

**Board of Supervisors**

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Laura A. Sellers  
Cord A. Sterling  
Robert "Bob" Thomas, Jr.

Anthony J. Romanello, ICMA-CM  
County Administrator

## Infrastructure Committee AGENDA

September 2, 2014 @ 1:30 p.m.  
ABC Conference Room, Second Floor

Agenda Item	
	Introduction <ul style="list-style-type: none"><li>♦ Welcome</li></ul>
1.	Transportation Matters <ul style="list-style-type: none"><li>a. FAMPO Prioritization Process – Andy Waple, Acting FAMPO Administrator</li><li>b. Exit 140 Economic Impact – Tim Baroody, Economic Development</li><li>c. Del. Futrell</li><li>d. FY2015 State Funding for Stafford County Transportation Projects</li></ul>
2.	Next Meeting October 7, 2014 at 1:30 PM; ABC Conference Room
	Adjourn

# FAMPO Highway Project Prioritization Methodology

Stafford County Infrastructure Committee

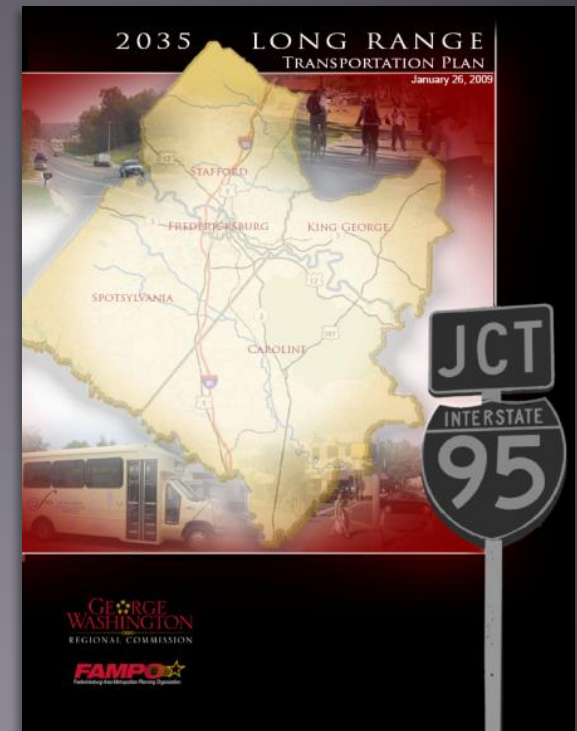
September 2, 2014

# Overview

- Background
- Methodology
- Scoring Categories and Point Values
- Example Scoring: I-95/Route 630 Interchange Project
- I-95/Route 630 Interchange Project Facts

# Background

- Developed to assist in setting priorities for the FAMPO Constrained Long-Range Transportation Plan
- Adopted by FAMPO in July of 2008
- Methodology based on:
  - Peer Research from other MPOs
  - Eight Federal Planning Factors
  - FAMPO Mission Statement



# Background: General Factors used by other MPOs

- Congestion
- Economic Opportunities
- Safety
- Security
- Public Support
- Environmental Impacts
- Funding and Local Match
- Cost
- Regional Connectivity
- Gap Closure
- Deliverability/Readiness
- Freight Mobility
- Hurricane Evacuation
- Improve Mobility for Disadvantaged
- Sustainability
- Prior Funding Commitments
- Local Priority
- Benefit/Cost Ratio
- Remaining Life Cycle and Existing Conditions

# Background: Eight Federal Planning Factors

1. Support the economic vitality of the United States, the States, metropolitan areas, and non-metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the transportation system for motorized and non-motorized users;
4. Increase accessibility and mobility of people and freight;
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
6. Enhance the integration and connectivity of the transportation system, across and between modes and throughout the State, for people and freight;
7. Promote efficient system management and operation; and
8. Emphasize the preservation of the existing transportation system

# Background: FAMPO Mission Statement

*The Fredericksburg Area Metropolitan Planning Organization's (FAMPO) mission is to provide a cooperative, continuous and comprehensive ("3C") transportation planning process to build regional agreement on transportation investments, that balance roadway, public transit, bicycle, pedestrian, and other transportation needs and support regional land use, economic, and environmental goals for the safe and efficient movement of people and goods. Special emphasis is placed on providing equal access to a variety of transportation choices and effective public involvement in the transportation planning process.*

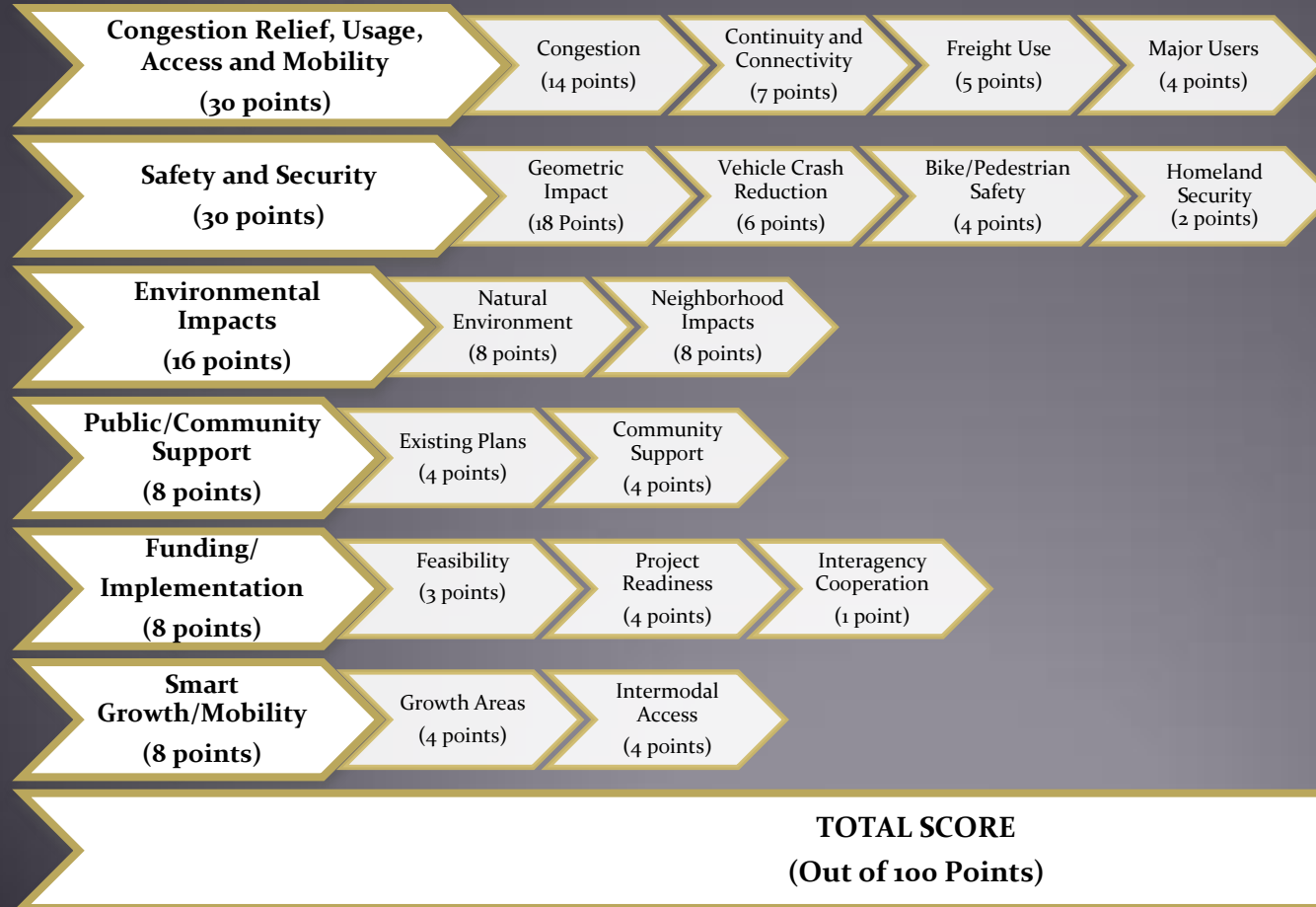
# Methodology

- Scoring Factors
  - *Congestion Relief* - 30 points
  - *Safety & Security* - 30 points
  - *Environmental Impacts* - 16 points
  - *Public Support* - 8 points
  - *Funding & Implementation* - 8 points
  - *Smart Growth/Mobility* - 8 points
- Project Functional Classifications
  - *Level I*
    1. Urban
    2. Rural
  - *Level II*
    1. Interstate
    2. Arterials
    3. Collectors
    4. Local

*Factors in Blue are also required in in HB2 Legislation. Other HB2 Factors include Accessibility and Economic Development.*



# Scoring Categories & Point Values



# Scoring Example:

## I-95/Route 630 Interchange Replacement Project

- Congestion Relief: 23/30 points
  - Points awarded for moderately high levels of congestion in the base and horizon years (Volume to Capacity Ratios of 1.2 and 1.3, respectively); having benefit to the national/regional transportation system; and enhancing the ability for a National Highway System Route to efficiently move freight.
- Safety and Security: 23/30 points
  - Points awarded due to mid-range crash rates (1.3 per million Vehicle Miles Traveled) in the project area; correction of insufficient geometry of the interchange; and improvements that will support access for incident management.
- Environmental Impacts: 8/16 points
  - Points awarded due to project being neutral in its environmental impact, neither providing significant benefit or detriment. Project is also neutral in its impact on neighborhood, community, historic, or archaeological elements in the community. The project is somewhat context sensitive; however, it has some measurable and real impact to community elements.

## Scoring Example:

### I-95/Route 630 Interchange Replacement Project

- Public and Community Support: 8/8 points
  - Project receives full points due to being contained in state, regional and local plans as well as being strongly supported at the state, regional and local levels.
- Funding and Implementation: 8/8 points
  - Project receives full points due to having demonstrated feasibility and being mostly funded
- Smart Growth/Mobility: 5/8 points
  - Points awarded due to project being neutral to smart growth (no interstate project given positive smart growth points due to the federal functional classification's definition of the interstate system and the preservation of its operational use)
  - The project also supports intermodal access by providing increased access to public transportation and supporting carpooling and vanpooling
- TOTAL: 75/100 points

## Scoring in Relation to Other Interstate Priorities

- I-95/Route 630 Interchange: 75/100 points
- I-95 Rappahannock River Crossing: 74/100 points
- I-95/Jackson Gateway Area Interstate Improvements : 71/100 points
- I-95 HOT/HOV Lanes Southern Segment (Exit 143-Exit 126): 47/100 points

# I-95/Route 630 Interchange Project Facts

- As a condition of the approval of the construction of Exit # 133, the Federal Highway Administration (FHWA) required VDOT allocate funding to move and reconstruct the Route 630 Interchange (letter dated November 16, 1992).
- Current project began work in 2011.
- Project is currently in the design and right-of-way acquisition phases

U.S. Department of Transportation  
Federal Highway Administration

Region 3  
Virginia Division

Federal Building  
400 N. 4th Street  
P.O. Box 10048  
Richmond, Virginia 23240-0048

November 16, 1992

IN REPLY REFER TO:

Request for Additional Interchange I-95 at the Proposed Outer Connector Stafford County, Virginia

LOCATION AND DESIGN DIVISION

ECC	RECEIVED	CWS
REA	NOV 10 1992	DOL
CFB		TED
KFP		RC
RJK		JTH
CJH	CAM	EWL

Mr. J. S. Hodge  
Chief Engineer  
Department of Transportation  
Richmond, Virginia

Attention: Mr. E. C. Cochran, Jr.

Dear Mr. Hodge:

Reference is made to your letter dated September 30, 1992 which submitted a Revised Access Justification Report for the subject interchange and requested approval of the additional access points.

We have analyzed the revised justification report and find that it adequately responds to the majority of our previously identified concerns. The proposed project has been redesigned to include CD roads in both directions on I-95 between the proposed interchange and Rte. 630 to the north. The existing Rte. 630 interchange will be replaced with a full cloverleaf interchange located south of the current location and will accommodate the new CD roads. The traffic analysis has been updated to reflect more current traffic growth trends and new levels of service have been determined. Although some of the assumptions utilized in performing the analysis can be questioned, such as the percentage truck assignment to lane one and the assumption that the Washington Bypass will be in place by the design year, it is apparent that the operational characteristics of I-95 will not experience any additional degradation due to the addition of the Outer Connector interchange or the other related improvements. Also, the proposed design does not introduce any additional ramp conflicts on I-95 which could adversely impact traffic flow.

In order to help insure that the total interchange proposal is completed and regional traffic needs are met, the approval includes the stipulations listed on pages 27 and 28 of the report. Item 8 is further clarified as follows: Prior to construction being initiated on the Outer Connector interchange, construction funding for the CD roads, the modified Rte. 630 interchange, and a functional length of the Outer Connector to facilitate intermodal connections (as noted in item 9), will be included in the VDOT Six-Year Plan. One other condition is that the Outer Connector

# I-95/Route 630 Interchange Project Facts

- Project fully funded for \$184.4 million in Fiscal Year 2014 – 2019 Six Year Improvement Program (SYIP)
- Project allocation reduced by \$5 million in Fiscal Year 2015 – 2020 SYIP
- Project currently subject to the newly enacted House Bill 2 project prioritization process due to being \$5 million “short”
- § 33.1-23.5:5 of the Commonwealth of Virginia Code (HB2) states:

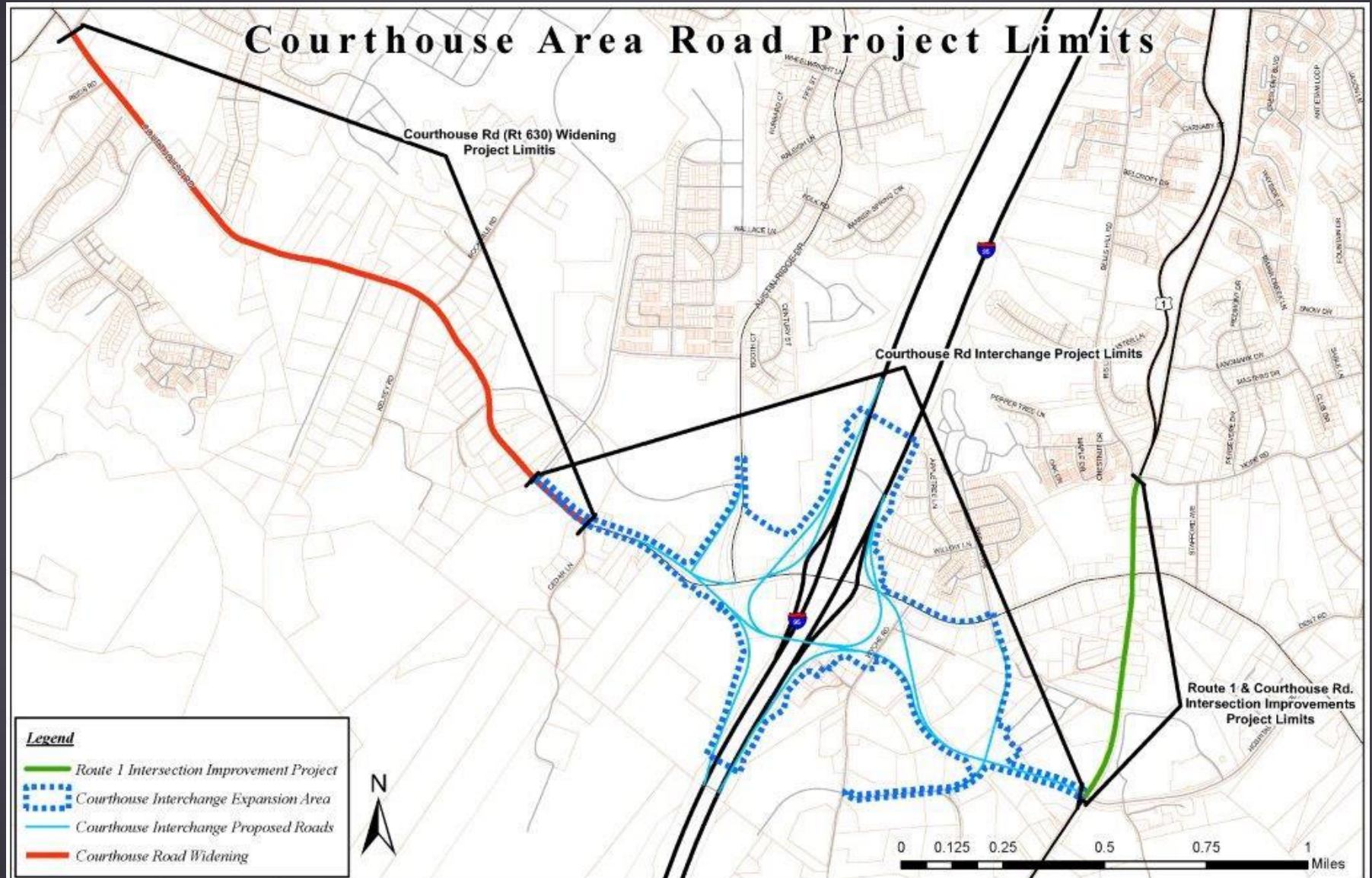
*“That, at the discretion of the Board, a project fully funded in the Six-Year Improvement Program that has completed the state environmental review process or the review process required by the National Environmental Policy Act may be exempt from the provisions of this act.”*

# Impacts to Adjacent Road Projects

- VDOT and Stafford County have two major road improvement projects underway adjacent to the Exit 140 Interchange project
  - Courthouse Road West Widening Project
  - Route 1 & Courthouse Road Intersection Improvements
- These projects, totaling over \$36 million, are underway
- Both projects have been modeled and designed on the basis that the Exit 140 Interchange will be upgraded as scheduled
- Delaying the interchange will result in delays and additional expense to both adjacent projects



# Courthouse Road Projects





# Courthouse Road West Widening

- Estimated at \$30 million; \$16 mil state & \$14 mil local
- Expands 2 to 4 lanes; increase in traffic west of I-95
- Design completed, currently acquiring Right of Way
- Eastern terminus connects to Interchange project
- Delaying the Interchange will have significant impacts
  - Extend eastern terminus by .5 mile at a cost of several \$million
  - Redesign required delaying project and adding cost
  - Loss of integration between two designs – specifically stormwater management, commuter lot relocation, Austin Ridge Drive relocation, etc.

# Route 1 & Courthouse Road Intersection

- Currently estimated at \$6.4 mil
- Planned to relieve Route 1 congestion in the Courthouse area
- Funded with \$3.2 mil of state funds and \$3.2 mil local
- Preliminary design completed; modeled assuming interchange improvements completed
- Delaying the Interchange will have significant impacts
  - Traffic modeling developed with the extension of Hospital Center Blvd. to be completed with interchange.
  - Proposed project will have to be re-modeled, and more extensive improvements to the intersection will be necessary
  - County must decide whether to proceed with intersection now, or wait until the interchange is funded

# *The Courthouse Redevelopment Area*

Progress To-Date

Board of Supervisors  
Infrastructure Committee Briefing

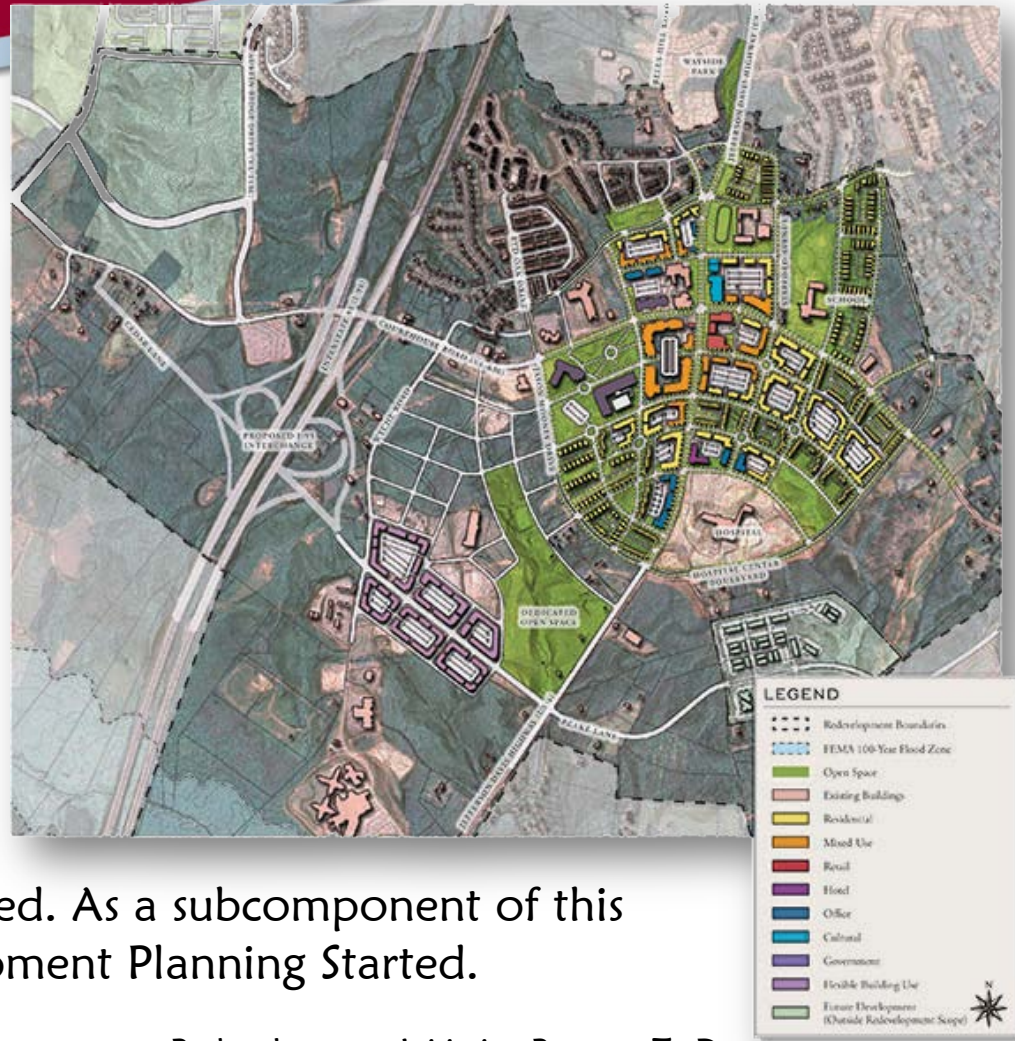
September 2, 2014



- 2005 - 2006
  - Hospital Property Rezoned (O06-29).
  - Hospital Center Boulevard Proffered.
- Board Approved Economic Development Strategic Plan to proceed - first update since 1994.







2006- 2007

ED Plan completed. As a subcomponent of this work, Redevelopment Planning Started.



*Stafford County  
Economic Development*

Redevelopment Initiative Progress To-Date



- 2008
  - Board rezoned approximately 489 acres to B-3 (O08-01).
  - After a five year pursuit, County Awarded \$535,000 VDOT Enhancement Program Grant funds for Courthouse Streetscaping project – a high priority Redevelopment Initiative.





- 2009
  - Redevelopment Public Outreach, with more than 50 public meetings (more than 40 public meetings held)
  - Awarded an additional \$467,750 VDOT Enhancement Program Grant funds for Courthouse Streetscaping project.
  - Historic Day in Stafford! Hospital opens.





- 2010 - 2011
  - Awarded two additional VDOT Enhancement Program Grant funds for Courthouse Streetscaping project totaling over \$1.2 million.
  - Redevelopment Plan Adopted



## STAFFORD COUNTY MASTER REDEVELOPMENT PLAN



VOLUME III: COURTHOUSE AREA  
OCTOBER 2009 | ADOPTED MAY 17, 2011

Redevelopment Initiative Progress To-Date

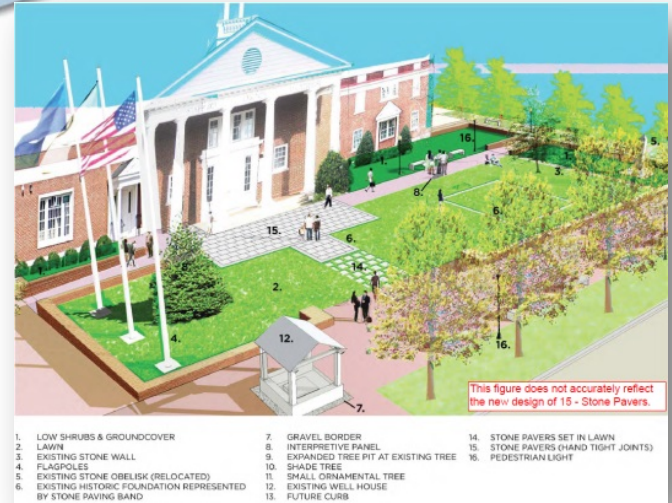


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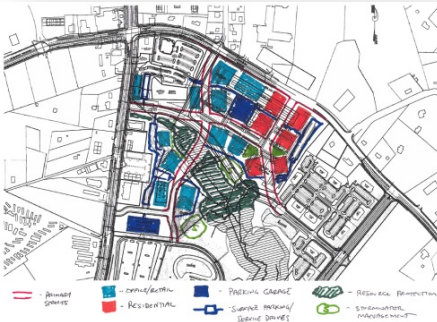


Stafford County  
Economic Development





- 2012 - 2013
  - Awarded \$500,000 VDOT Enhancement Program Grant funds, and received final Streetscaping Design Plans Approved by VDOT.



- Southeast Quadrant Small Area Plan Initiated.



## Today and Beyond:

- Potential Retail: 299,290 sf; \$175/sf;  
\$52,375,750
- Potential Office: 309,490 sf; \$175/sf;  
\$54,160,750
- Potential Residential: 165 units;  
\$170,000/unit; \$28,050,000
- Total Potential: \$134,586,500



## Questions?







# **Economic Impacts of Transportation Infrastructure Improvements**

**To: CTB Workshop  
September 16, 2009**

**By: Glen Weisbrod  
*Economic Development Research Group  
(EDRG)***

### **Impact of Spending Money on Capital Investment and on Operations/Maintenance**

- Spending going directly to Virginia workers and businesses
- Indirect/ effects: supplier industries
- Induced effects: spending of added worker wages
- Measured by increased employment, business output, value added and wages

## Short-Term Spending Impact

### Total Effect on the Virginia Economy, 2009-2014

Category	Total Over Six Years	Average Year	Per \$mil Spent
<b>Capital Investment Spending (\$ mil)*</b>	<b>\$ 10,422</b>	<b>\$ 1,737</b>	<b>--</b>
Employment (Jobs)	142,082 <i>(job-yrs)</i>	23,680	14
Business Output (\$ mil)*	\$ 18,780	\$ 3,130	1.8
Value Added (GRP)(\$ mil)*	\$ 9,740	\$ 1,623	0.9
Worker Income (\$ mil)*	\$ 7,518	\$ 1,253	0.7
<b>Capital + Operations Spending (\$ mil)*</b>	<b>\$30,423</b>	<b>\$5,070</b>	<b>--</b>
Employment (Jobs)	468,850 <i>(job-yrs)</i>	78,142	15
Business Output (\$ mil)*	\$56,172	\$9,360	1.8
Value Added (GRP)(\$ mil)*	\$29,302	\$4884	1.0
Worker Income (\$ mil)*	\$20,340	\$3,890	0.7

*\* Note: Dollar amounts can not be added together because impact categories are different measures of related economic impacts. Specifically, worker income is a subset of value added, and value added is the portion of business output that does not go for materials and supplies.*

## Tax Revenue Impact – Six Years

### Total Over Six Years (2009 - 2014) from Capital + Operations Spending

Revenue Category	State /Local Revenue Impacts (\$ Millions)
Household + Business Income Tax	\$ 410
Sales Taxes	\$ 695
Property Tax	\$ 481
Social Insurance Payments	\$ 20
Other Taxes & Fees	\$ 696
<b>TOTAL</b>	<b>\$2,302</b>



- **Step 1: Incremental Effect of Capital Investments on Changes in Travel Conditions**
  - Direct cost savings due to reduced user time delay & expense
  - Direct cost savings due to enhanced safety & reliability
  - Direct cost savings due to enhanced intermodal capacity & connectivity
  - Growth enabled by elimination of air/sea capacity constraints
  
- **Step 2: Effect of Travel Changes on Economic Growth**
  - Direct, indirect & induced effects on household costs, business operating costs, productivity & competitiveness
  - Adjustment for “leakage” of income and savings going to businesses & households out of Virginia.
  - Measured by increased VA employment, business output, value added, wages



## Long-Term Capital Investment Impact

**Effect on the Virginia Economy, 2010-2035**, reflecting the post construction impacts on transportation system efficiency (for travelers & shippers), and business attraction and expansion due to productivity, competitiveness and improved market access. Based on \$9.955 billion of productive investment over 26 years.

Impact Category	Avg. Year 2010-2035	Year 2035 Impact	Sum of 2010-2035	Per \$mil of Capital Investment
Employment (Jobs)	23,523	101,932	611,590	58.8
Business Output (\$ mil)*	\$ 3,137	\$13,594	\$ 81,566	\$ 7.8
Value Added (\$ mil)*	\$1,539	\$ 6,668	\$4 0,006	\$ 3.8
Worker Income (\$ mil)*	\$ 1,025	\$ 4,441	\$ 26,645	\$ 2.6

\* Note: Dollar amounts can **not** be added together because impact categories are different measures of related economic impacts. Specifically, worker income is a subset of value added, and value added is the portion of business output that does not go for materials and supplies.

# Exit 140 Interchange Economic Impacts

Impact Category	I-95 Interchange Economic Impact per \$mil of Cost
Employment (Jobs)	10,584
Business Output (\$mil)*	\$1,404
Value Added (\$mil)*	\$684
Worker Income (\$mil)*	\$468

\* Note: Dollar amounts can **not** be added together, because impact categories are different measures of related economic impacts.

## 1d-Revenue Sharing

- Each year the Virginia Department of Transportation (VDOT) Revenue Sharing Program allows localities to receive matching funding for eligible improvement projects.
- The total funds available each year is determined by the Commonwealth Transportation Board (CTB)
- In order to identify the amount of state funds required to fully maximize local participation in advance of the FY2016 budget, VDOT has requested localities submit applications for revenue sharing by November 1, 2014
- Our local VDOT office has requested that we submit our applications to them by October 1<sup>st</sup> for their review.
- Each locality may request up to \$10 million dollars in state allocations
- Recent Board actions related to Revenue Sharing are as listed below:
- Revenue Sharing allocations for FY2015
  - Courthouse Road  
(Mine Road to Winding Creek Road) \$7,774,000
  - Courthouse Rd. Intersection @ Rt. 1 \$433,000
  - Enon Road \$376,000
  - Ferry Road \$500,000
  - Mt. View Road Phase I \$917,000
  - TOTAL = \$10,000,000
- Proposed FY2016 Revenue Sharing in the Adopted FY2015 CIP
  - Courthouse Road Phase II (to Shelton Shop) \$8,240,000
  - Route 1 at Potomac Creek \$ 600,000
  - Berea Church Road \$1,160,000
  - TOTAL = \$10,000,000
- There have been changes affecting project funding in the past year. These include:
  - VDOT removed \$1.8 million from the Courthouse Road West project in the most recent SSYP.
  - The most recent estimate for the Ferry Road intersection improvements increased to \$3 million due to addition scope of that project and expected utility relocation expenses.

- The County and VDOT have noticed a significant increase in bid prices recently; consequently, project estimates have been adjusted upwards to ensure sufficient funding.
- Some projects currently underway had not requested the full 50% revenue sharing funding possible. Fuels tax funds would have been required to make up the balance.
- Staff is recommending the applying for the maximum revenue sharing allowed for the projects currently underway to preserve transportation fund revenues.
- Recommended Road Projects and allocations for FY2016:
 

○ Courthouse Road West (to Ramoth Church Rd.)	\$ 870,273
○ Mountain View Road Extension	\$ 500,000
○ Enon Road	\$ 895,968
○ Ferry Road & Route 3 Intersection	\$ 938,177
○ Route 1 at Garrisonville Road	\$ 382,560
○ Poplar Road, Phase II	\$ 343,658
○ Courthouse Road & Route 1 Intersection	\$1,152,500
○ Berea Church Road	\$2,446,034
○ Courthouse Road Phase II (to Shelton Shop)	<u>\$2,470,830</u>
TOTAL =	\$10,000,000
- Staff recommends prioritizing the projects that are well under way in design, right of way acquisition or awaiting award for construction to ensure full funding is available. Projects which have been advertised for bids are also eligible for revenue sharing.
- Fully funding Courthouse Road West is the #1 priority. The added revenue sharing, when combined with matching County funds, will fully fund this project through construction.
- Funding the Mountain View Road extension as the 2<sup>nd</sup> priority will fully fund this project in light of the bids recently received.
- The road improvements for Enon Road are the #3 priority. This maximizes revenue sharing for this project and completes funding through construction.
- Ferry Road is the #4 priority and the revenue sharing would fund the total updated project cost.
- The second right turn lane at Route 1 and Garrisonville Road is the 5<sup>th</sup> priority and will allow us to shift some previously dedicated transportation fund revenues to other road priorities.

- Poplar Road, Phase II north of Truslow Road is the 6<sup>th</sup> priority. Additional funding is necessary due to a higher construction cost estimate and maximizes revenue sharing potential for this project.
- Improvements to the Courthouse Road and Route 1 intersection is the 7<sup>th</sup> priority. This project has advanced to the preliminary engineering stage and may be affected by delays to the Exit 140 interchange project.
- Improvements to Berea Church Road and the widening of the 2<sup>nd</sup> phase of Courthouse Road west of Ramoth Church Road are the 8<sup>th</sup> and 9<sup>th</sup> priorities, respectively. Neither of these projects have been initiated to date.
- The committee may wish to consider fully funding the Exit 140 interchange project to remove the project from the prioritization process. The \$5 million funding shortfall could be addressed with \$2.5 million in revenue sharing, combined with \$2.5 million in local funding from fuels tax revenues. The revenue sharing could be addressed by a corresponding reduction in the request for the 2<sup>nd</sup> phase of the Courthouse Road widening. If the Board is interested, the Revenue Sharing application could be structured as shown below.

○ Courthouse Road West (to Ramoth Church Rd.)	\$ 870,273
○ Exit 140 Interchange	\$2,500,000
○ Mountain View Road Extension	\$ 500,000
○ Enon Road	\$ 895,968
○ Ferry Road & Route 3 Intersection	\$ 938,177
○ Route 1 at Garrisonville Road	\$ 382,560
○ Poplar Road, Phase II	\$ 343,658
○ Courthouse Road & Route 1 Intersection	\$1,152,500
○ Berea Church Road	<u>\$2,416,864</u>
TOTAL =	\$10,000,000

- In order for an application to be processed, a resolution outlining the request which states the Board's support of the projects identified must be submitted to VDOT no later than November 1, 2014
- Staff will prepare a resolution and bring it to the full Board not later than mid-October