

Proposed Alternatives for Eaton Place/Chain Bridge Road Intersection Improvements

Public Meeting
May 14, 2018

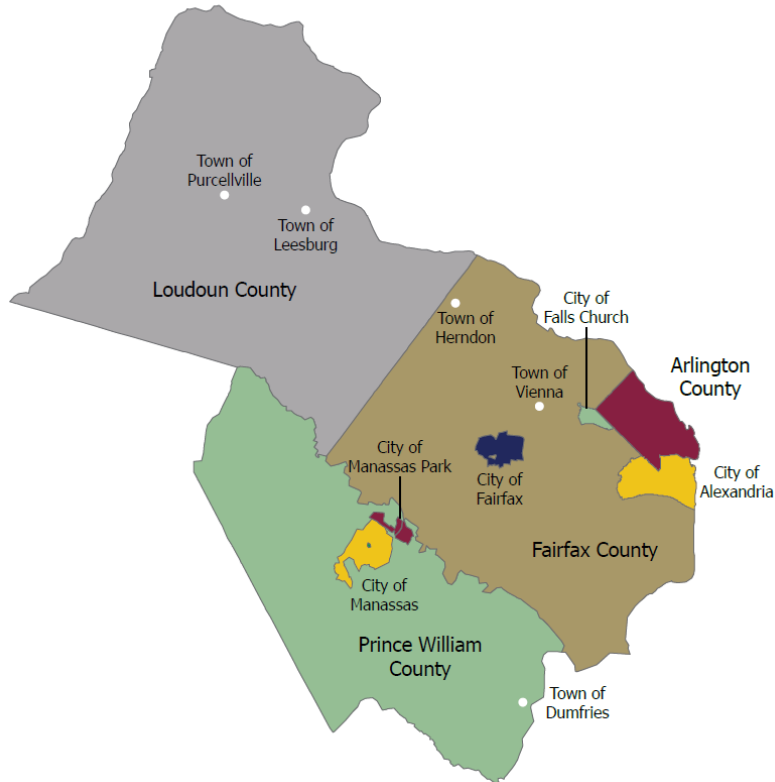
Tonight's Agenda

- ▶ Project Overview
 - Existing conditions
 - Improvement options
- ▶ Question and answers
- ▶ Obtain input from citizens and stakeholders

Project Purpose and Need

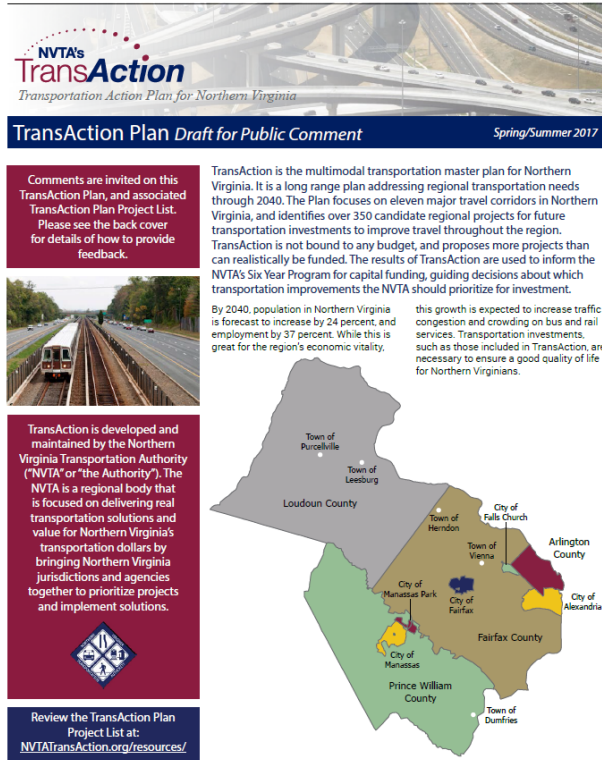
- ▶ Chain Bridge Road provides key local access (residential, school, & commercial locations) and connections to the county and I-66
- ▶ Current conditions are challenging so accommodating future growth and changes will require improvements to help us:
 - Improve current roadway operations for all travelers
 - Plan for future demand and travel needs
 - Maintain connections to residential neighborhoods
 - Maintain and improve transit operations
 - Increase pedestrian and bicycle safety and connectivity

Regional Context



- The City of Fairfax is well positioned in the regional transportation system
- The City is a member of the Northern Virginia Transportation Authority, which engages in regional transportation planning

Regional Context



NVTA's TransAction
Transportation Action Plan for Northern Virginia

TransAction Plan Draft for Public Comment Spring/Summer 2017

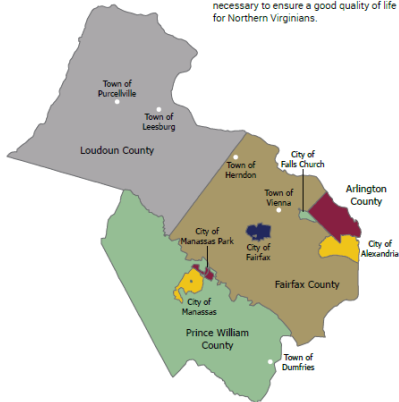
Comments are invited on this TransAction Plan, and associated TransAction Plan Project List. Please see the back cover for details of how to provide feedback.

TransAction is the multimodal transportation master plan for Northern Virginia. It is a long range plan addressing regional transportation needs through 2040. The Plan focuses on eleven major travel corridors in Northern Virginia, and identifies over 350 candidate regional projects for future transportation investments to improve travel throughout the region. TransAction is not bound to any budget, and proposes more projects than can realistically be funded. The results of TransAction are used to inform the NVTA's Six Year Program for capital funding, guiding decisions about which transportation improvements the NVTA should prioritize for investment.

By 2040, population in Northern Virginia is forecast to increase by 24 percent, and employment by 37 percent. While this is great for the region's economic vitality, this growth is expected to increase traffic congestion and crowding on bus and rail services. Transportation investments, such as those included in TransAction, are necessary to ensure a good quality of life for Northern Virginians.

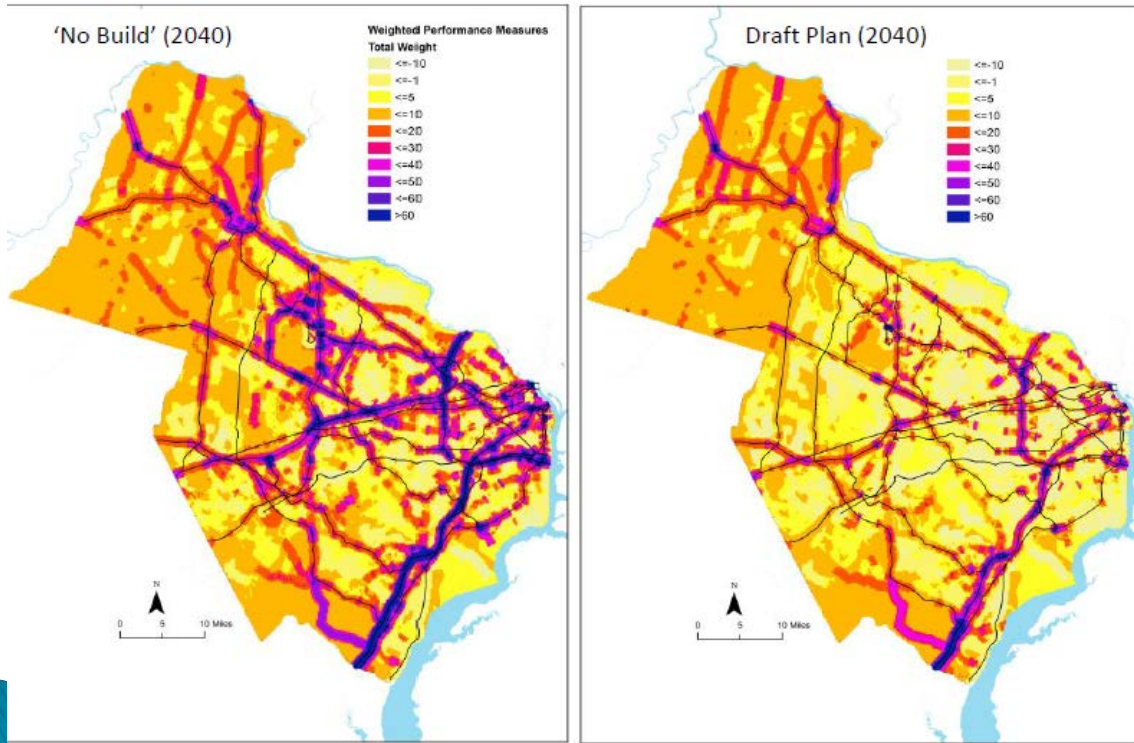
TransAction is developed and maintained by the Northern Virginia Transportation Authority ("NVTA" or "the Authority"). The NVTA is a regional body that is focused on delivering real transportation solutions and value for Northern Virginia's transportation dollars by bringing Northern Virginia jurisdictions and agencies together to prioritize projects and implement solutions.

Review the TransAction Plan Project List at:
NVTATransAction.org/resources/



- NVTA recently updated the long range Transportation Plan, TransAction
- This plan identifies over 350 regional projects to improve travel throughout the region
- Some of the 350 projects are located in the City of Fairfax

Draft Plan compared to No Build



Even if the region were to construct all 358 projects proposed in the regional long range plan, we will still have congestion in the region

City of Fairfax Multimodal Plan



Vision for Transportation

In 2035, Fairfax is a city with options for residents to easily, safely, and efficiently move within and between neighborhoods either by walking, bicycling, taking public transportation, or driving.



66%

Of residents surveyed would prefer to travel by a means **other than driving alone** to work or errands

1/3 of all household trips



1/2 Of these short distance trips are driven





TWO-YEAR TRANSPORTATION PROGRAM POTENTIAL PROJECTS:



Additional Roadway Network In Northfax
West of Chain Bridge Road

Eaton Place/Chain Bridge Road
Intersection Improvements

George T. Snyder Trail Completion

Jermantown Road Widening
(Between Fairfax Blvd & Route 1-66)



66% Of residents surveyed would prefer to travel by a means **other than driving alone** to work or errands

Judical Drive Trail Completion

Old Lee Highway Multimodal Improvements
(Pedestrian/Bicycle Improvements)

- City Wide Projects**
- Bike Share (in partnership with Mason)
 - Pedestrian Network Safety Spot Improvements
 - Transit Facility Improvements
 - Transportation Demand Program
 - Roadbed Reconstruction

University Drive Traffic Calming (South of Fairfax Blvd)



Existing Conditions

- ▶ Improvement needed to relieve congestion
- ▶ Intersection operates with 8 signal phases to control four side street phases)
- ▶ Long delays at signal



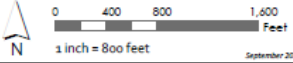
Baseline Future Conditions

The following independent projects are expected to be in place prior to improvements at Eaton Place and Chain Bridge Road:

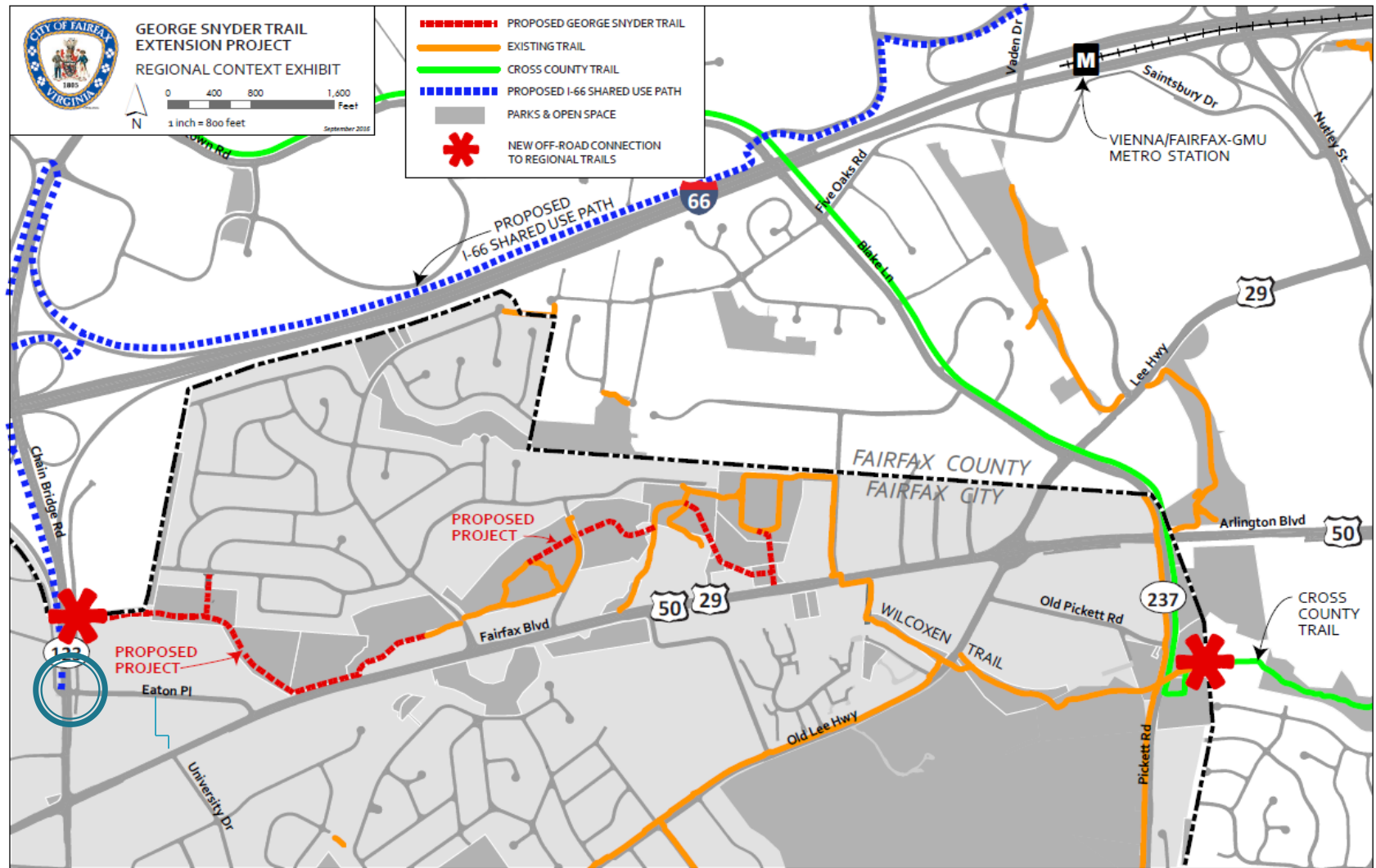
- I-66 Project
- Northfax Project (Route 50/123 Intersection)
- New Street within Northfax area
- George Snyder Trail



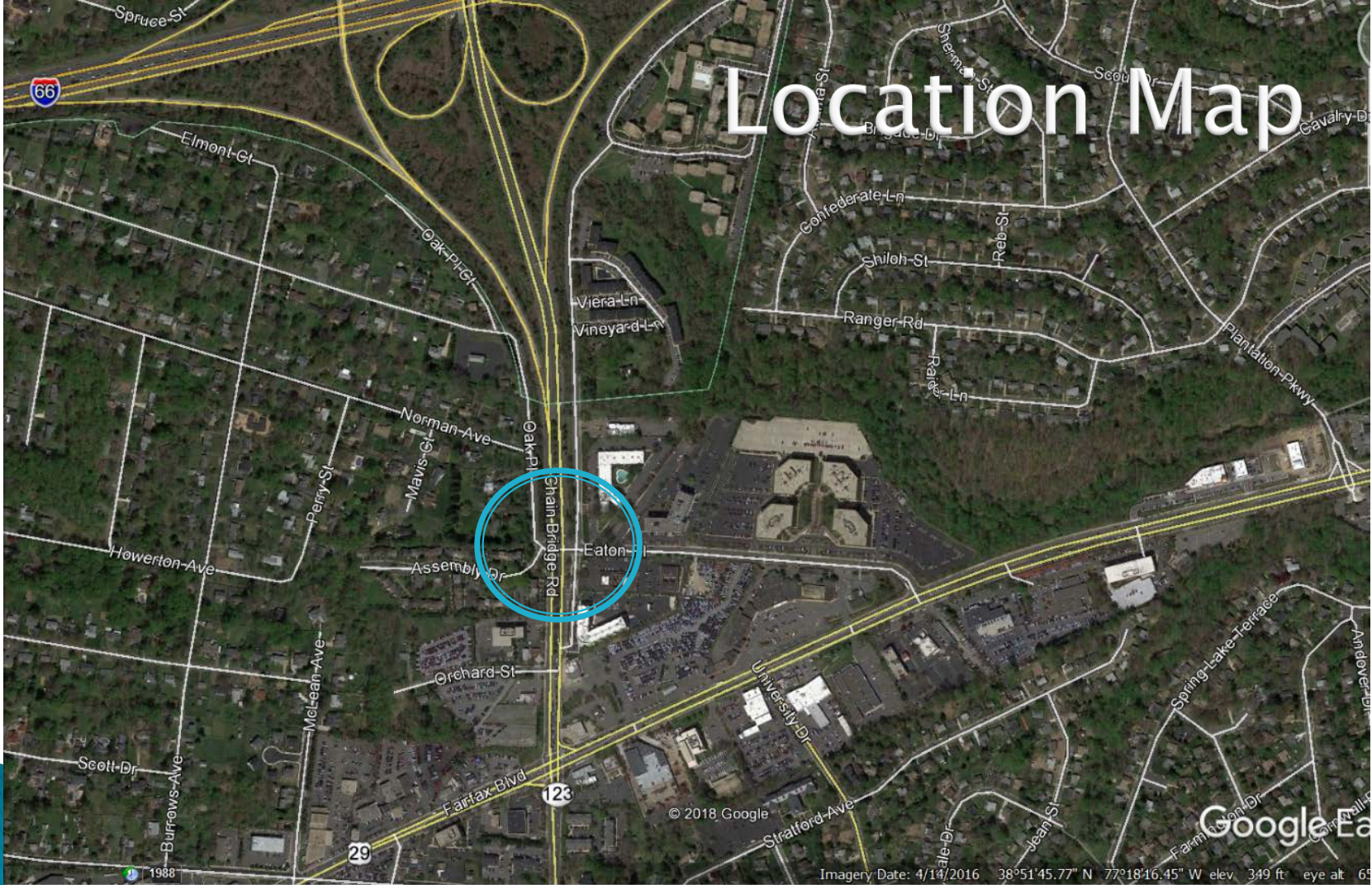
GEORGE SNYDER TRAIL EXTENSION PROJECT REGIONAL CONTEXT EXHIBIT



- PROPOSED GEORGE SNYDER TRAIL
- EXISTING TRAIL
- CROSS COUNTY TRAIL
- PROPOSED I-66 SHARED USE PATH
- PARKS & OPEN SPACE
- NEW OFF-ROAD CONNECTION TO REGIONAL TRAILS



Location Map



Alternatives Considered

- ▶ Two-Lane Roundabout
- ▶ Displaced Left-Turn (Continuous Flow Intersection)
- ▶ Both would be effective at reducing congestion and improving mobility through the intersection

Traffic Analysis

- ▶ Traffic study based on 2040 traffic volume forecasts
 - Baseline condition
 - Future conditions with improvements
 - Values shown are volume/capacity ratios

Design Option	Volume/ Capacity Ratio 2040 AM	Volume/ Capacity Ratio 2040 PM
2-Lane Roundabout	0.84	0.61
Displaced Left-Turn	0.72	0.79

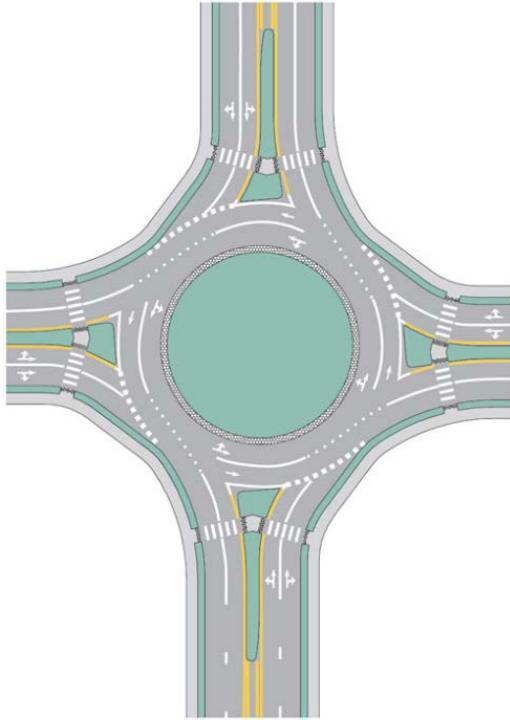
2-Lane Roundabout



Two Lane Roundabout

- ▶ Replace signalized intersection with two lane roundabout
- ▶ Entry points are yield controlled, eliminating the need for a signal
- ▶ Roundabouts are low speed intersections
- ▶ Roundabouts reduce delay by allowing a continuous flow of traffic

2-Lane Roundabouts



2-Lane Roundabout Pros/Cons

Pro	Con
Improved Safety (removes multiple conflict points)	Greater Property Impacts than Signalized intersection
Gateway Feature Opportunity	Bicycle/Pedestrian Crossings
No Signal Required	Maintenance of Traffic / Constructability
Common in Virginia	Commercial property access on east side impacted
Provides Congestion Relief	Access road impacted

Displaced Left-Turn



Displaced Left Turn

- ▶ Displaced Left–Turn (DLT) creates unopposed left turns by moving traffic to the other side of the road in advance of the intersection
- ▶ Traffic enters a parallel left turn lane separated from opposing lanes
- ▶ Left turning traffic moves simultaneously with through traffic at the main intersection
- ▶ Partial DLT's improve intersection throughput by about 20%

Displaced Left-Turn Pros/Cons

Pro	Con
Efficient Traffic Movement	Urban Style Intersection
Minimal Right of Way Impact	Difficult Access for Apartments
Reduced Utility Impact	Signals Required
Simple Maintenance of Traffic	Long pedestrian crossing distances
Conventional Bike/Ped Paths	Commercial property access on east side impacted
Congestion Relief	

Next Steps

- ▶ May 14: Public Outreach Meeting (Concept Design)
 - **7 PM at Mason Lodge in Cobbdale**
- ▶ June 1: Smart Scale Pre-Application
- ▶ Mid-June: Council and community re-engagement
- ▶ July: City Council Resolution of Support for Application
- ▶ August 1: Smart Scale Final Submission Due

Questions / Comments?

- ▶ **Your feedback is important!**
 - Fill out comment cards
 - Review the information boards
 - Ask questions or provide feedback to any staff with nametags
- ▶ Feedback on project elements will help shape the direction of this project