



Access Management Protecting Virginia's Arterial Investments

**CTB Workshop
October 2016**

Goal/Purpose

Goal

The goals of the comprehensive highway access management standards are:

1. To reduce traffic congestion and impacts to the level of service of highways, leading to reduced fuel consumption and air pollution;
2. To enhance public safety by decreasing traffic crash rates;
3. To support economic development in the Commonwealth by promoting the efficient movement of people and goods;
4. To reduce the need for new highways and road widening by improving the performance of the existing systems of state highways; and
5. To preserve public investment in new highways by maximizing their performance.

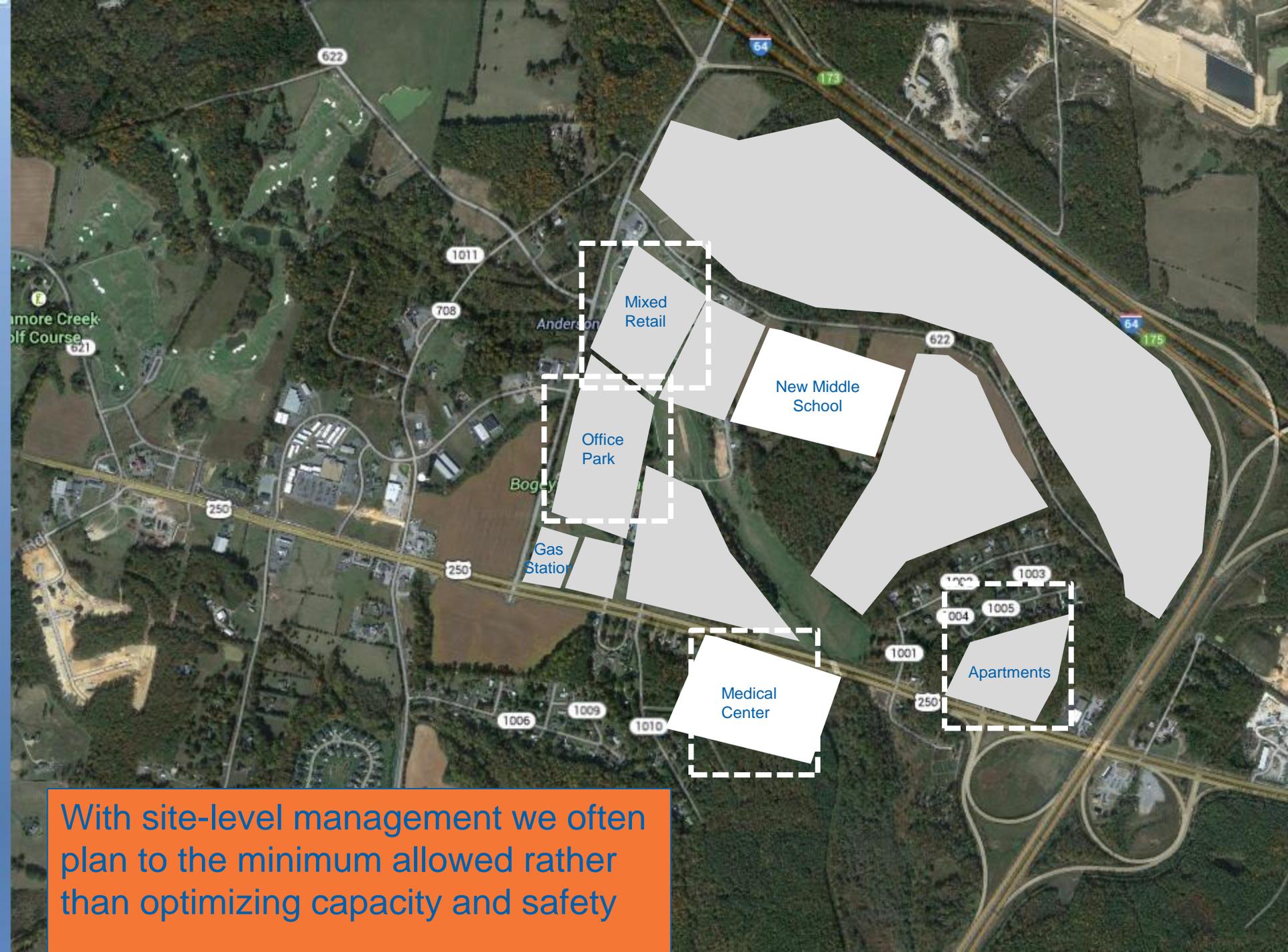
Solutions

1. Apply lessons from other states
2. Strengthen policies/procedure
3. Proactive planning
4. Inventory, track & report

Slow Erosion of Safety and Capacity

- Arterials have become “main streets” for local growth
- Direct access at site level to Virginia’s arterial routes
- Traffic signal proliferation
- Viable transportation system essential to state, regional, and local economies
- Difficult to plan and manage access at the site level – must have corridor approach

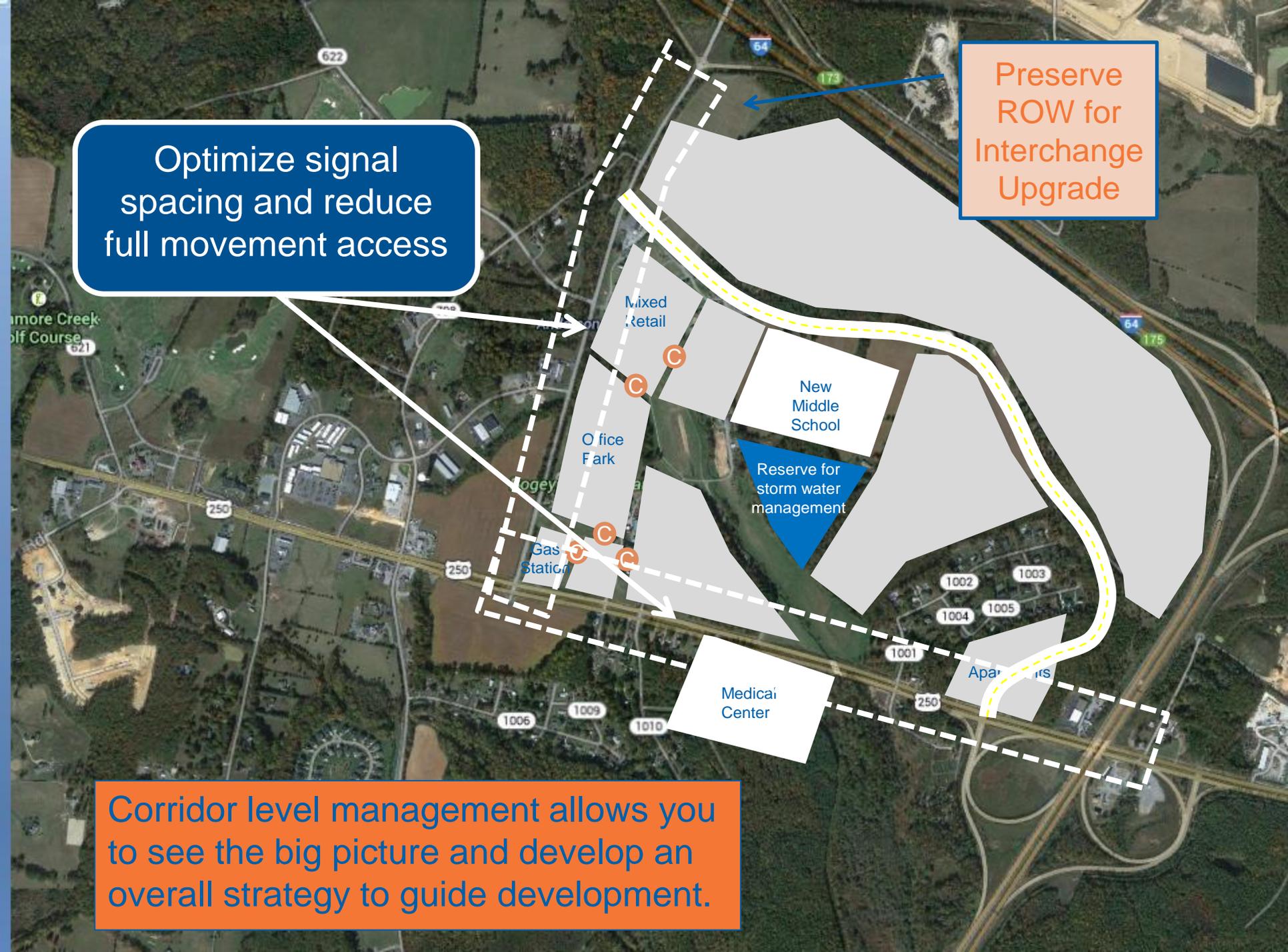




With site-level management we often plan to the minimum allowed rather than optimizing capacity and safety

Preserve
ROW for
Interchange
Upgrade

Optimize signal
spacing and reduce
full movement access



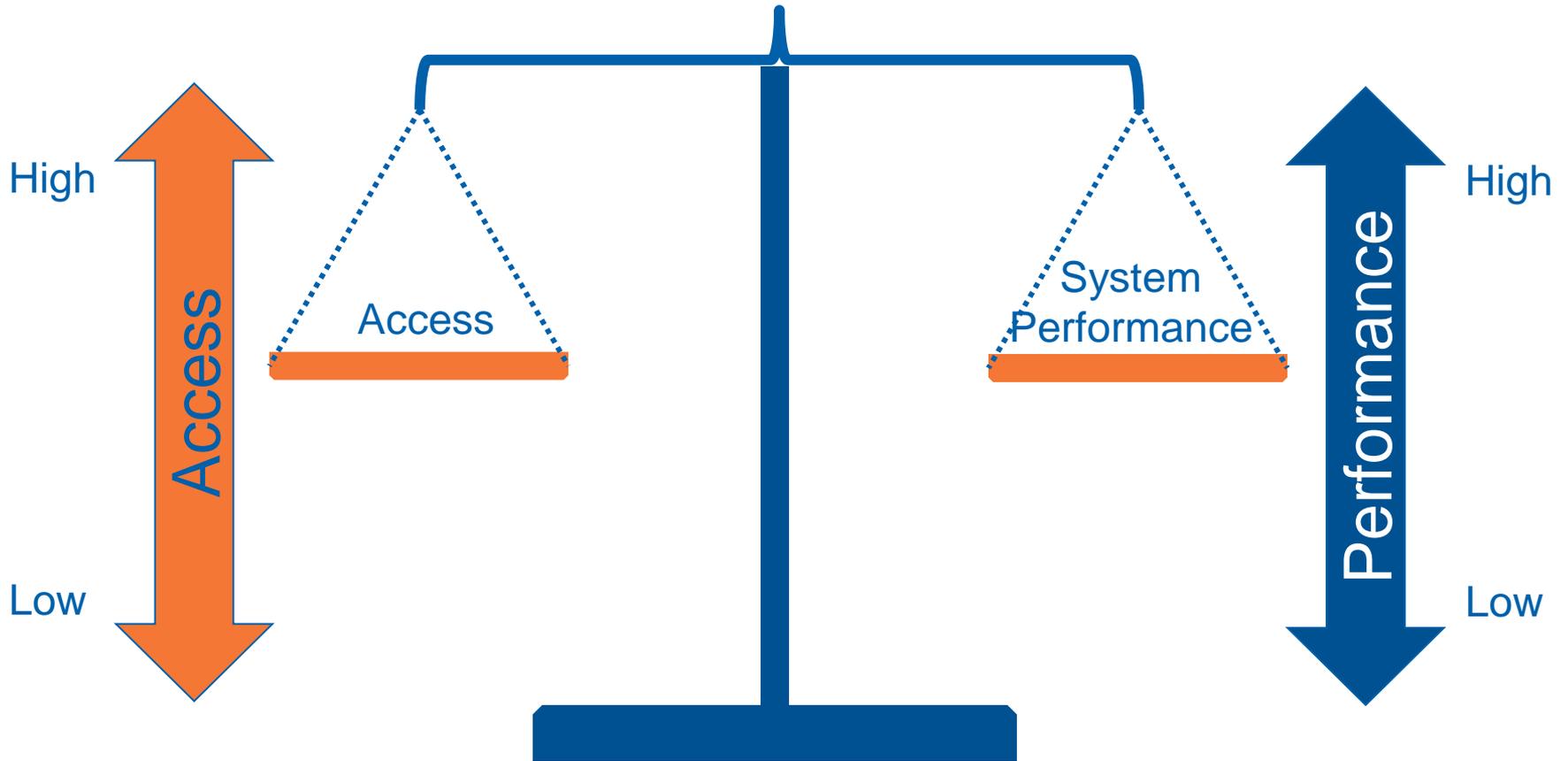
Corridor level management allows you to see the big picture and develop an overall strategy to guide development.

Why this matters

- ‘Buying back’ the capacity lost over time
- Funding limitations
- Protect the tax payer investments
- Road user costs – delay and safety
- Treat the transportation system as a finite resource

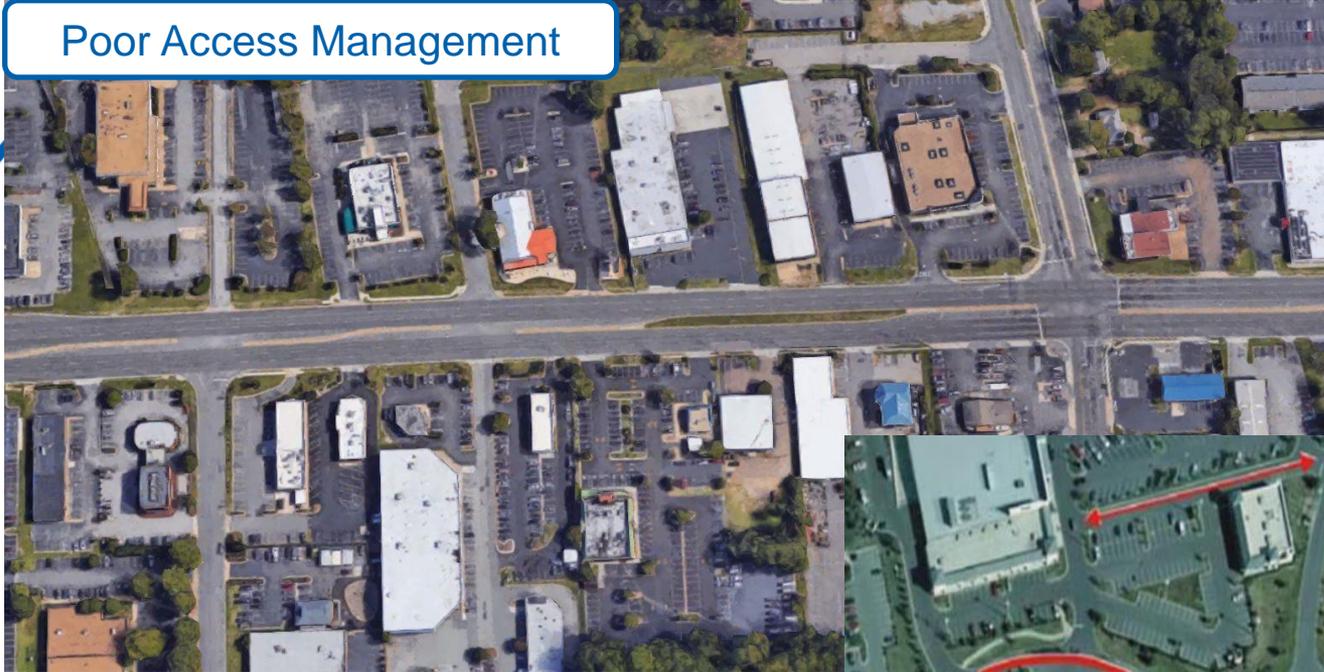


How can we achieve reasonable balance?



Applying Access Management Principles

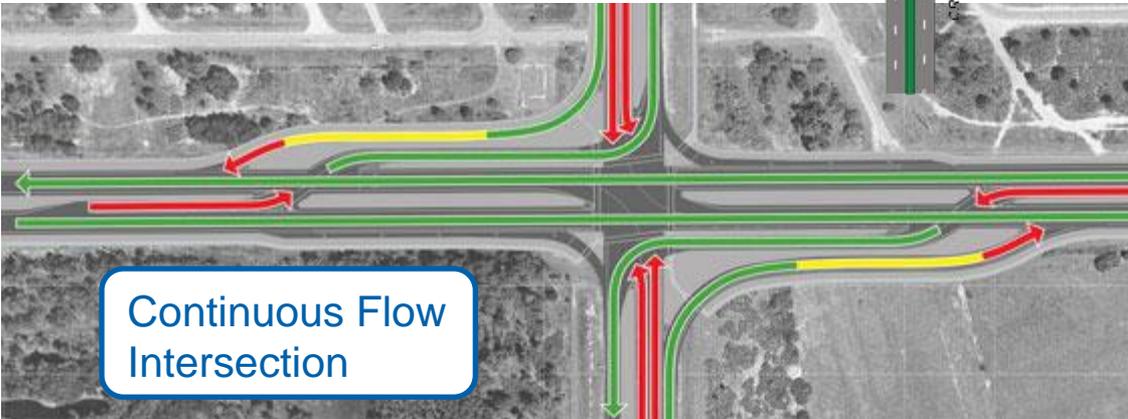
Poor Access Management



Good Access Management



Applying National Lessons Learned



Urban Application - US 281 in San Antonio, TX

53% decrease
in travel time



Loons to facilitate
U-turns

Rural Application - US 17 in Leland, NC

55% decrease
in Fatal and
Injury crashes



Superstreets can be
implemented without signals

Success Story – Route 17 in Stafford



Proposed Access Management Strategy for Virginia

- **Establish the network**

- Aim for higher than minimum spacing standards
- Emphasize alternative intersection design

- **Establish Plan**

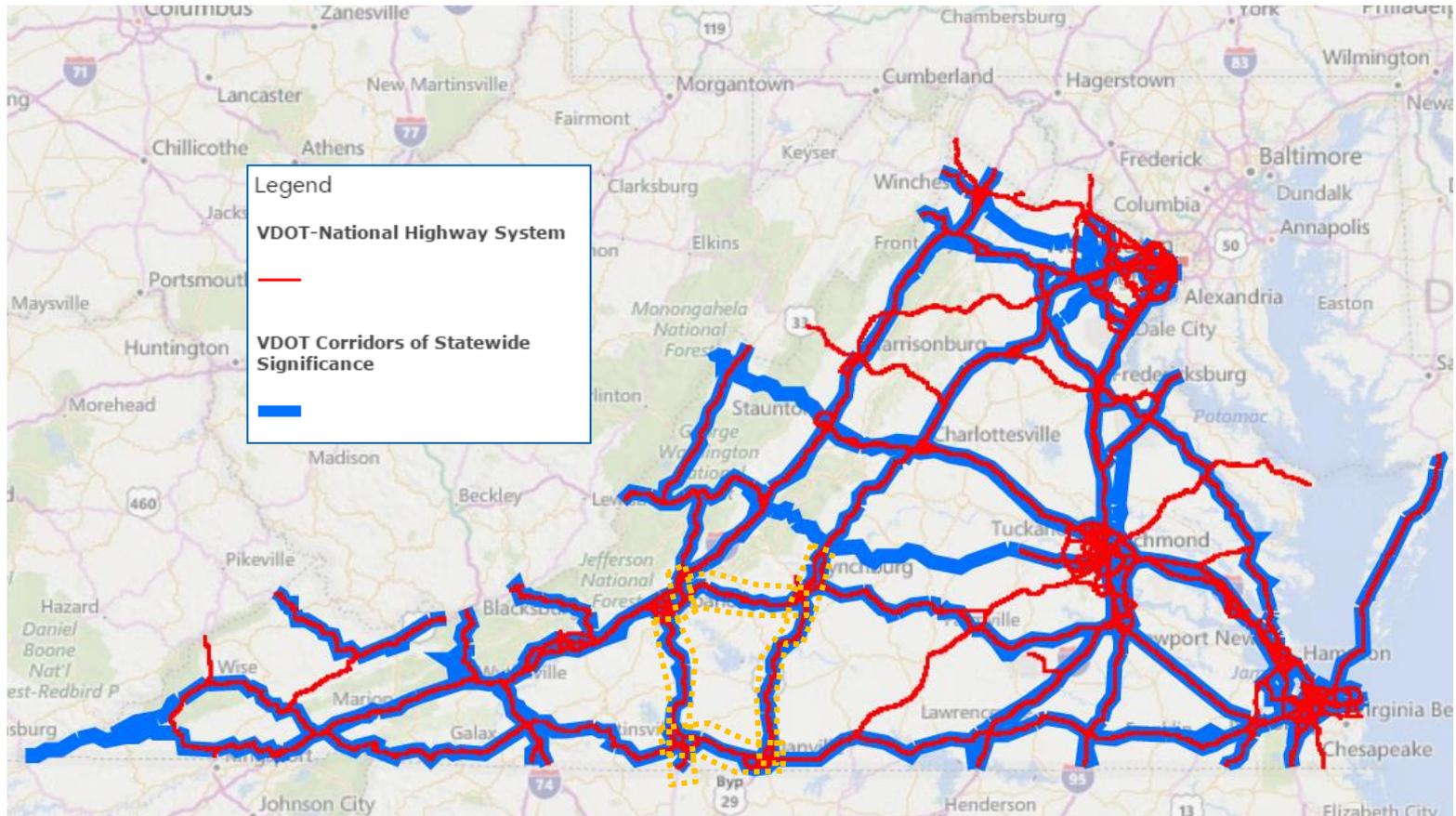
- **Strengthen Policies**

- **Monitor and Report**

Strategy – Establish the Network

Focus efforts on Corridors of Statewide Significance and National Highway System – State Arterial Network

Lynchburg and Salem as pilots



Strategy – Establish a Plan

Arterial Management Plans

Goals

- Improve Highway Safety
- Protect Highway Capacity
- Maintain Highway Function
- Extend life of Current Investments

Management Techniques

- Reduce conflict points
- Reduce signal phasing
- Provide sufficient spacing
- Plan site circulation/inter-parcel connections

Developed jointly by VDOT and localities. Three pilot efforts to-date:

- Goochland (complete)
- Spotsylvania (complete)
- Campbell (underway)

Strategy – Establish a Plan

- Inventory access points & signals on the state network
 - Establish baseline and facilitate reporting
- Develop Arterial Management Plans for key arterial routes
 - Optimize access spacing beyond minimum access management standards
 - Identify potential crossovers to (i) close or (ii) make directional, with no thru movements
 - Focus on key arterial corridors in pilot districts
 - Salem – Routes 220, 220 Alt, 460 and 58
 - Lynchburg – Routes 360, 460, 29 (underway), 58
- Partner with localities and business community
- Expand Statewide

Strategy - Strengthen Policies

Policy Objective: Plan access to the State Arterial Network to minimize negative impacts to capacity, mobility & safety

- Review design & permit approval related to traffic signals and access
- Implement innovative strategies to preserve capacity and safety
 - Guidance for maximizing throughput
 - Full range of engineering solutions considered before conventional traffic signals
- Include stakeholders
- Funding of improvements & sharing costs
- Summarize findings and recommendations for presentation to Board

Strategy - Monitor and Report

Reporting to Board (within 6 months)

- Policy Review
- Progress on implementation of Arterial Management Plans
- Statistics, by corridor and District, for
 - **total access points and signals**
 - **change from previous year**
 - **change in system performance**

Recap of Access Management Strategy

- **Establish a network with a focus on Access Management**
- **Establish Arterial Management Plans**
 - **Inventory access points and signals**
 - **Assess potential for development**
 - **Partner with local governments**
- **Strengthen Policies (and provide training and support)**
- **Monitor and Report to Board annually on:**
 - **Progress on implementation of Arterial Management Plans**
 - **Statistics, by corridor and District, for**
 - **total access points and signals**
 - **change from previous year**
 - **change in system performance**