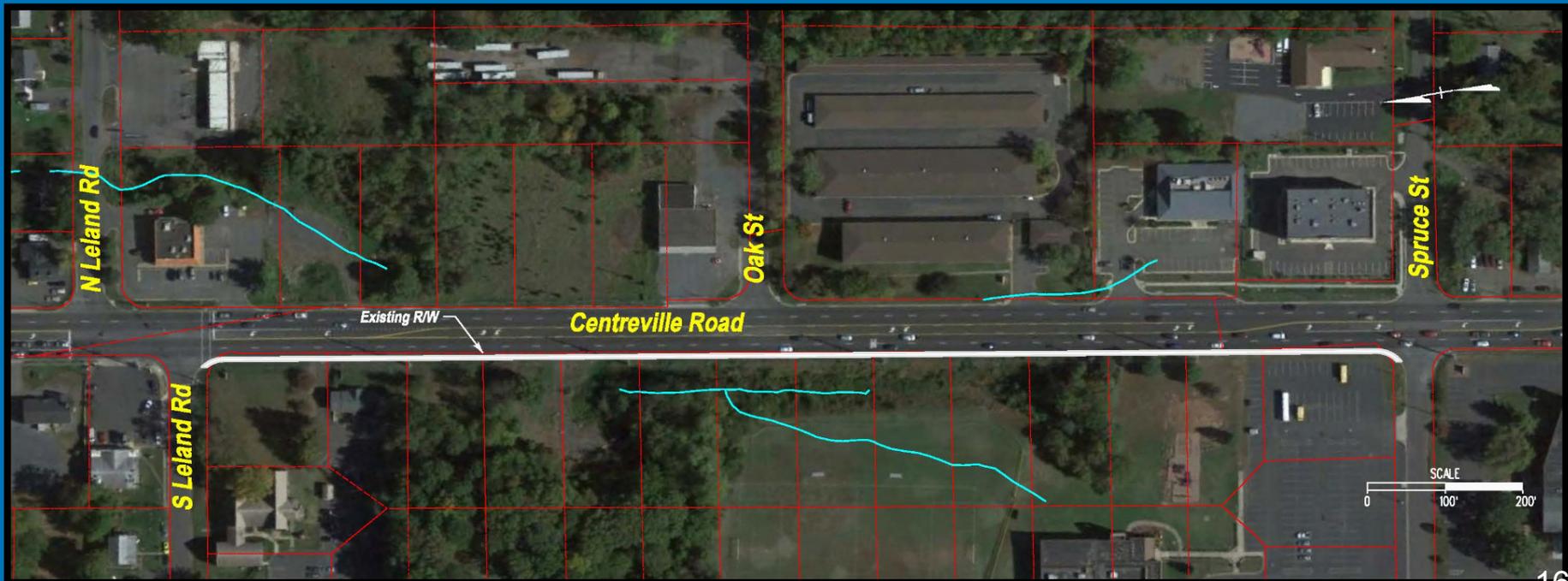
**Section B-B**



**Section C-C**

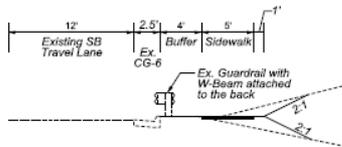
## Safety related improvement

- Adds 1,400' of sidewalk, westside of Route 28
- Addresses pedestrian/bicycles in roadway

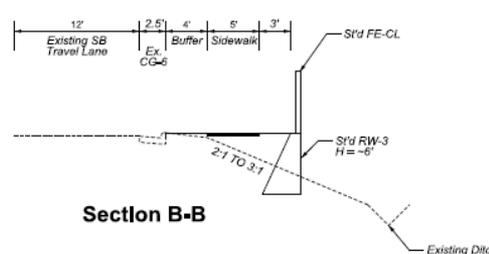


# Sidewalk/path – Westside Spruce Street to Leland Road

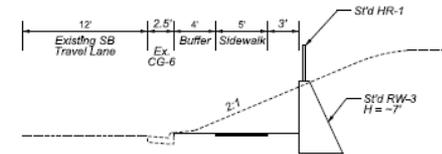
## Westside Sidewalk from Spruce St. to Leland Rd Route 28 Safety and Operational Study



Section A-A



Section B-B



Section C-C

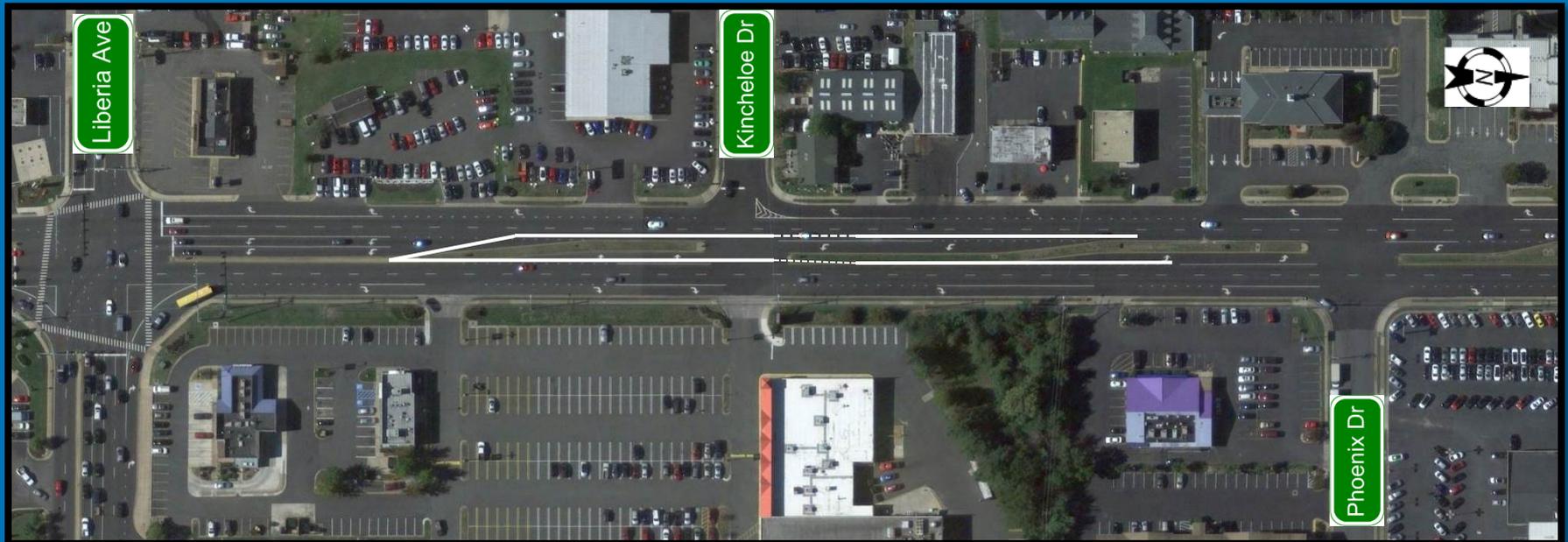


## Improvement Benefits

- Removes pedestrians/bicycles conflicts from roadway
- Provides pedestrian access to private school
- Design constraints
  - Drainage and slope areas
  - Vegetation
- Cost = \$2.5M
  - Construction \$1,700,000
  - Engineering \$460,000
  - Right-of-way \$325,000
- High cost benefit ratio (3 to 1)

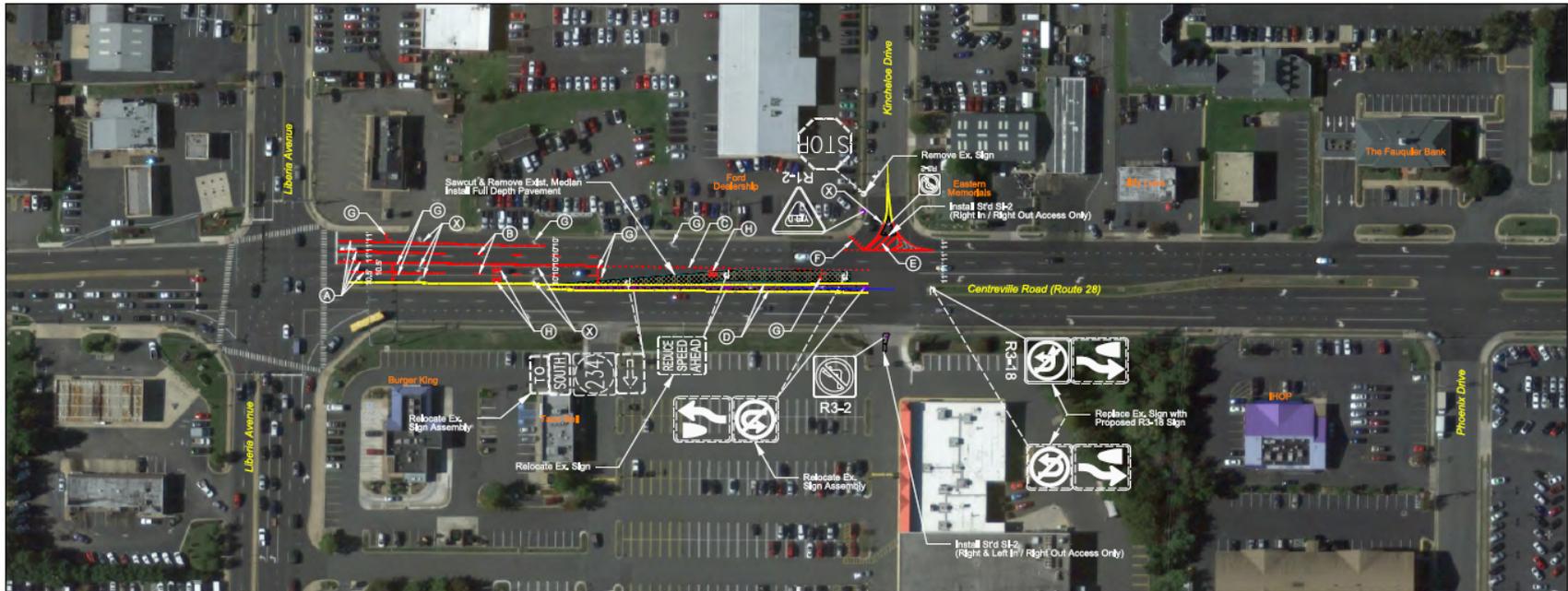
## Intersection improvement :

- Additional storage for southbound to eastbound left turn vehicles



# Southbound Left-Turn Bay Extension at Liberia Avenue

## Route 28 SB Left-Turn Bay Extension at Liberia Ave. Route 28 Safety and Operational Study



PAVEMENT MARKING LEGEND:

- (A) WHITE, 4" WIDTH
- (B) WHITE, 4" WIDTH, 10' LONG, 30' SPACE
- (C) WHITE, 4" WIDTH, 2' LONG, 4" SPACE
- (D) YELLOW, 4" WIDTH
- (E) WHITE, 24" WIDTH @ 45 DEGREES & 20' SPACING
- (F) WHITE, YIELD LINE
- (G) WHITE, ELONGATED ARROW
- (H) WHITE, WORD MESSAGE "ONLY"
- (X) ERADICATE EXISTING PAVEMENT MARKING

LEGEND:

- FULL DEPTH PAVEMENT
- CONCRETE MEDIAN ISLAND



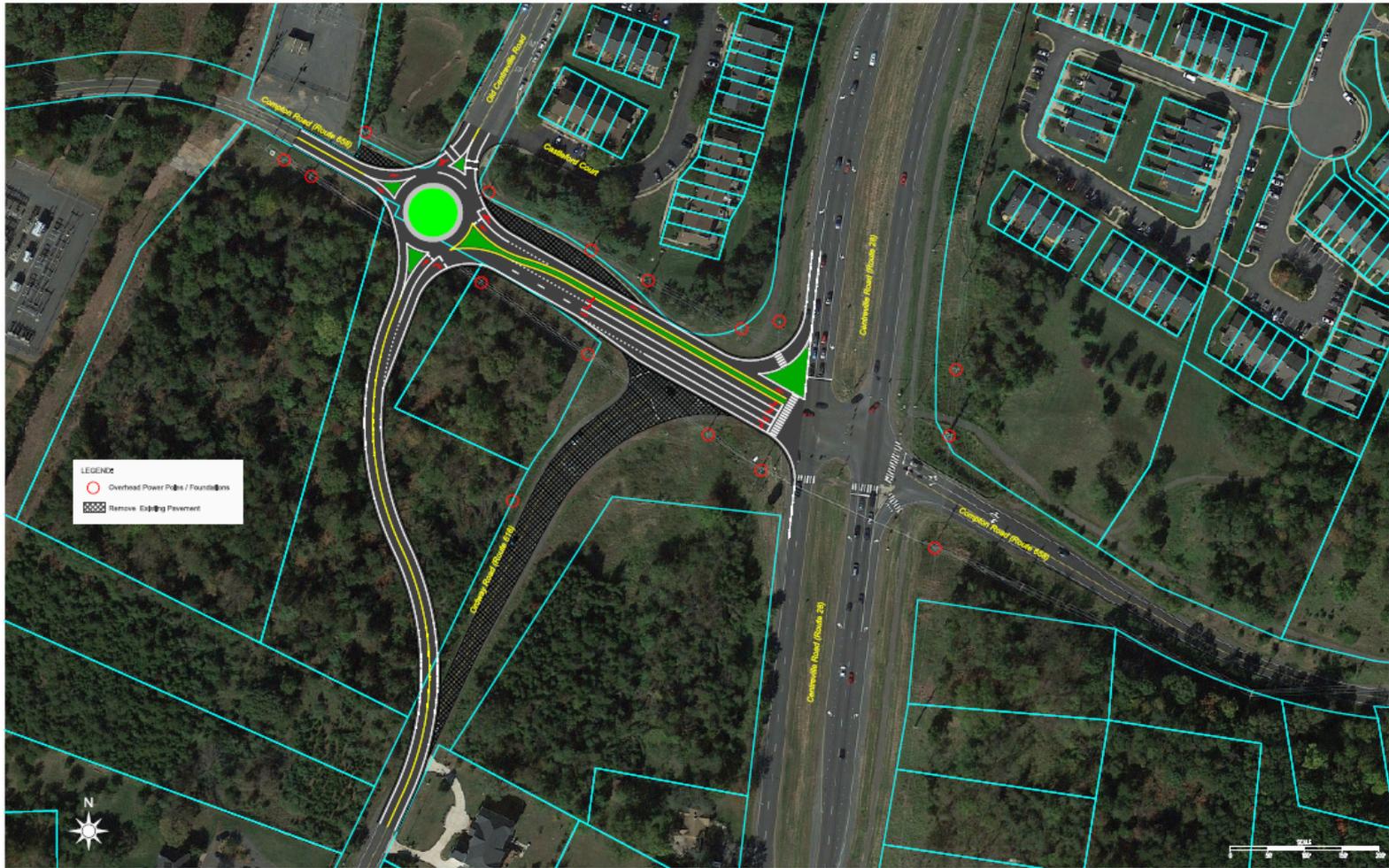
## Intersection improvement to address:

- Southbound left turning traffic queuing into southbound through lanes during peaks
- Reduction in rear-end accidents
- Requires access changes:
  - Make Kincheloe Drive Right in-out only
  - Shopping center driveway, right out only, possibly support left turn in
- Cost = \$250K
  - Construction \$190,000
  - Engineering \$55,000
  - Right-of-way \$0

## Old Centreville Road

- Serves as a parallel alternative route
- Address off-set intersection in close proximity to the of Compton Road and Route 28
- Roundabout would:
  - Re-align the approaches to intersect at 90 degrees
  - Change the intersection control from minor street stop to a roundabout operation.
  - Increase the approach geometry for the intersection of Compton Road with Route 28
    - Dual lefts, a through lane and a right turn lane.

# Roundabout Intersection at Ordway Rd/Compton Rd



## Intersection improvement to address:

- Address intersection spacing between Ordway Road and Route 28, more queuing space
- Congestion reduction at Ordway Road/Compton Road/Route 28 (LOS A/B)
- Address queuing on EB leg of Ordway Rd/Compton Rd/Route 28
- Cost = \$6.2M
  - Construction \$4,700,000
  - Engineering \$925,000
  - Right-of-way \$580,000
- Recommend traffic calming study for Old Centreville Road during the design phase

## Route 28 widening north of Bull Run

- Fairfax County and NVRTA underway

## Sidewalks

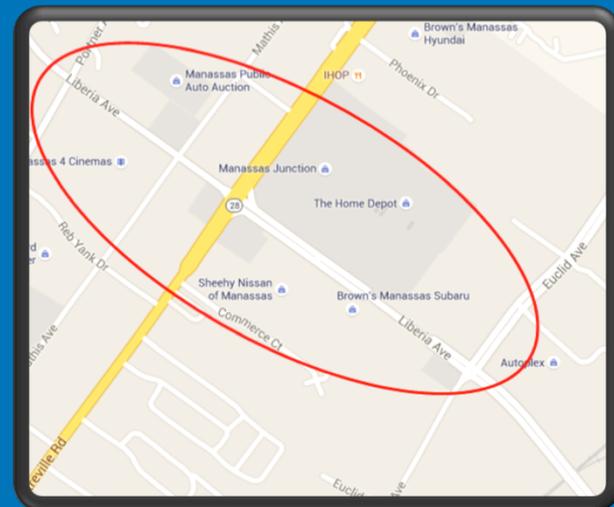
- Sidewalk/path – westside Spruce St to Leland Rd
- Sidewalk/path - eastside near Bull Run Bridge
  - Part of completion of pedestrian/bicycle plan

## SB Left-Turn Bay Extension at Liberia Ave

## Roundabout Intersection at Ordway Rd/ Compton Rd

## VDOT On-Going Recommendation Implementation

- Signal retiming on Route 28
  - Upperridge Road to Bull Run – completed
  - Bull Run to Manassas Drive – completed
- Liberia Avenue retiming – data collection phase
  - Portner Avenue
  - Mathis Avenue
  - Route 28
  - Manassas Junction
  - Euclid Avenue

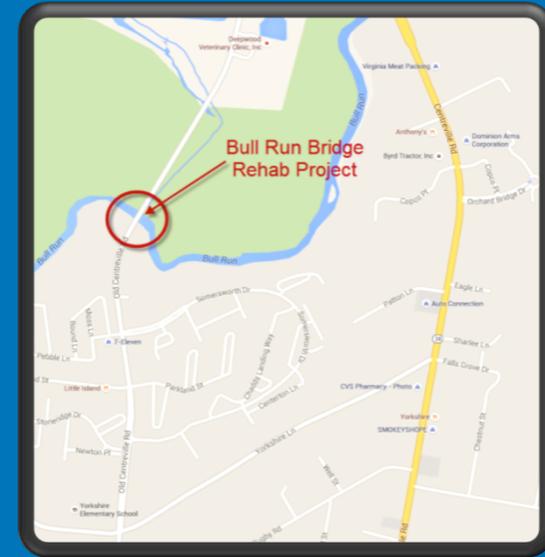


## VDOT Traffic Engineering Activities:

Cross Street	#	Candidate Improvement
Machen Rd	2	Add “Right Lane Must Turn Right” sign and pavement markings to the southbound lanes 100-150 ft. south of the intersection (to supplement existing sign and pavement markings downstream) Currently under review
New Braddock Rd	7	EB center signal head serving thru-left lane should be four-section signal head
Compton Rd	14	Install supplemental signal head on Ordway Rd EB approach
Rugby Rd	17	Install intersection warning signs with road name plaque
Rugby Rd	20	Relocate school pedestrian crossing sign SB Rt 28
Maplewood Dr	21	Install advance “Next Signal” guide signing
Manassas Plz / Browns Ln	23	Install advance “Next Signal” guide signing
Old Centreville / Blooms Quarry Ln	25	Install intersection warning signs for SB with road name plaque
Orchard Bridge Dr	Citizen	Review and adjust southbound left turn indications to address visibility comments from citizens, alignment or replacement possible.

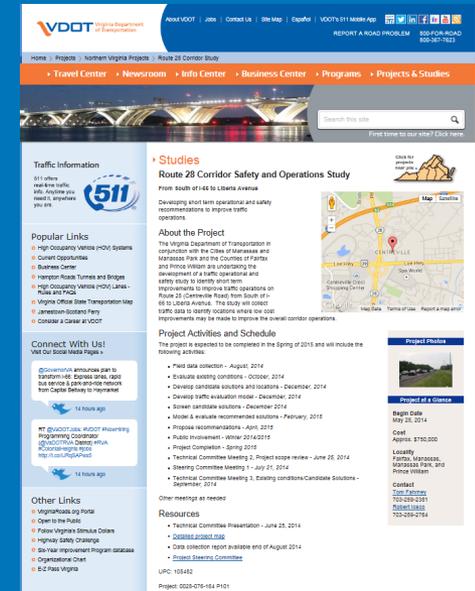
# Old Centreville Road Bull Run Bridge, Major Rehab Project

- Existing Rt 28 alternative route
- Work starts in Summer 2016
- Estimated construction cost = \$1.9M
- Deck replacement, no additional capacity
- Old Centreville Rd
  - Will be reduced to one reversible lane with signalization
- Impact, moves existing bottleneck south



## Web Page

- Study-specific information
- Reports and presentations



[http://www.vdot.virginia.gov/projects/northernvirginia/route\\_28\\_corridor\\_study.asp](http://www.vdot.virginia.gov/projects/northernvirginia/route_28_corridor_study.asp)

Comment Email Address:

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## Questions / Comments?

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