REPORT OF THE
VIRGINIA DEPARTMENT OF TRANSPORTATION ON

THE U.S. ROUTE 1 CORRIDOR STUDY IN FAIRFAX AND PRINCE WILLIAM COUNTIES

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

HOUSE DOCUMENT NO. 64

COMMONWEALTH OF VIRGINIA
RICHMOND
1997

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PREFACE

In 1994, the Virginia General Assembly passed House Joint Resolution (HJR) 256, directing the Virginia Department of Transportation (VDOT) to study the Route 1 corridor in Fairfax and Prince William Counties. This resolution was in response to concerns that a complete and comprehensive study of the Route 1 corridor is required to address growing travel demand and to ensure coordinated revitalization efforts in the corridor.

In 1996, a Continuing Resolution, HJR 21, was passed requesting VDOT to continue its study of the Route 1 corridor in Fairfax and Prince William Counties. HJR 21 requires an interim report to the Governor and 1997 session of the General Assembly and a final report for the 1998 session.

STUDY GROUP MEMBERSHIP

A Steering Committee of State senators, delegates, and county supervisors whose districts are located within the corridor is providing policy direction for the study. The members of the Steering Committee are listed in Table P-1 on the following page.

VDOT's Northern Virginia District Transportation Planning Section is managing the technical study in coordination with a Technical Committee. The Technical Committee includes staff from VDOT, Virginia Department of Rail and Public Transportation (VDRPT), Prince William County, and Fairfax County. Transit agencies participating on the Technical Committee include Fairfax County, Potomac and Rappahannock Transportation Commission (PRTC), and Washington Metropolitan Area Transit Authority (WMATA). Two citizen representatives from each county also serve on the committee.

A study team led by JHK & Associates (JHK), a transportation engineering and planning firm, is under contract to VDOT to lead the technical efforts. Other members of the consultant team include Dewberry and Davis, A. Morton Thomas & Associates, Hunter Interests, Lardner-Klein Landscape Architects, and Mary Means & Associates.

STAFF ASSIGNED

The Project Manager for VDOT is Joe Langley of the Northern District Transportation Planning Section. Larry Miller of JHK & Associates is the Project Manager for the consultant team.

ACKNOWLEDGMENT

This Interim Report was prepared in cooperation with the Virginia Department of Transportation.

DISCLAIMER

The contents of this report reflect the view of the consultant who is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Commonwealth Transportation Board. This report does not constitute a standard, specification, or regulation.

Table P-1. Route 1 Corridor Study Steering Committee

Chairman	Thomas Farley	VDOT, Northern Virginia District Administrator

Members

David B. Albo	Virginia Delegate
Hilda Barg	Prince William County Supervisor
Samuel Bauckman	Mayor, Town of Dumfries
Col. Thomas M. Brady	Garrison Commander, Ft. Belvoir
Maureen Caddigan	Prince William County Supervisor
Joseph V. Gartlan, Jr.	Virginia Senate
Kate Hanley	Fairfax County Supervisor
Gerry Hyland	Fairfax County Supervisor
Dana Kauffman	Fairfax County Supervisor
Gladys B. Keating	Virginia Delegate
Linda Puller	Virginia Delegate
John A. Rollison, III	Virginia Delegate
Kathleen K. Seefeldt	Prince William County Supervisor

EXECUTIVE SUMMARY

This document summarizes the findings to date of the Route 1 Corridor Study. The Virginia Department of Transportation (VDOT) has completed the first phase of the study: an assessment of existing and future conditions in the Route 1 corridor. Ongoing and subsequent phases of the study include:

- Development and identification of alternative concepts to improve transportation in the Route 1 Corridor
- Selection of a package of improvements
- Development of a phased implementation plan
- Documentation of the study recommendations.

The study is scheduled for completion in October, 1997.

PROBLEMS IDENTIFIED IN THE CORRIDOR

The Study Team assessed conditions in the corridor based on field observations, technical analyses, and discussions with local citizens familiar with the corridor. The problems identified to date in the corridor are:

Physical Roadway Conditions

- Inconsistent cross sections and discontinuous service roads exist where the roadway has been widened in a piecemeal fashion.
- Roadside traffic hazards such as the inadequate setback of piers at four bridges over Route 1 and at some utility poles.
- Poor conditions and non-standard width of shoulders, ditches and roadway surfaces.
- Inadequate roadway lighting in terms of uniformity and lighting levels.

Traffic Operations and Safety

- Currently, traffic bottlenecks occur during peak periods at several intersections with Route 1 including:
  - Telegraph Road/Pohick Road
  - Route 123 (Gordon Boulevard)
  - Fort Hunt Road
  - Longview Drive
  - Woodlawn Road
- Traffic is projected to increase 15,000 to 35,000 vehicles per day, by 2020. Without transportation improvements to Route 1 beyond those currently funded, Route 1 will have an almost continuous series of congested intersections during peak periods.
- When I-95 is congested in Prince William County, traffic diverts onto Route 1. This slows traffic and restricts access to transit stations, businesses and neighborhoods.
- Backups onto Route 1 from the Woodrow Wilson Bridge and the City of Alexandria restrict access to the Capital Beltway and businesses in the vicinity of the Capital Beltway.
- Operational and safety problems are caused by numerous access points, poorly delineated driveways, and uncontrolled parking areas abutting the roadway.

Transit/Ridesharing Facilities and Services

- Gap in transit service in Lorton area; no connections between OmniRide and OmniLink bus service sponsored by Potomac and Rappahannock Transportation Commission (PRTC) and Fairfax Connector buses or Metrobus service in the corridor.
- Lack of convenient suburb-to-suburb transit services.
- Many bus stops in the corridor are in poor condition; are inconvenient; are in potentially unsafe locations; have unpaved waiting areas; lack connecting sidewalks; and lack amenities such as route maps/schedules, benches, and shelters.
- By 2020, traffic congestion on Route 1 will impede the movement of buses and increase transit travel times.

Pedestrian Accommodations

- Inconsistent and discontinuous sidewalks along Route 1 and between adjacent neighborhoods and businesses.
- Pedestrian crossing of Route 1 is difficult due to roadway width and high traffic volume, especially in inclement weather and at night.

Land Use and Urban Design

- The Route 1 Corridor presents a poor appearance due to deteriorated building stocks, underdeveloped parcels, and a chaotic visual environment (signage and overhead wires).
- Limited connections are available for vehicles and pedestrians between adjacent land uses.

Economic Conditions

- The development community has a negative image of portions of the Route 1 Corridor due to poor appearance, obsolete development patterns, and perceived crime problems.
- There is competition for the retail market in portions of Prince William County from the Potomac Mills/Prince William Parkway shopping areas.
- There is a constrained retail market in northern portions of Fairfax County due to limited east-west connections.
- Opportunities for (re)development of small parcels are restrained by difficulties in property consolidation and limited property depths.

IMMEDIATE IMPROVEMENTS

The study team identified potential immediate action improvements based on observations made during inventory and assessment work. These improvements are intended to be low-cost actions that would be beneficial and can be quickly implemented. That is, minimal design work would be needed, little additional right-of-way would be required and the projects could be implemented over the next one or two years. These actions are not "short-term" improvements which will be identified in subsequent phases of the study. Short-term improvements will be developed that are consistent with the recommended long-range plan and would have a three to seven year implementation timeframe.

The projects listed in Table E-1 should be pursued as immediate action improvements.

Table E-1. Potential Immediate Action Improvements

Improvement Item	Cost
Roadway Maintenance • Expand maintenance program to upgrade eroded ditches and shoulders – Coordinate with resurfacing program	**$13,170,000**
Pedestrian Improvements • Construct sidewalk links in locations lacking sidewalks – First priority, bus access links – Second priority, other missing links – For examples See Appendix C	**$1,980,000**
Bus Stop Improvements • Improve bus service and facilities – Improve bus stops – Resurrect the "Adopt-a-bus-stop" program ▫ Revise policies regarding governments ability to accept donations and placement of sponsor name/logo on shelter – Add route numbers/schedules to Fairfax Connector and OmniLink/OmniRide signs	**$90,000**
Bus Route and Vehicle Improvements • Hold a "Transit Operator Roundtable" meeting to address the gap in transit service on Route 1 in Lorton • Consider accommodations for strollers/bicycles on buses	**Not included in cost estimate**
Traffic Signal Improvements • Modify signal timing, phasing, and equipment – Check pedestrian crossing signal timing and signal equipment – Repair and replace equipment – Re-time pedestrian crossings, as necessary • Implement a pilot program of shorter cycle lengths – Use capabilities of ongoing regional signal system upgrade project to install and monitor	**Work to be performed by state forces**

Table E-1. Potential Immediate Action Improvements (continued)

Improvement Item	Cost
Turn Lane Improvements • Investigate safety of existing protected/permissive left-turn locations • Lengthen selected turn lanes on Route 1 including: – For examples see Appendix C • Construct selected turn lanes on Route 1 including: – For examples see Appendix C • Construct a second left turn lane on Route 235 for vehicles turning to southbound Route 1	**$1,100,000**
Roadway Lighting and Signage Improvements • Improve roadway lighting – First priority, add lighting to unlit areas – Second priority, upgrade lighting where feasible • Improve and coordinate destination signing	**$1,360,000**
Cultural and Natural Resources Promotions • Package and promote Route 1 attractions: – Heritage Tourism – Parks – Military History – Natural Resources and Wildlife – Shopping	**Not included in cost estimate**
Roadway Safety • Remove selected potential safety hazards – Relocate a few critical utility poles further from the traveled way – Remove abandoned railroad bridge over Route 1 at Fort Belvoir	**$4,140,000**
Total Cost for Immediate Action Improvements	**$21,840,000**

1. INTRODUCTION

GENESIS OF STUDY

The Virginia General Assembly recognized that a complete and comprehensive study of the Route 1 corridor is required to address growing travel demand and to ensure coordinated revitalization efforts in the corridor. In response, legislation approved by the Virginia General Assembly in 1994 (House Joint Resolution No. 256) and a Continuing Resolution in 1996 (HJR No. 21) (see Appendix A) directed the Virginia Department of Transportation (VDOT) to conduct a study of the Route 1 corridor in Prince William and Fairfax Counties. As shown in Figure 1, the 27 mile corridor extends from the Prince William/Stafford County Line to the Fairfax County/Alexandria City Line near the Capital Beltway (I-95/I-495).

The purpose of the study is to identify the current and future transportation needs in the corridor through the year 2020 and to develop a reasonable program of solutions to address those needs. This program will also accommodate county-specific economic development goals for the corridor.

The legislation passed by the General Assembly states that the study should be modeled after the "Beltway Study" and provide a series of immediate near-term and long-term recommendations. The study will use an interactive citizen input and participation model.

BACKGROUND

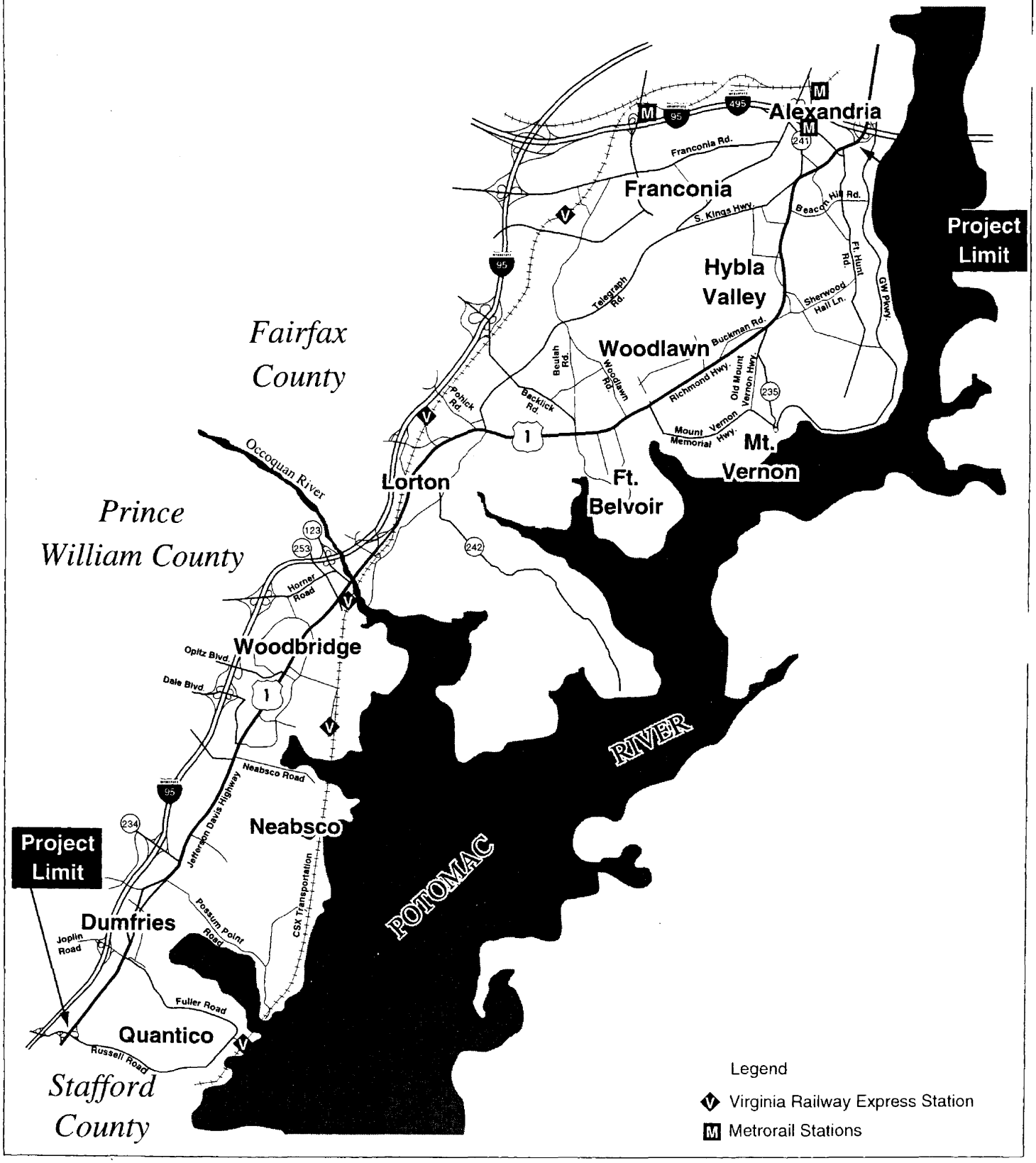
Route 1 is a four- to six-lane arterial roadway that is part of a busy north-south transportation corridor. Route 1 serves intercounty, commuter, and local traffic in Fairfax County and Prince William County. The other major facilities serving north-south travel include I-95, Telegraph Road (in Fairfax County), George Washington Memorial Parkway, and the rail line owned by CSX Transportation. The rail line carries freight, intercity passengers (AMTRAK), and commuter rail passengers (Virginia Railway Express). Route 1 is the only direct alternative or emergency diversion route for I-95 in the southern portion of the study corridor.

As an arterial roadway, Route 1 serves two key purposes:

- To provide for travel between Route 1 and origins and destinations outside of the corridor
- To provide access to the residences, businesses and other land uses in the corridor.

The Route 1 Corridor, however, is experiencing industrial, commercial, and residential growth that makes it increasingly difficult to provide an effective and efficient transportation facility. A variety of problems including congestion, poor access, limited serviceability and safety plague Route 1.

The character of Route 1 varies over its length. Most of the 27 miles of Route 1 under study are undivided with two, 12-foot wide travel lanes in each direction. Only the northern-most 4.5 miles has three lanes in each direction and a median separating opposing traffic flows. The speed limit on Route 1 varies from 35 to 50 miles per hour.



Route 1 Corridor Study

Study Area

scale 0 5

Figure 1

METHODS USED TO PERFORM THE ASSESSMENT

The assessment of the Route 1 corridor is based on field observations, technical analyses, and discussions with local citizens familiar with the corridor. The information gathered has provided the study team with first-hand knowledge of the existing conditions and problems in the corridor. The study team met with representatives from transit operators, economic development staff, a Citizen Advisory Committee, small business owners, and people dependent on bus or rail transit service. The information and varied perspectives from these groups were melded together into an assessment of existing and future conditions.

Extensive field work has been a key component in determining existing and future conditions in the Route 1 corridor. Much of the field work has included performing numerous vehicle and passenger counts, surveying and observing transit and ridesharing facilities, and collecting sample travel time information for major north-south routes in the corridor using global positioning satellite (GPS) receivers and palmtop computers in vehicles. Field inventory work and interviews were also conducted to evaluate roadway and roadside conditions, the urban design setting, and the economic situation.

A major component of the Route 1 Corridor Study is public interaction. Throughout the course of the study, hearing from the public and providing information to the public have been integral elements of the study. Public involvement activities include meetings with the Steering Committee, Technical Committee, Citizens Advisory Committee, Focus Groups and the general public. To date, the public has received three newsletters which described the study team's progress and findings (copies in Appendix B) and two public meetings were held in each county to obtain input from the community. One more round of public meetings is scheduled. The consultant has compiled a project mailing list consisting of over 350 names of interested people. This list is continually updated as the study progresses.

Since the character of Route 1 varies over its length, the study team divided the corridor into seven segments as shown in Figure 2. Transportation and land use characteristics are similar within each of these segments. The characteristics of each segment are listed below.

Segment I - Quantico - from the Stafford County Line to Route 619 (Joplin Road/Fuller Road); 2.2 miles through a wooded area.

Segment II - Triangle/Dumfries - from Route 691 to Route 234 (Dumfries Road); 2.5 miles through the commercial areas of Triangle and Dumfries; the northbound and southbound roadways divide through Dumfries.

Segment III - Cherry Hill/Neabsco - from Route 234 to Dale Boulevard Extended; 4.0 miles through mostly wooded land with commercial pockets and connecting roads to residential developments.

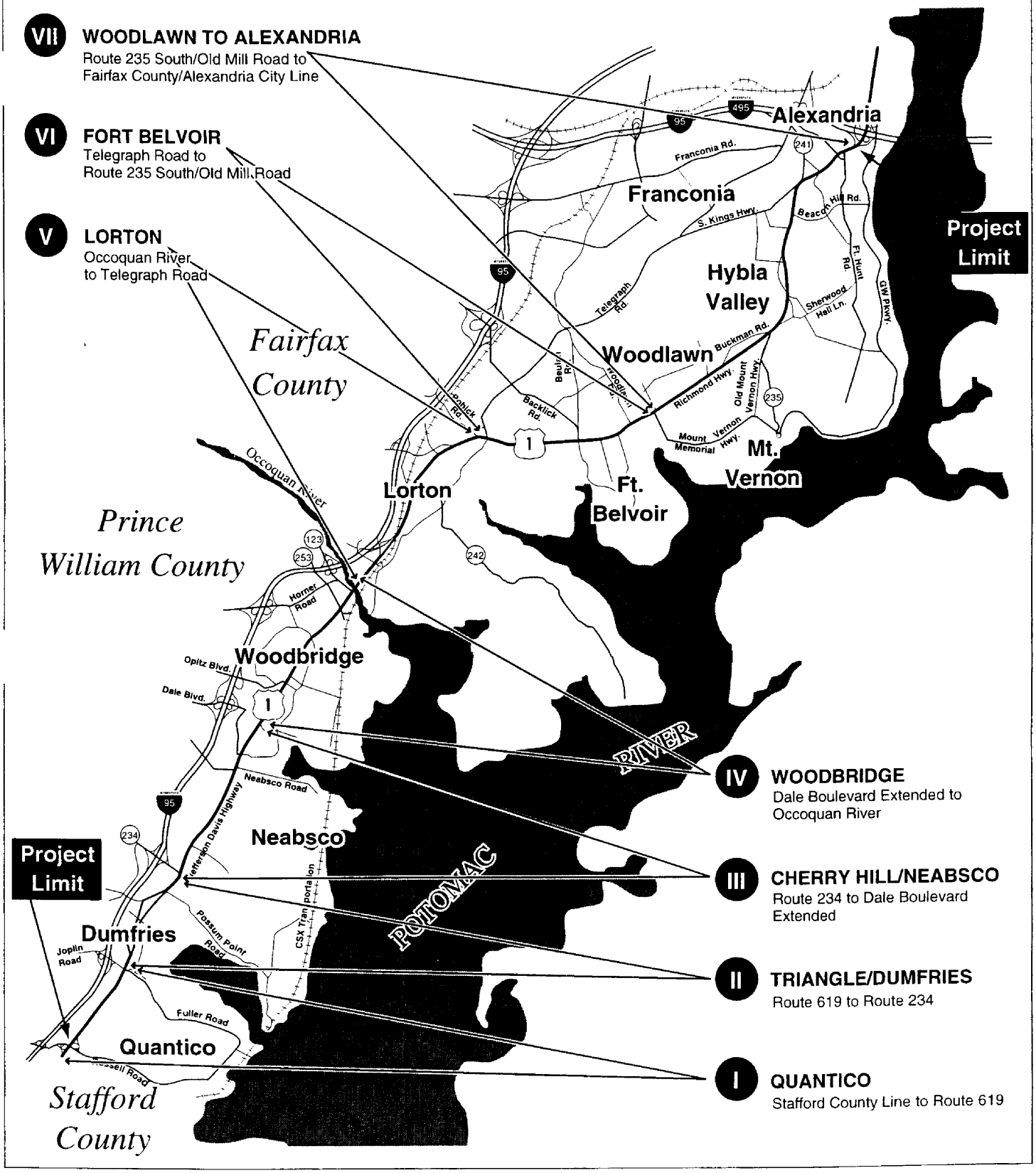
Segment IV - Woodbridge - from Dale Boulevard Extended to the Occoquan River; 3.5 miles with commercial development throughout the segment.

Segment V - Lorton - from the Occoquan River to Telegraph Road; 4.3 miles with a mix of industrial, residential, commercial, and institutional land uses.

Segment VI - Ft. Belvoir - from Telegraph Road to Route 235 South/Old Mill Road; 3.5 miles in a largely wooded area except at Fort Belvoir entrance and Backlick Road-Accotink area.

Segment VII - Woodlawn to Alexandria - from Route 235 South to Cameron Run; 7.3 miles with almost continuous commercial and residential development along the roadway.

The study team is preparing traffic forecasts using a computerized regional travel demand model, based on, and consistent with, the model used by the Metropolitan Washington Council of Governments (MWCOG). Inputs for the population and employment data that drive the model are based on the latest (Round 5.3) Cooperative Forecasts developed by MWCOG in cooperation with the member municipalities.



Route 1 Corridor Study

Corridor Segments

scale 0 5

Figure 2

2. FINDINGS TO DATE - ASSESSMENT OF EXISTING AND FUTURE CONDITIONS

The study team has completed a preliminary assessment of existing and future conditions in the Route 1 corridor based on field observations, technical analyses, and discussions with local citizens familiar with the corridor. The study team met with representatives from transit operators, economic development staff, a Citizen Advisory Committee, small business owners, and people dependent on bus or rail transit service. The information and varied perspectives from these groups were melded together into an assessment of existing and future conditions.

PROBLEMS IDENTIFIED

The following section provides a summary of the problems identified by the study team and the Route 1 corridor community.

Physical Roadway Conditions

The physical characteristics of the Route 1 roadway reflect its gradual, often piecemeal, development over a number of decades. Problems with the Route 1 roadway include:

- Inconsistent roadway cross sections and discontinuous service roads exist where the roadway has been widened in a piecemeal fashion.
- Roadside traffic hazards such as the inadequate setback of piers at four bridges over Route 1 and at some utility poles.
- Poor conditions and non-standard width of shoulders, ditches and roadway surfaces.
- Inadequate roadway lighting in terms of uniformity and light levels.

Traffic Operations and Safety

Currently, reasonable travel speeds in many sections of Route 1 are impeded by delays at several bottleneck locations. However, by 2020 under the "baseline scenario", congestion will expand to most of the corridor. The "baseline scenario" assumes that no additional roadway improvements are made to Route 1 beyond those currently funded. The improvements currently funded for construction on Route 1 include:

- Add northbound left turn lane at Route 1 and Woodlawn Road in Fairfax County (Construction underway)
- Replace bridge (6 lanes) at Route 1 and Neabsco Creek in Prince William County (In design)
- Improve vertical alignment on Route 1 from Canal Road to Old Stage Coach Road in Prince William County (In design)
- Widen (to 4 lanes) Route 1 southbound (Main Street) from Possum Point Road to Mine Road in the Town of Dumfries. (In design)

Figure 3 indicates that daily traffic volumes on Route 1 in 1995 range from 11,000 vehicles per day in the Quantico segment to over 80,000 vehicles per day in the Woodlawn to Alexandria segment. The busiest sections are: between Route 123 and the Occoquan River bridge; between Pohick Road and Telegraph Road; between Sherwood Hall Lane and Lockheed Boulevard ; and between Fort Hunt Road and the Capital Beltway. By 2020, traffic projections for a "baseline scenario" show traffic volumes increasing on Route 1 to a range from 54,000 to over 100,000 vehicles per day. As illustrated in Figure 3, the southern segments of the corridor will have the largest increases.

From a safety standpoint, the section of Route 1 under study has a higher accident rate than other similar roadways in Virginia. Over 1,200 accidents are reported annually along the 27 mile corridor - over three accidents per day. Within any one segment, accident frequency ranged from one every ten days in the Quantico segment, to nearly one per day in the Woodlawn to Alexandria segment. A total of 18 locations were identified as "high accident" areas. These are locations where the actual accident rate exceeds a "critical rate" as calculated and based on VDOT procedures.

Traffic operational and safety problems include:

- Currently, traffic bottlenecks occur during peak periods at several intersections with Route 1 including:

  - Telegraph Road/Pohick Road
  - Route 123 (Gordon Boulevard)
  - Fort Hunt Road
  - Longview Drive
  - Woodlawn Road

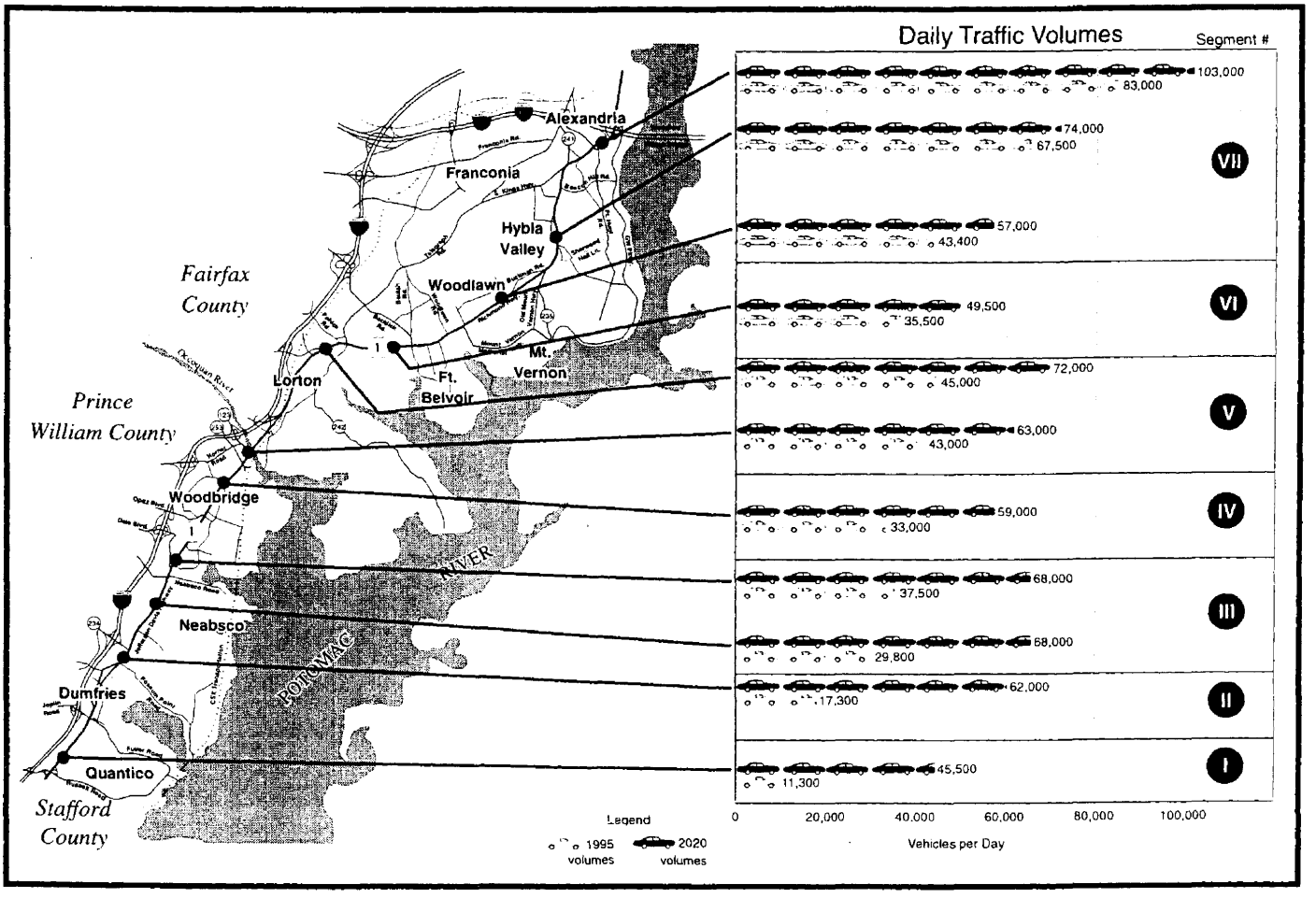
- Traffic is projected to increase 15,000 to 35,000 vehicles per day, by 2020. Without transportation improvements to Route 1 beyond those currently funded, Route 1 will have an almost continuous series of congested intersections during peak periods. This congestion is depicted in Figure 4.

- When I-95 is congested in Prince William County, traffic diverts onto Route 1. This slows traffic and restricts access to transit stations, businesses, and neighborhoods.

- Backups onto Route 1 from the Woodrow Wilson Bridge and City of Alexandria restrict access to the Capital Beltway and businesses in the vicinity of the Capital Beltway.

- Operational and safety problems are caused by numerous access points, poorly delineated driveways, and uncontrolled parking areas abutting the roadway.

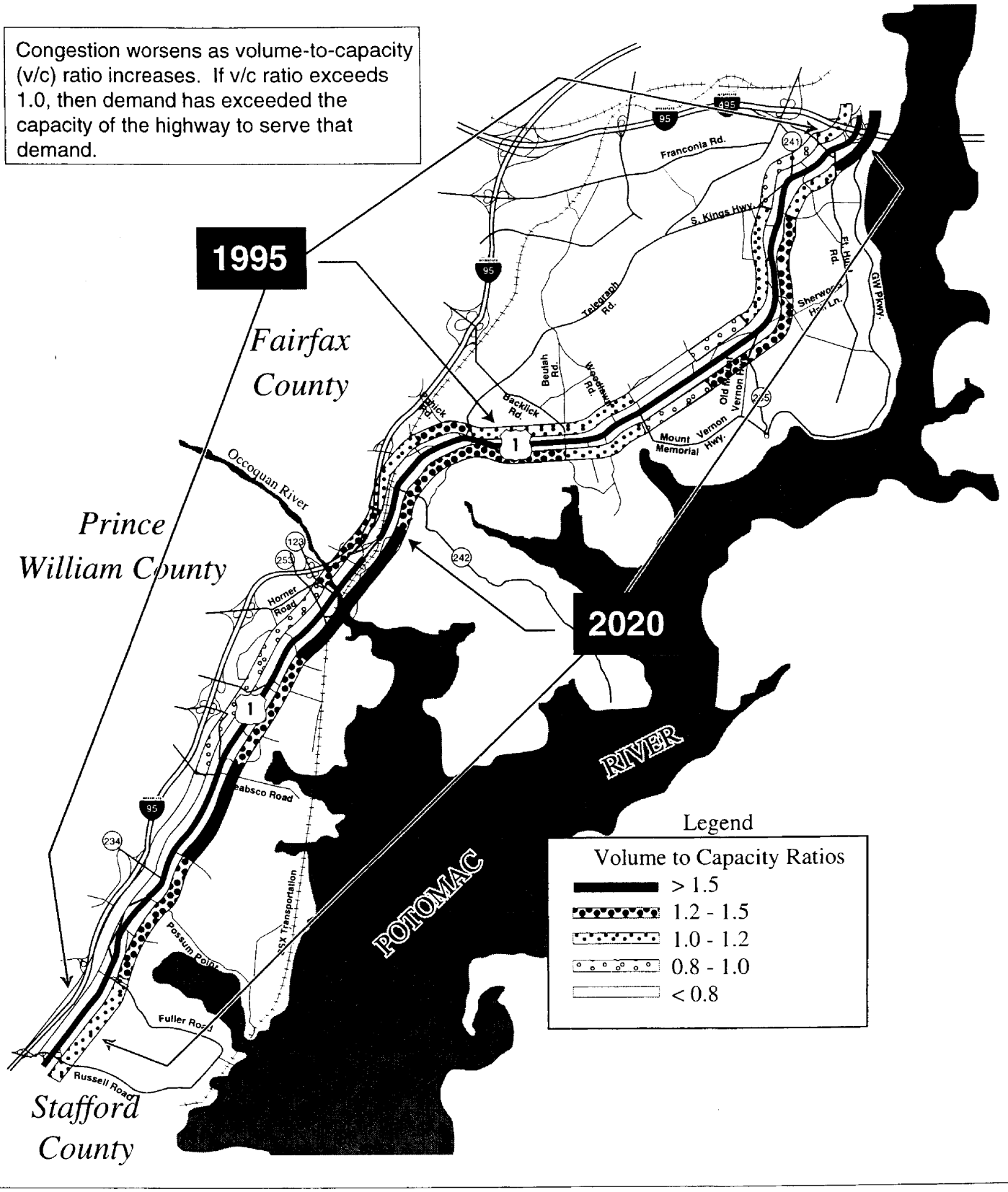
- Destination and directional signage is uncoordinated.



Route 1 Corridor Study

Route 1 Daily Traffic Volumes 1995-2020

Figure 3



Route 1 Corridor Study

Route 1 Traffic Conditions 1995-2020

VIRGINIA DEPARTMENT OF TRANSPORTATION

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Figure 4

Transit /Ridesharing Facilities and Services

Existing transit services provide good local coverage and serve areas in the corridor with the greatest needs. The amount and multiple types of service provide much of the population in the Route 1 corridor with an alternative to the single occupant automobile. Some areas of service can be improved. The identified problems include:

- A gap in transit service in Lorton area; no connections between OmniRide and OmniLink bus service sponsored by Potomac and Rappahannock Transportation Commission (PRTC) and Fairfax Connector buses or Metrobus service in the corridor.

- Lack of convenient suburb-to-suburb transit services.

- Many bus stops in the corridor are in poor condition: are inconvenient; are in potentially unsafe locations; have unpaved waiting areas; lack connecting sidewalks; and lack amenities such as route maps/schedules, benches, and shelters.

- By 2020, the traffic congestion on Route 1 will impede the movement of buses and increase transit travel times.

Pedestrian Accommodations

Sidewalks are an important means of connecting adjacent residences, businesses, and institutions. Sidewalks also provide access to bus service. Both the Fairfax County and Prince William County Comprehensive Plans specify a bike trail to be provided adjacent to Route 1.

An examination of pedestrian crashes occurring between January 1, 1992 and July 31, 1995 showed that 67 pedestrians were involved in crashes including 6 fatalities. All but one crash involved pedestrians crossing Route 1 and a majority occurred in dark conditions. This latter statistic is noteworthy since most pedestrian activity occurs during the daylight hours. Pedestrians walking in the Route 1 corridor face challenges such as:

- Inconsistent and discontinuous sidewalks along Route 1 and, between adjacent neighborhoods and businesses.

- Pedestrian crossing of Route 1 is difficult due to roadway width and high traffic volume, especially in inclement weather and at night.

Land Use and Urban Design

In the Route 1 Corridor, there is little recognition of the original settlement patterns, historic structures, or the corridor's positive characteristics. As a result, few recognizable places or districts exist. In addition, a consistent sense of scale is lacking in relationship to either pedestrians or automobiles. Other problems include:

- The poor appearance of Route 1 and adjacent areas due to deteriorated buildings, underdeveloped parcels, and a chaotic visual environment (signage and overhead wires).

- Limited connections for vehicles and pedestrians between adjacent land uses.

Economic Conditions

Generally, the entire Route 1 Corridor has undergone several shifts in market orientation. One shift has been from serving long distance travelers to serving commuters and those who live nearby. A second shift has been from serving as a regional shopping area to serving a smaller, more local shopping market. While some quality developments have occurred in the corridor, many problems still exist, including:

- The development community has a negative image of portions of the Route 1 Corridor due to poor appearance, obsolete development patterns, and perceived crime problems.

- There is competition for the retail market for Route 1 businesses in portions of Prince William County from the Potomac Mills/Prince William Parkway shopping areas.

- There is a constrained retail market in northern portions of Fairfax County due to limited east-west connections.

- Opportunities for (re)development of small parcels are restrained by difficulties in property consolidation and limited property depths.

IMMEDIATE ACTION IMPROVEMENTS

The study team identified potential immediate action improvements based on observations made during inventory and assessment work and as a result of citizen input. These improvements are intended to be low-cost actions that would be beneficial and quickly implemented. That is, minimal design work would be needed, little additional right-of-way required and the projects could be implemented over the next one or two years. These actions are not "short-term" improvements which will be identified in subsequent phases of the study. Short-term improvements would have a three to seven year implementation timeframe and would be consistent with the recommended long-range plan.

Potential immediate action improvements are listed in Table 1.

Table 1. Potential Immediate Action Improvements

Improvement Item	Cost
Roadway Maintenance • Expand maintenance program to upgrade eroded ditches and shoulders – Coordinate with resurfacing program	**$13,170,000**
Pedestrian Improvements • Construct sidewalk links in locations lacking sidewalks – First priority, bus access links – Second priority, other missing links – For examples See Appendix C	**$1,980,000**
Bus Stop Improvements • Improve bus service and facilities – Improve bus stops – Resurrect the "Adopt-a-bus-stop" program ▫ Revise policies regarding governments ability to accept donations and placement of sponsor name/logo on shelter – Add route numbers/schedules to Fairfax Connector and OmniLink/OmniRide signs	**$90,000**
Bus Route and Vehicle Improvements • Hold a "Transit Operator Roundtable" meeting to address the gap in transit service on Route 1 in Lorton • Consider accommodations for strollers/bicycles on buses	**Not included in cost estimate**
Traffic Signal Improvements • Modify signal timing, phasing, and equipment – Check pedestrian crossing signal timing and signal equipment – Repair and replace equipment – Re-time pedestrian crossings, as necessary • Implement a pilot program of shorter cycle lengths – Use capabilities of ongoing regional signal system upgrade project to install and monitor	**Work to be performed by state forces**

Table E-1. Potential Immediate Action Improvements (continued)

Improvement Item	Cost
Turn Lane Improvements • Investigate safety of existing protected/permissive left-turn locations • Lengthen selected turn lanes on Route 1 including: – For examples see Appendix C • Construct selected turn lanes on Route 1 including: – For examples see Appendix C • Construct a second left turn lane on Route 235 for vehicles turning to southbound Route 1	**$1,100,000**
Roadway Lighting and Signage Improvements • Improve roadway lighting – First priority, add lighting to unlit areas – Second priority, upgrade lighting where feasible • Improve and coordinate destination signing	**$1,360,000**
Cultural and Natural Resources Promotions • Package and promote Route 1 attractions: – Heritage Tourism – Parks – Military History – Natural Resources and Wildlife – Shopping	**Not included in cost estimate**
Roadway Safety • Remove selected potential safety hazards – Relocate a few critical utility poles further from the traveled way – Remove abandoned railroad bridge over Route 1 at Fort Belvoir	**$4,140,000**
Total Cost for Immediate Action Improvements	**$21,840,000**

3. CONCLUSION - REMAINING STEPS

There are four remaining steps in the Route 1 Corridor Study. The study team is presently working on the development of alternative strategies for addressing both existing and future problems in the corridor. These alternative concepts incorporate ideas from the community and identify possible solutions. The concepts include ideas for the following:

- Improving the capacity and safety of the roadway
- Enhancing bus and rail service
- Adding carpool facilities
- Improving connectivity of bicycle routes and pedestrian walkways.

Ideas for improving the economic vitality and appearance of the corridor through transportation improvements are a component of each of the improvement concepts.

The second remaining step is the evaluation of alternative concepts. The Study Team will evaluate the alternative concepts using a comprehensive set of objectives. These objectives will address the potential impacts of the concepts on travel in the corridor, environmental/historic resources, economic vitality, and quality of life. Costs of options will also be estimated. This step includes a third round of Public Meetings in March, 1997.

Following the public meetings in March, the study team will begin the third remaining step: selection and refinement of a package of improvements. Working with the community, the Steering and Technical Committees will determine what improvements should be made in the Route 1 Corridor.

The fourth, and final, remaining step of the Route 1 Corridor Study is the documentation of the findings. Based on the selected package of improvements, the Study Team will prepare a Corridor Management and Improvement Plan. This Plan will document the long range vision for the corridor. A draft report will be prepared in late summer, 1997.

Recommendations will be incorporated into a prioritized timetable. This timetable will identify actions to be taken by VDOT and/or the Counties as early as 1997. The Counties and VDOT will then use the study's recommendations to facilitate ongoing and future improvements in the corridor. The study is scheduled for completion in October, 1997.

APPENDIX A

Copy of joint resolution or other legislative mandate directing the study

1994 SESSION

LD7030410

HOUSE JOINT RESOLUTION NO. 256

Offered January 25, 1994

Directing the Virginia Department of Transportation to study the U. S. Route 1 corridor in Fairfax County.

Patrons—Puller; Senator: Gartlan

Referred to Committee on Roads and Internal Navigation

WHEREAS, U.S. Route 1 is the prime north-south highway serving a substantial portion of interstate, commuter, and local traffic in Fairfax County between the Prince William County line and the Alexandria City boundary, and is the only direct alternative or emergency diversion route for Interstate Route 95; and

WHEREAS, U.S. Route 1 is continually impacted by industrial, commercial, and residential growth that creates conditions detrimental to providing an effective or efficient transportation facility; and, therefore is fraught with congestion, poor access, limited serviceability, and safety problems; and

WHEREAS, continued growth in the corridor will increase the ineffectiveness of the facility, lead to further endangerment of the traveling public, degeneration of socio-economic vitality, and eventual deterioration of the corridor's potential revenue producing capacity; and

WHEREAS, several items, occurring or planned, will continue that scenario including (i) development in the Belmont Bay area (Prince William County) of over 140 acres with a potential of almost 2,000 residential units, and an excess of three million square feet of non-residential use including some 500 condominiums or hotel units; (ii) expansion of Fort Belvoir's scope and mission in accordance with the Base Realignment and Closure Act (BRAC), increasing the work force, dependent housing, personal and personnel services for active and retired government employees in the region, thereby increasing the demands on the already strained transportation infrastructure; (iii) development of the Engineer Proving Grounds (EPG), an 840-acre tract in a unique government and private enterprise partnership, with potential for many square feet of commercial and office and approximately 4,000 residential units at buildout; (iv) completion of the Fairfax County Parkway (VA 7100) from I-95 to U.S. Route 1, providing direct connection of the U.S. Government-related operations and services at the EPG and the service-oriented facilities at Fort Belvoir; and (v) reconstruction or replacement of the Woodrow Wilson Bridge, and improvements to the I-95 (Capital Beltway) at the northern terminus of U.S. Route 1 in Fairfax County; and

WHEREAS, the capability of U.S. Route 1 to act as an efficient transportation corridor is directly related to the ability of the region to present viable business and housing opportunities to potential developers, ensuring a continuing and stable revenue base; and

WHEREAS, the Clean Air Act and its Amendments (CAAA), and the State Implementation Plan (SIP) legislate specific criteria for emissions reductions, especially in an identified non-attainment area, directing a Corridor Study and Alternatives Analysis of any transportation improvement projects; and

WHEREAS, U.S. Route 1 is included in the National Highway System (NHS) of the International Surface Transportation Efficiency Act (ISTEA), it is not included in the Strategic Highway Network (STRAHNET) category, pending a study of its existing and proposed capabilities; and

WHEREAS, a complete and comprehensive study has never been carried out for the entire U.S. Route 1 corridor in Fairfax County; now, therefore, be it

RESOLVED by the House of Delegates, the Senate ,concurring, That the Virginia Department of Transportation (VDOT) be requested to study the U.S. Route 1 corridor in Fairfax County from the Prince William County line to the Alexandria City limits. VDOT is requested to pursue every avenue for funding availability through the U.S. Department of

Transportation, and the Regional Metropolitan Planning Organization. The study should be modeled after the "Beltway Study" and provide a series of immediate near-term and long-term recommendations; and, be it

RESOLVED FURTHER, That the study be conducted using the citizen input and participation model of the I-95/395/495 Interchange and Woodrow Wilson Bridge studies; and, be it

RESOLVED FINALLY, That the Department complete its study in time to present its findings and recommendations to the Governor and the 1995 Session of the General Assembly in compliance with the procedures of the Division of Legislative Automated Systems for processing legislative documents.

Official Use By Clerks	
Agreed to By The House of Delegates	**Agreed to By The Senate**
without amendment ☐	without amendment ☐
with amendment ☐	with amendment ☐
substitute ☐	substitute ☐
substitute w/amdt ☐	substitute w/amdt ☐
Date: _____	Date: _____
Clerk of the House of Delegates	Clerk of the Senate

GENERAL ASSEMBLY OF VIRGINIA -- 1996 SESSION

HOUSE JOINT RESOLUTION NO. 21

Requesting the Virginia Department of Transportation to continue its study of the U. S. Route 1 corridor in Fairfax and Prince William Counties.

Agreed to by the House of Delegates, February 8, 1996
Agreed to by the Senate, February 29, 1996

WHEREAS, U. S. Route 1 is the prime north-south highway serving a substantial portion of interstate, commuter, and local traffic in Fairfax County and Prince William County between the Stafford County line and the Alexandria City boundary, and is the only direct alternative or emergency diversion route for Interstate Route 95; and

WHEREAS, House Joint Resolution No. 256 (1994) requested the Virginia Department of Transportation (VDOT) to study the U. S. Route 1 corridor in Fairfax County and Prince William County; and

WHEREAS, VDOT has advertised for consultant services, gone through the selection process, negotiated with the selected consultant to arrive at an acceptable contract, and signed the consultant agreement; and

WHEREAS, it will take the consultant 18 to 24 months to complete this work on the study; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Virginia Department of Transportation be requested to continue its study of the U. S. Route 1 corridor in Fairfax County and Prince William County.

The Department shall complete its work in time to submit an interim report to the Governor and the 1997 Session of the General Assembly and its findings and recommendations in a final report to the Governor and the 1998 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

APPENDIX B
Public Bulletins

PUBLIC BULLETIN

ROUTE 1 CORRIDOR STUDY

Fairfax and Prince William Counties

February, 1996

VDOT Launches Study

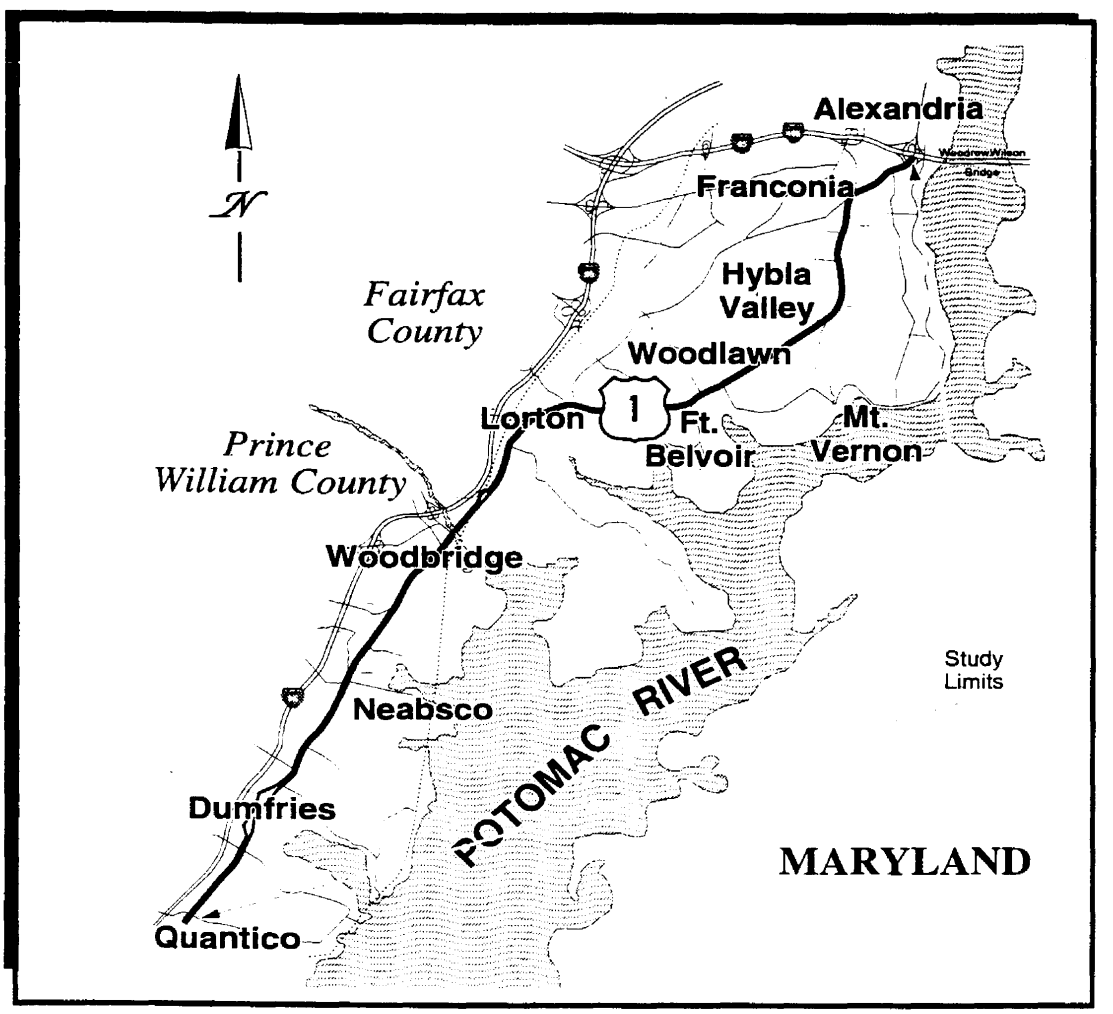
The Virginia Department of Transportation (VDOT) is conducting a study of the Route 1 Corridor in Fairfax and Prince William Counties. The 27 mile corridor under study extends from the Prince William/Stafford County line to the Fairfax County/Alexandria City line near the Capital Beltway (I-95/I-495).

This is the first of several Bulletins to keep you -- residents, business owners and users of the Route 1 corridor -- informed about the study and encourage your participation and involvement. This issue focuses on the purpose of the study, how it will be conducted, when it will be completed, and how you can provide your comments throughout the study.

Study Will Identify Transportation Needs and Solutions

The purpose of the study is to identify the current and future transportation needs in the corridor through the year 2020. A reasonable program of solutions will be developed to address those needs. This program will also accommodate county-specific economic development goals for the corridor.

The General Assembly recognized that a complete and comprehensive study of the corridor is required.



The Route 1 Corridor Study Area extends from the Prince William/Stafford County line to the Capital Beltway (I-95/I-495).

Legislation approved by the General Assembly in 1994 directed VDOT to cond study of the U.S. Route . Corridor in Prince William and Fairfax Counties. The General Assembly recognized that a complete and comprehensive study of the corridor is required to address growing travel demand and to ensure coordinated revitalization efforts.

VDOT Oversees a Cooperative Study Effort

A study team led by JHK & Associates (JHK), a transportation engineering and planning firm, is under contract to VDOT to lead the technical efforts. VDOT Northern Virginia Transportation Planning section is managing the technical study in coordination with a Technical Committee.

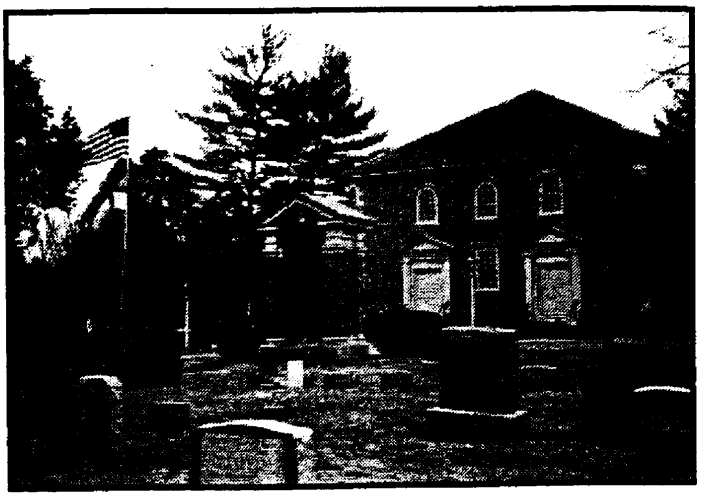
The Technical Committee includes staff from VDOT, Virginia Department of Rail and Public Transportation (VDRPT), Prince William County, and Fairfax County. Two citizen representatives from each county also serve on the committee. A Citizen's Advisory Committee (CAC) appointed by each county's Board of Supervisors will also provide input.

A Steering Committee composed of State senators, delegates, and county supervisors whose districts are located within the corridor will provide policy direction. The Steering Committee invites public participation throughout the study process.

Study Will Address Local Concerns and Solve Problems

The four step study approach described in the following pages is based on solving the identified current and future transportation-related problems in the corridor. The Study Team will evaluate the implications of a variety of solutions. Based on the findings of the evaluation and input from the community, the Committees will select the preferred solutions to transportation-related problems. The findings of this study will lead to improvement actions in the corridor as early as 1997.

Consultant Study Team	
Team Member	**Role**
JHK & Associates, Inc.	*Prime Contractor-Traffic Engineering and Transportation Planning*
Dewberry & Davis	*Highway Engineering and Environmental*
A. Morton Thomas & Associates	*Engineering and Environmental Support*
ıter Interests, Inc.	*Economic*
Lardner/Klein Landscape Architects	*Landscape Architecture & Land Use*
Mary Means & Associates	*Public Involvement and Historic Preservation*



The evaluation of alternatives will consider transportation benefits as well as impacts on environmental and historical resources, such as the Pohick Church.

1 Establish Current and Future Conditions

Current conditions will be established by examining the corridor's characteristics. Study Team staff are observing traffic conditions, counting traffic, and noting existing features. Team members are also taking inventory of environmental and historical resources and gathering information on the current economic and business conditions in the corridor.

An equally important part of this Study is the participation of citizens within the study area. Input will be obtained from the community throughout the study. In March, the Study Team will meet with the CAC to discuss current conditions and problems. The Study Team will also meet with focus groups in February. Focus group members will be selected to ensure input from a full cross-section of the corridor's diverse residents, businesses, and users. An Informational Meeting will be held in each county in May, 1996 to gather further comments and ideas. The schedule on the opposite page shows additional meetings to be held by the Study Team throughout the continuing key phases of the study.

The Study Team will establish future conditions by forecasting travel demand in the corridor for the year 2020. These forecasts will be based on population and employment projections in the corridor and the Washington Metropolitan region.

rridor Study

2 Develop and Evaluate Alternatives

During the early summer of 1996, a range of alternative visions, or concepts, for the Route 1 corridor will be developed. These concepts will incorporate ideas from the community and identify possible alternative solutions. The concepts will include ideas for:

- Improving the capacity and safety of the roadway
- Enhancing bus and rail service
- Adding carpool facilities
- Improving connectivity of bicycle routes and pedestrian walkways.

Ideas for improving the economic vitality and appearance of the corridor through transportation improvements will be a component of each of the concepts.

The Study Team will evaluate the alternative concepts using a comprehensive set of objectives. These objectives will address the potential impacts of the concepts on travel in the corridor, environmental/historic resources, economic vitality, and quality of life. Costs of options will also be estimated.

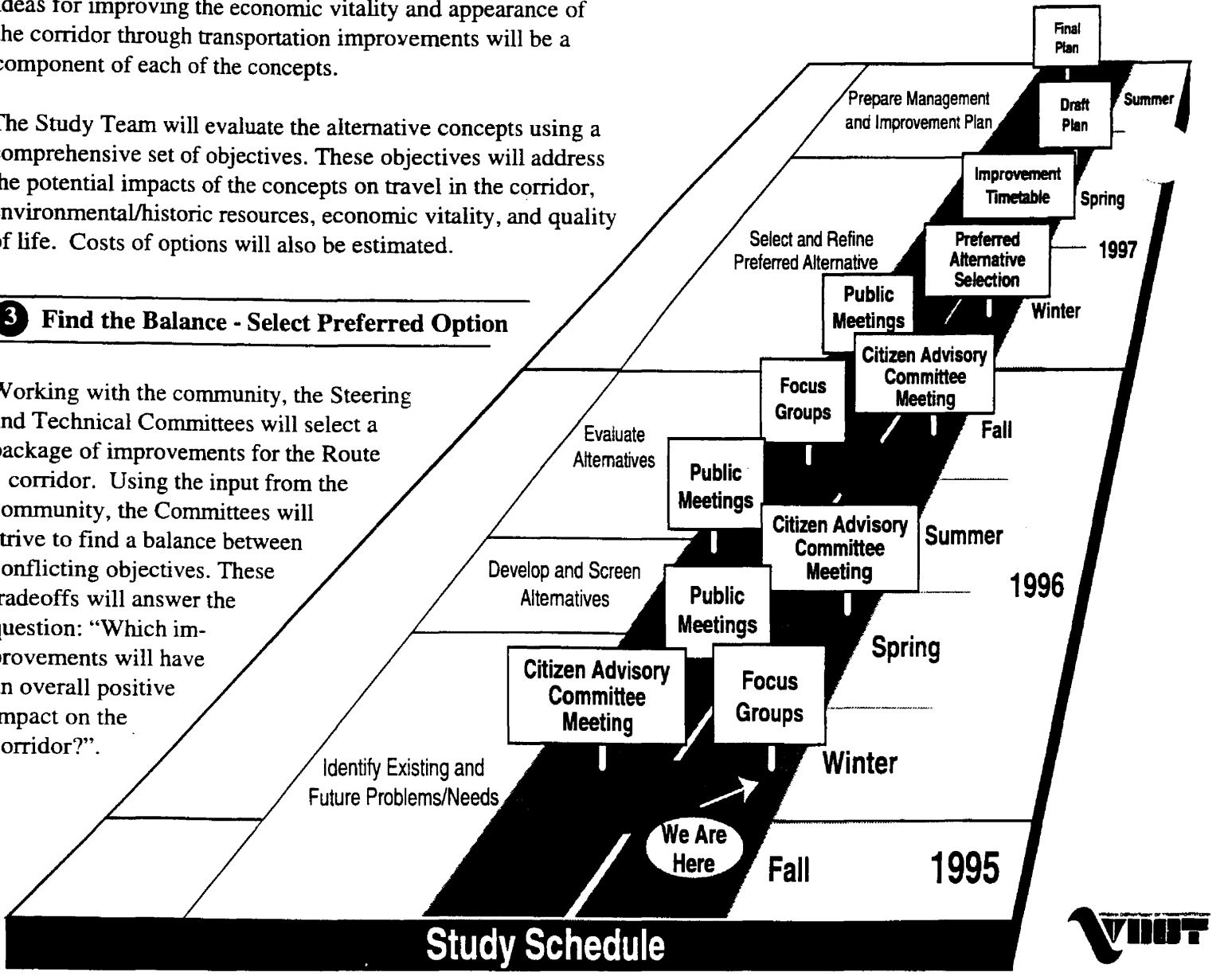
3 Find the Balance - Select Preferred Option

Working with the community, the Steering and Technical Committees will select a package of improvements for the Route 1 corridor. Using the input from the community, the Committees will strive to find a balance between conflicting objectives. These tradeoffs will answer the question: "Which improvements will have an overall positive impact on the corridor?".

4 Prepare an Action Plan

Based on the selected package of improvements, the Study Team will prepare a *Corridor Management and Improvement Plan*. This *Plan* will document the long range vision for the corridor.

Recommendations will be incorporated into a prioritized timetable for improvements. This timetable will identify actions to be taken by VDOT and/or the Counties as early as 1997. The Counties and VDOT will use the study's recommendations to facilitate ongoing future improvements in the corridor.



Get Involved!

OT and the Steering Committee welcome your participation throughout the study process. Please send your comments, questions, or suggestions, concerning the Route 1 Corridor Study to:

Mr. Joe Langley
Virginia Department of Transportation
Transportation Planning
3975 Fair Ridge Drive
Fairfax, Virginia 22033

Telephone: 703/934-0604
Fax: 703/934-0623

To be added to the study mailing list, please contact:

Joann White
JHK & Associates, Inc.

Telephone: 703/820-5455
Fax: 703/820-7970

Watch your local newspapers for Public Meeting dates, times, and locations.

Route 1 Corridor Study
JHK & Associates, Inc.
1900 N. Beauregard Street, Suite 300
Alexandria, Virginia 22311

PUBLIC BULLETIN

Route 1 Corridor Study

Fairfax and Prince William Counties

June, 1996
Issue Number 2

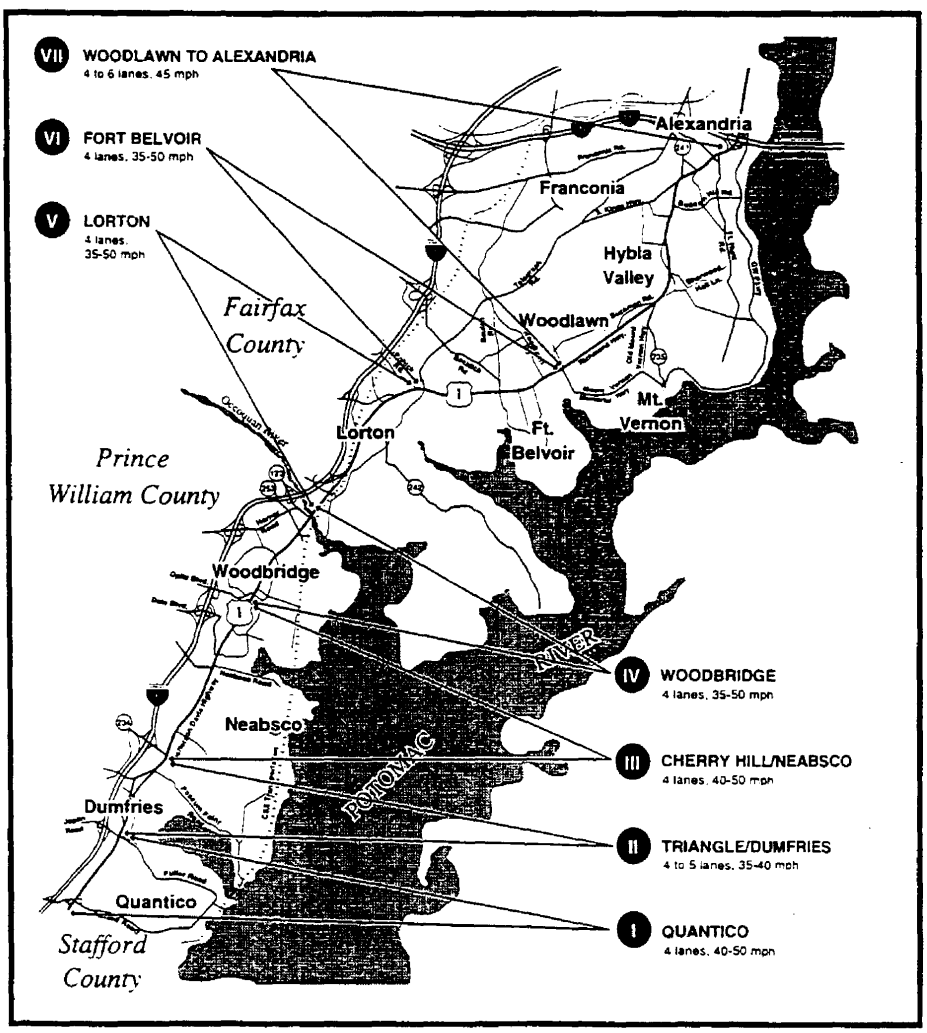
VDOT Identifies Problems

The Virginia Department of Transportation has completed a preliminary assessment of existing and future conditions in the Route 1 corridor. This newsletter presents a summary of the study team's findings to date. Your comments on these findings are welcomed. You can use the comment form attached to the end of this newsletter to send in your comments.

The study team's assessment is based on field observations, technical analyses, and discussions with local citizens familiar with the corridor.

Continued on page 4

The study team subdivided the 27-mile long corridor into seven segments, each with its own characteristics and issues.



Something to Offer Everyone

The Route 1 Corridor in Fairfax and Prince William Counties has many positive qualities to offer to those who live, work, shop, and visit the corridor. It is clear the diversity of the Route 1 corridor is an asset that should be promoted.

The Route 1 corridor has something for everyone. A variety of shopping opportunities exist throughout the corridor. The proximity of the Potomac River provides for unique recreational opportunities, especially at the numerous county, regional, and state parks in the area. The area is rich with historic sites. These features are available to all of each County's residents and to the millions of tourists who pass through and near the corridor.

The Route 1 corridor in Prince William and Fairfax Counties is home to over 150,000 people. Over 65,000 people are employed here in all types of jobs. Residents and employees have access to a wide variety of transit services. These include express and local bus service, Metrorail, Virginia Railway Express commuter rail, the I-95-395 bus/carpool express lanes, and park-and-ride lots. ■

Questions?
Contact Joe Langley at 703-934-0604

Inside

Why a Study?

In 1994, the General Assembly directed VDOT to conduct a study of the Route 1 corridor in Prince William and Fairfax Counties. This study will address growing travel demand and help ensure coordinated revitalization efforts.

The study will identify transportation needs through the year 2020. A reasonable program of solutions will be developed to address those needs. County-specific economic development goals for the corridor will be accommodated. ■

Route 1 Transportation Characteristics

Route 1 is a four- to six-lane arterial roadway that is part of a busy north-south transportation corridor. The other major facilities serving north-south travel include I-95, Telegraph Road (in Fairfax County), George Washington Memorial Parkway, and the rail line owned by CSX Transportation.

The character of Route 1 varies over its length. The study team divided the corridor into seven segments (see box below and map on page one).

Transportation and land use characteristics are similar within each of these segments.

Most of the 27 miles of Route 1 under study are undivided with two 12-foot wide travel lanes in each direction. Only the northern-most 4.5 miles has three lanes in each direction with a median separating traffic flows. The speed limit on Route 1 varies from 35 to 50 miles per hour.

What is the Role of Route 1?

As an arterial roadway, Route 1 serves two primary purposes:

- To provide access to the residences, businesses, and other development in the corridor.
- To provide for travel between Route 1 and origins and destinations outside of the corridor.

Few people regularly travel the entire length of the corridor. This is primarily due to the proximity of I-95 to Route 1, especially south of Lorton Road. For travel to and from places outside of the corridor, traffic need only use Route 1 to find a connecting road with access to I-95. North of Lorton Road, trips to and from locations outside of the corridor must travel longer distances on Route 1 to reach I-95.

Descriptions of the Seven Segments of Route 1

I. **Quantico:** From Stafford County Line to Route 619 (Joplin Road/Fuller Road); 2.2 miles through a wooded area.

II. **Triangle/Dumfries:** From Route 619 to Route 234 (Dumfries Road); 2.5 miles in the commercial areas of Triangle and Dumfries; the northbound and southbound roadways divide through Dumfries.

III. **Cherry Hill/Neabsco:** From Route 234 to Delaware Road (just south of Opitz Road); 4.3 miles with two commercial pockets while the remainder of Segment III is mostly wooded with a few connecting roads to residential developments.

IV. **Woodbridge:** From Delaware Road to Occoquan River; 3.2 miles with commercial development throughout the segment.

V. **Lorton:** From the Occoquan River to Telegraph Road; 4.3 miles with a mix of industrial, residential, commercial, and institutional land uses.

VI. **Ft. Belvior:** From Telegraph Road to Route 235 South/Old Mill Road; 3.5 miles in a largely wooded area except at Fort Belvior entrance and Backlick Road-Accotink area

VII. **Woodlawn to Alexandria:** From Route 235 South to Cameron Run; 7.3 miles with almost continuous commerical and residential development along the roadway.

Route 1 Corridor Study

Fairfax and Prince William Counties

The proximity of I-95 in Prince William County also results in Route 1 carrying traffic diverted from I-95 if there is congestion or an incident on I-95.

Traffic Volumes

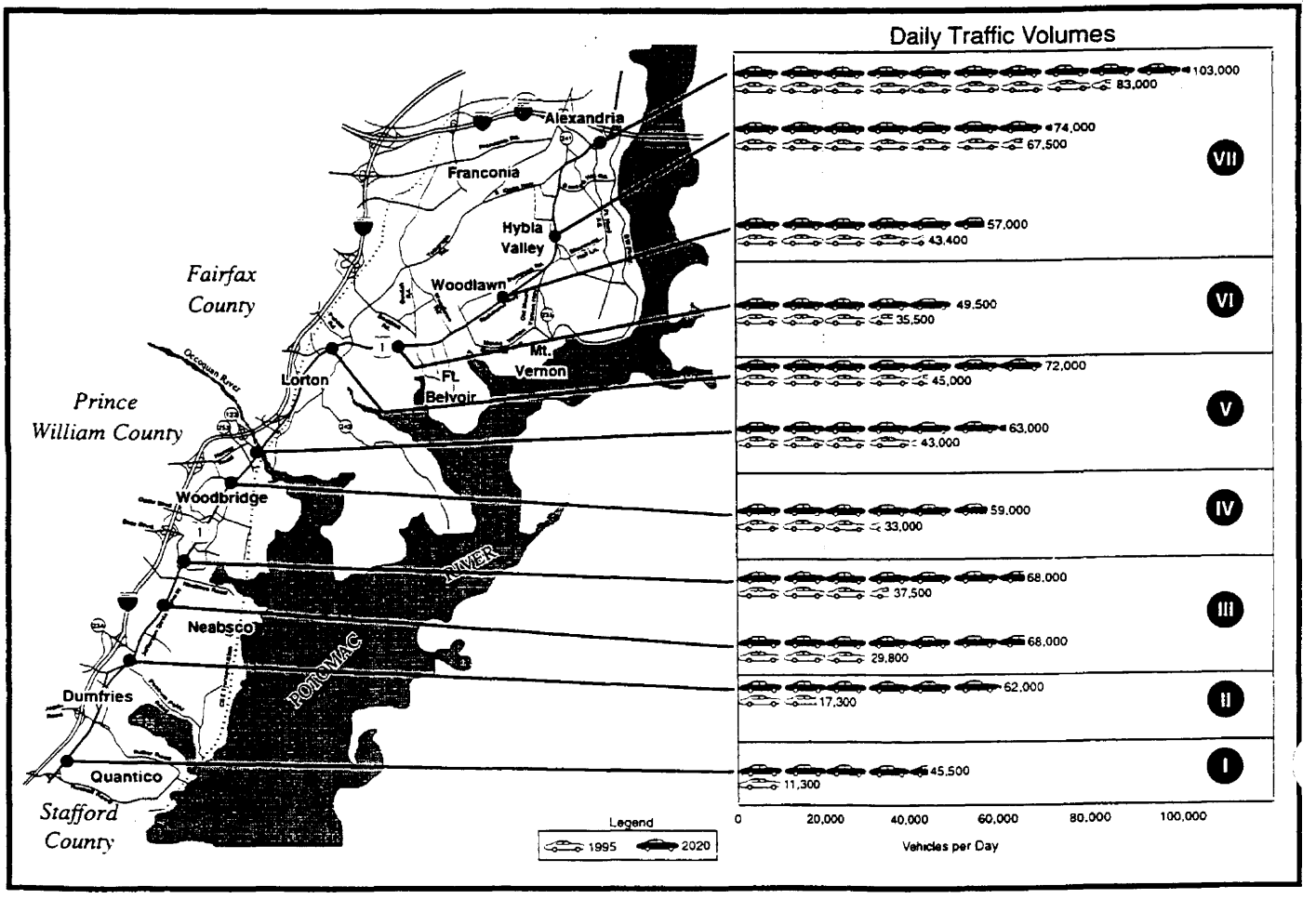
Daily traffic volumes on Route 1 in 1995 range from 11,000 vehicles per day in Segment I to over 80,000 vehicles per day in Segment VII. The busiest sections are: the Occoquan River bridge; between Pohick Road and Telegraph Road; between Sherwood Hall Lane and Lockheed Boulevard; and between Fort Hunt Road and the Capital Beltway.

By 2020, traffic projections for a "baseline scenario" show traffic increasing on Route 1 to a range from 54,000 to over 100,000 vehicles per day. As shown in the graphic on this page, the southern segments of the corridor will have the largest increases. In 2020, Route 1 in Prince William County will be as busy as the section of Route 1 in Hybla Valley is today.

These traffic increases are due to additional development expected to occur within and near the corridor as well as in Stafford County. Population in the corridor is forecast to increase by 85,000 people (from 157,000 to 242,000 people), two-thirds of which will occur in Prince William County. Employment in the corridor is forecast to grow by over 45,000 jobs (from 68,000 to 115,000 jobs), 70 percent of which will occur in Prince William County.

The "baseline scenario" assumes transportation improvements are made in the region in accordance with the Metropolitan Washington Council of Governments' Constrained Long Range Plan, except along Route 1. The "baseline scenario" assumes that no additional roadway improvements are made to Route 1 beyond those currently funded. The

Traffic volumes are projected to increase throughout the corridor with the highest increases in Prince William County.



traffic projections are based on land use changes for the region cooperatively adopted by the local governments.

Travel Modes

The I-95/395 HOV express lanes result in much ridesharing in the corridor. In the peak hour, the regular lanes and HOV lanes on I-95 have a combined average auto occupancy of 1.8 persons per vehicle—among the highest in the nation in a suburban location. Route 1 has an average auto occupancy of over 1.2 persons per vehicle in the morning peak hour at the Capital Beltway.

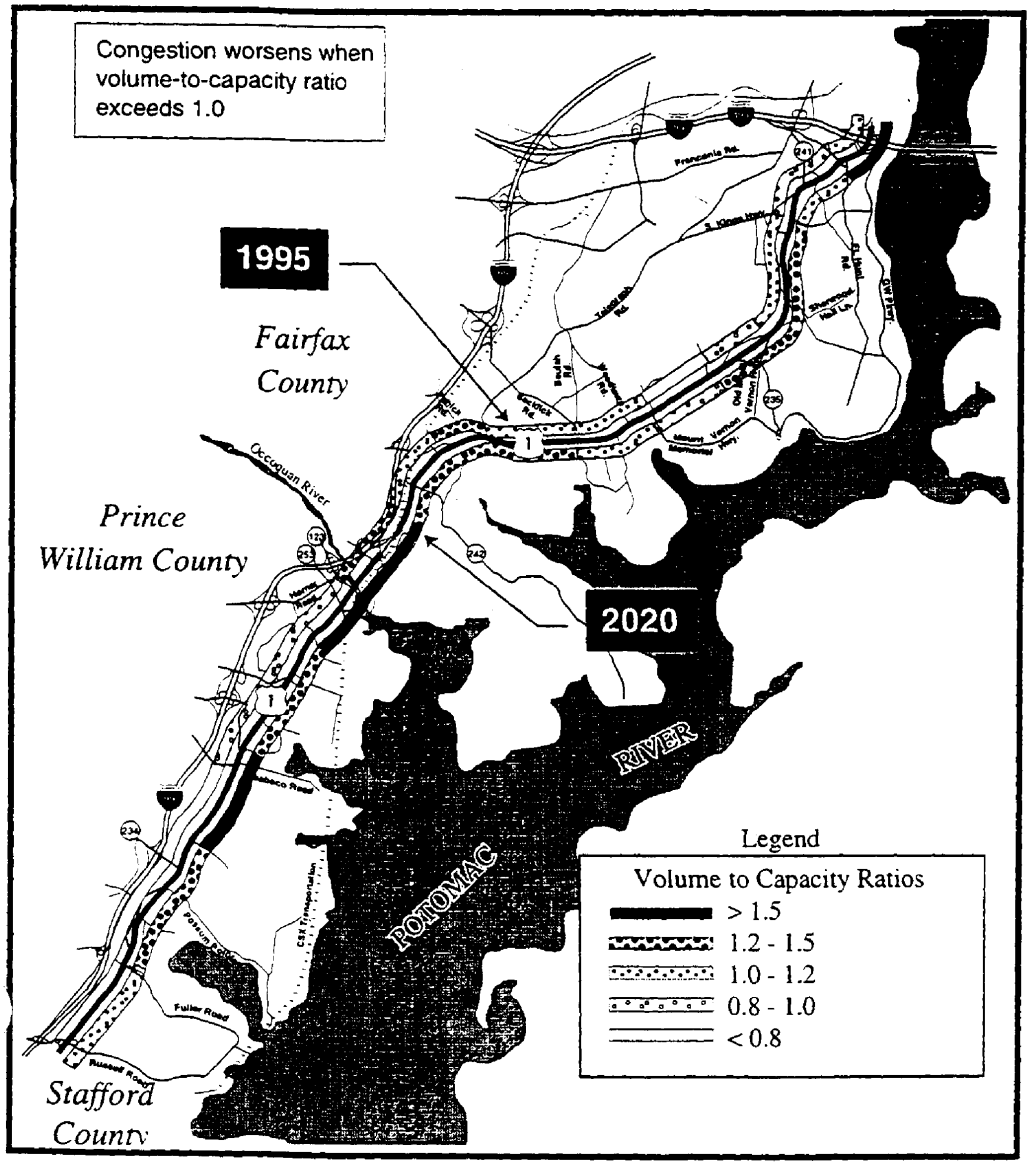
The amount of transit service in the area also results in relatively high suburban transit usage. Approximately 12 percent of peak hour travel is on bus, Virginia Railway Express, and Metrorail. ■

VDOT Identifies Problems

Continued from page 1

The study team has met with representatives from transit operators, economic development staff, a Citizen Advisory Committee, small business owners, and people dependent on bus or rail. The wealth of information and varied perspectives from these groups were melded together into an assessment of existing and future conditions. The following provides a summary of the problems.

Under a baseline scenario by the year 2020, congestion on Route 1 will expand from a few bottlenecks to most of the corridor, as indicated by increases in volume-to-capacity ratios.



Physical Roadway Conditions

The physical characteristics of the Route 1 roadway reflect its gradual, often piecemeal, development over a number of decades. Problems with the Route 1 roadway include:

- Inconsistent roadway cross sections and discontinuous service roads in areas where the roadway has been widened in a piecemeal fashion.
- Roadside traffic hazards such as the inadequate setback of piers at four bridges over Route 1 and at some utility poles.
- Poor conditions of shoulders and ditches.
- Inadequate and inconsistent roadway lighting.

Traffic Operations and Safety

Currently, reasonable travel speeds in many sections of Route 1 are impeded by delays at several bottleneck locations. However, by 2020 under the "baseline sceriario", congestion will expand to most of the corridor (see graphic at left).

From a safety standpoint, the section of Route 1 under study has a higher accident rate than other similar roadways in Virginia. Over 1200 accidents are reported annually along the 27 mile corridor—over 3 accidents per day. Within any one segment, accident frequency ranged from one every ten days in Segment I (Quantico), to nearly one per day in Segment VII (Woodlawn to Alexandria). A total of 18 locations were identified as "high accident" areas.

Traffic operational and safety problems include:

- In 1995, traffic bottlenecks during peak periods at several intersections with Route 1 including:
  - Telegraph Road/Pohick Road
  - Route 123 (Gordon Boulevard)
  - Fort Hunt Road
  - Woodlawn Road
- By 2020, without transportation improvements to Route 1 beyond those currently funded, Route 1 will have an almost continuous series of congested intersections during peak periods.
- Diversions of traffic from I-95 in Prince William County onto Route 1 slowing traffic and restricting access to transit stations, businesses, and neighborhoods.
- Backups onto Route 1 from the Woodrow Wilson Bridge and City of Alexandria restricting access to businesses and the Capital Beltway.
- Operational and safety problems caused by numerous access points, poorly delineated driveways, and uncontrolled parking areas abutting the roadway.
- Uncoordinated destination and directional signage.

Transit/Ridesharing Facilities and Services

Existing transit services provide good coverage and are located in the areas with the greatest needs. The amount and multiple types of service provide much of the population of the Route 1 corridor an alternative to the single occupant automobile. Some areas of service can be improved. The identified problems include:

- A gap in transit service in the Lorton area; no connections between Potomac and Rappahannock Transportation Commission (PRTC) services and Fairfax Connector or Metrobus services in the corridor.
- The poor condition of many bus stops in the corridor: inconvenient and potentially unsafe locations, unpaved waiting areas, lack of connecting sidewalks, and lack of amenities.
- Lack of convenient suburb-to-suburb transit services.
- By 2020, the congestion on Route 1 will impede the movement of buses and increase transit travel times.

Pedestrian Accommodations

Along an arterial roadway such as Route 1, sidewalks are important to connect adjacent residences, businesses, and institutions. Sidewalks also provide access to bus service along Route 1. Unfortunately, pedestrians walking in the Route 1 corridor face challenges such as:

- Inconsistent and discontinuous sidewalks both along Route 1 and connecting to adjacent neighborhoods and businesses.
- Difficulty of crossing Route 1 as a pedestrian due to the roadway width and high traffic volume, especially at night.

Land Use and Urban Design

In the corridor there is little recognition of the original settlement patterns, historic structures, or the corridor's positive characteristics. As a result, few recognizable places or districts exist. In addition, a consistent sense of scale is lacking in relationship to either pedestrians or automobiles. Other problems include:

- The poor appearance of Route 1 and adjacent areas due to deteriorated buildings, underdeveloped parcels, and a chaotic visual environment (signage and overhead wires).

Continued on page 6

- Limited connections for vehicles and pedestrians between adjacent land uses.

Economic Conditions

Generally, the entire Route 1 corridor has had to undergo a shift in market orientation. The market has shifted over the past decades from the primary north-south transportation route for the east coast to a commuter and local route. While some quality developments have occurred in the corridor, many problems still exist including:

- Negative image of Route 1 in the development community.
- Competition for the retail market for Route 1 businesses in portions of Prince William County due to Potomac Mills/Prince William Parkway shopping area.
- Constrained retail market in northern portions of Fairfax County due to limited east-west connections.
- Opportunities for (re)development of small parcels are restrained by difficulties in property consolidation and limited property depths. ■

Next Steps

The remaining steps of the Route 1 Corridor Study are:

- Public Meetings to gain further insight as to the problems and opportunities in the corridor.
- Development of alternative strategies for addressing both existing and future problems in the corridor, including another round of Public Meetings.
- Evaluation of alternative strategies considering transportation needs, environmental impacts, and implementation costs, including a third round of Public Meetings.
- Selection of a preferred set of strategies and a timetable for improvements.

These tasks and their findings will be documented in subsequent newsletters and technical reports. ■

Questions?

Contact Joe Langley at 703-934-0604

Public Information Meetings

Help plan the future of Route 1.

Come and tell us what you think are the transportation problems and ideas for improvement.

Wednesday June 19, 1996

Ferlazzo Government Center
15941 Cardinal Drive
Woodbridge, Virginia

Tuesday June 25, 1996

Mount Vernon Government Center
2511 Parkers Lane
Alexandria, Virginia

Open house from 5:00 P.M. to 7:00 P.M. with a presentation at 7:00 P.M. Study staff will be available to answer your questions.

Route 1 Corridor Study

Fairfax and Prince William Counties

Comment Sheet - This pre-addressed sheet can be removed, folded, and mailed to VDOT.

1. Do you have any questions related to information you have received on the Route 1 Corridor Study?

☐ Yes ☐ No

If yes, explain.

_____

_____

_____

2. What problems do you feel should be addressed in this study?

_____

_____

_____

3. What should be done to fix the current and future problems on Route 1?

_____

_____

_____

4. What type of information do you feel is important for you to receive as the study progresses? What is the best way for you to receive that information on this study?

_____

_____

_____

5. Please provide any other comments that you feel would assist during the course of this study.

_____

_____

_____

QUESTIONS OR COMMENTS ON THE STUDY? CALL 703-934-0604

Thank you for taking the time to complete this comment sheet. To mail, please fold on the lines shown on the reverse side to allow the return address to be visible. Please secure the edge with tape. Do not use a staple.

PUBLIC BULLETIN

Route 1 Corridor Study

Fairfax and Prince William Counties

October, 1996
Issue Number 3

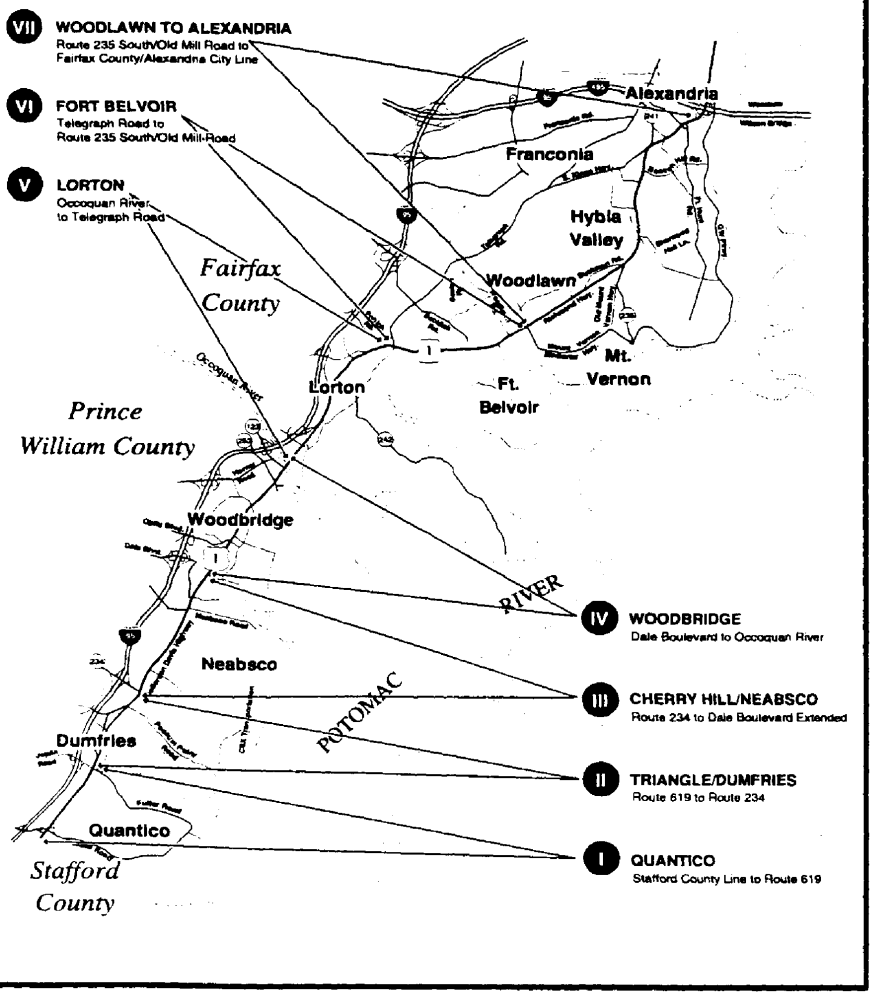
VDOT Seeks Solutions

The Virginia Department of Transportation (VDOT) is conducting a study of the Route 1 Corridor in Fairfax and Prince William Counties. The purpose of this study is to identify the current and future transportation needs through the year 2020. To date, the study has identified existing and future problems in the corridor. The study team is currently developing a range of possible solutions for the identified problems. This newsletter provides an update of the study team's efforts to consider a variety of ideas. Please use the comment form on page 7 of this newsletter to send in your comments on these ideas.

Anyone who has tried to cross Route 1 on foot, make a left turn during rush hour, navigate its service roads on a Saturday afternoon, or make bus transfers in non-rush hours knows all too well that many transportation problems and trouble spots exist along the Route 1 Corridor. VDOT has commissioned the Route 1 Corridor Study to determine what long-term changes will need to take place in order to accommodate future transportation needs into the year 2020.

Continued on page 2

The study team subdivided the 27-mile long corridor into seven segments, each with its own characteristics and issues.



Public Infomation Meetings in October

The Project Team will be presenting potential alternative concepts for the seven segments that make up the Route 1 Corridor study area. Your input will assist our team as it finalizes the alternative concepts for detailed evaluation.

Tuesday, October 22, 1996
Ferlazzo Government Center
15941 Cardinal Drive
Woodbridge, VA
Take Route 1 South, Turn right on Cardinal Drive, Center is on right

Wednesday, October 23, 1996
Fort Belvoir Sosa Community Center
Fort Belvoir, VA
Take Route 1 South, turn left into Main Gate (Belvoir Road); follow Belvoir Road for about 1.3 miles to the Center on the right (look for red lighted sign).

Open house from 6:00 to 7:00 P.M. with a presentation at 7:00. Team members will be available to answer your questions.

VDOT Seeks Solutions

Continued from Front Page

What Have We Learned So Far?

There are many existing problems in the corridor and demand for travel is expected to increase further. From a safety standpoint, this section of Route 1 has a higher average accident rate than other similar roadways in Virginia. Over 1200 accidents are reported annually along the 27-mile corridor—more than three accidents per day. A total of 18 locations in the corridor were identified as "high accident" areas.

Significant growth is expected in the number of people who live and work in the corridor. This will contribute to more traffic congestion unless improvements beyond those currently funded are made. The Route 1 Corridor in Fairfax and Prince William Counties is now home to 157,000 people and 68,000 jobs. By 2020, the corridor will have 242,000 residents and 115,000 jobs. Other nearby areas are also expected to grow. This growth in people and jobs will increase traffic by 10% to 60% in Fairfax County and by 45% to more than 100% in Prince William County. With this growth in traffic, congestion on Route 1 will expand from a few existing bottlenecks to most of the corridor.

What Kind of Changes Will Be Needed?

Meeting the existing and future transportation needs of the Route 1 Corridor requires improvements to many aspects of the existing transportation system. The improvement of one element of the system alone will not meet future needs. The Route 1 roadway and intersections need to be widened and made more efficient. Bus and train service will need to be improved and complimented with improved pedestrian and bicycle facilities. Methods to encourage more ridesharing and reduce the need to travel by car will also be required.

The Challenge

The challenge for the study team is to find the best balance among the various improvement options. Which mix of improvements will provide acceptable transportation service and have an overall positive impact on the adjacent communities and businesses? Input from the community will be vital in finding this balance. Remember that the study team is seeking solutions that will carry the Route Corridor well into the next century, to the year 2020. Solving existing problems will be the first priority. If possible, the worst safety hazards and traffic bottlenecks will receive attention first. However, a long-range plan is necessary to provide a guiding vision for a better Route 1. ■

Where Are We Now?

The two-year study, which began in October 1995, has several key phases. To date, the study team has completed data collection, field inventory, and an assessment of existing and future transportation conditions. This information, with citizen comments from earlier public meetings, has helped the team identify an initial list of issues, problems and trouble spots.

We are now coming to you to get your ideas and reactions to potential concepts that describe what the Route 1 Corridor could 'feel' like in the future. Potential concepts that provide alternative approaches to meeting the existing and future transportation needs have been developed for your consideration. Your feedback is vital as we begin the detailed evaluation of the concepts. If there are any other ideas that should be considered, please use the attached comment sheet.

The study team's evaluation will provide information on the potential impacts of the concepts on travel in the corridor, environmental/historic resources, economic vitality, and quality of life. The cost of each concept will also be estimated. These findings and drawings showing the potential physical improvements will be presented to you at a March, 1997 public information meeting. This will lead to the final phase of the study in which we will come up with a package of improvements for the corridor. The study is scheduled for completion in October, 1997.

Development of Solutions— The Big Picture: Concepts

To begin developing the specific physical improvements for the corridor, the study team stepped back to look at the bigger picture: What type of overall characteristics should the corridor possess? To guide this big picture look, the study team first considered the following goals for the Route 1 Corridor:

- Provide a safe and efficient transportation system with an appropriate balance between the needs of the residents, businesses, and other users of the corridor.
- Respect environmental and cultural resources
- Enhance economic vitality
- Be cost effective

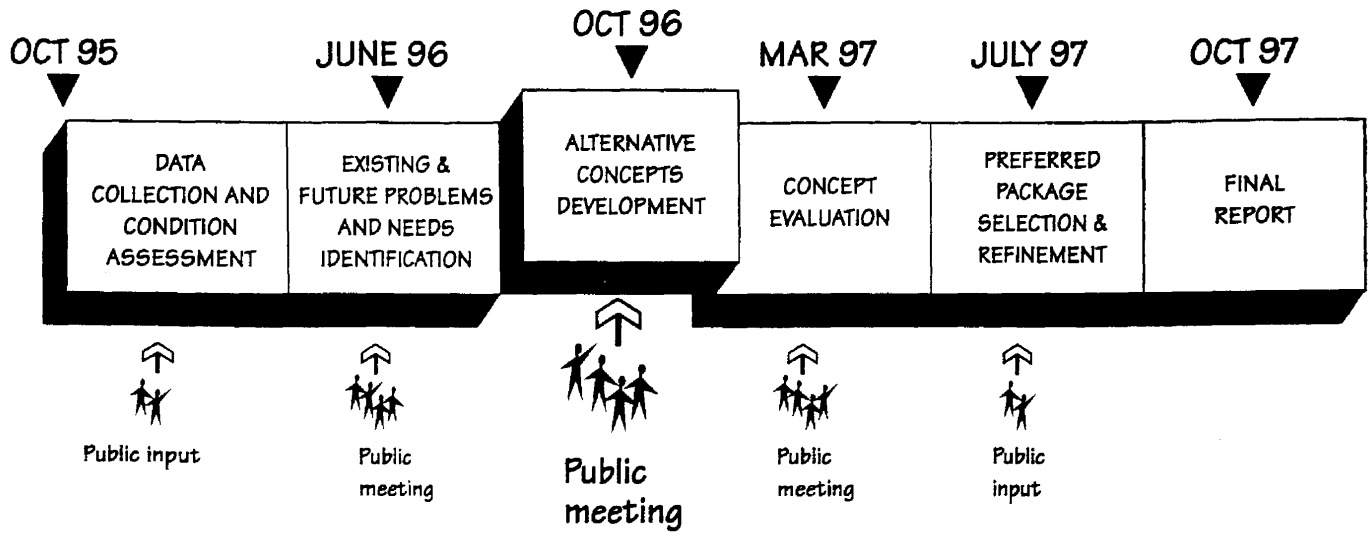
The study team and advisory committees will consider the varying degree to which a potential solution meets and balances the four goals. Often, these goals compete against each other. For example, a larger roadway will ease traffic congestion but may have negative impacts on the local environment or nearby buildings. Conversely, a smaller roadway may have fewer physical impacts but may result in poor traffic movement that hurts economic vitality.

The study team then compared these goals with the identified existing and future problems. Based on this comparison, the study team developed a list of characteristics that the Route 1 Corridor should possess. This list is shown on page 6 and includes improvements that, ideally, would be part of the corridor by 2020.

The study team used these characteristics and the goals to develop a range of concepts to meet the future (2020) travel demand needs in the corridor. Four alternatives were developed to be compared to a Baseline Concept: Concept A, Concept B, Concept C, Concept D. These concepts are intended to be broad, overriding themes for the corridor; details of local improvements included in each concept will be consistent with its overall theme.

By presenting these five concepts to you, the study team hopes to gain feedback as to whether these concepts represent an appropriate range of options for the Route 1 Corridor. It is likely that the evaluation of these concepts may find that the best package of improvements for Route 1 is a combination of parts of two or more concepts. ■

Project Schedule



Summary of Concep

The study team has developed four concepts for improvements to the Route 1 Corridor, Concepts A, B, C, and D. These concepts, which include the Future Route 1 Characteristics listed on page 6, will be compared to the Baseline in the detailed evaluation phase of this study. The Baseline Concept includes transit service and roadway improvements that are funded*.

	Baseline **Limited Transit Service Improvements** **Limited Roadway Expansion**	Concept A ** **Major Transit Service Improvements** **Minor Roadway Expansion**
TRANSIT		
Service	Limited new transit service	Improve and expand existing service into existing developed areas with little transit coverage and begin new service t support growth
Anticipated Conditions		
Transit Mobility	*Declining transit mobility as new growth areas are not served*	*Largest increase in transit mobility beyond Baseline as additional areas, and growth areas are served and ex areas are better served*
Percentage Using Transit	*Reduced percentage of people using transit as compared to today*	*Largest increase in percentage of people using transit*
ROADWAY		
Added Thru Lane	No added thru lanes	No added thru lanes
Median/Left Turn Treatment	Limited added left turn lanes	Add left turn lanes throughout corridor with painted medians (includes continuous two-way left turn lanes)
Access Management (Entrances on Route 1)	More than 50 entrances per mile maximum frequency	10% decrease in maximum frequency of entrances through improved definition of driveways
Anticipated Conditions		
Safety	*Safety problems extend throughout corridor*	*Alleviates some safety problems*
Traffic Congestion	*Congestion problems extend throughout corridor*	*Congestion will remain in many locations in corridor*
Access	*Convenient access to many small businesses but numerous driveways and left turn points*	*Convenient access to many small businesse but numerous driveways and left turn points*
Landscaping	*Limited landscaping opportunities on roadside and median*	*No median landscaping opportunities*

* The Baseline Concept includes the following improvements to Route 1:
Addition of left turn lanes at the Woodlawn Road intersection
Replacement of the Neabsco Creek bridge with a six-lane bridge
Vertical alignment improvements from Canal Road to Old Stage Coach Road
Widening to four lanes from Possum Point Road to Mine Road

s for the Year 2020

The table below identifies key roadway and transit service features in each concept. These concepts should be viewed as overall themes around which local improvements will be detailed. The final improvement package selected for implementation may contain ideas based on more than one concept. ■

Concept B **	Concept C **	Concept D **
Moderate Transit Service Improvements **Moderate Roadway Expansion**	**Moderate Transit Service Improvements** **Major Roadway Expansion**	**Minor Transit Service Improvements** **Major Roadway Expansion**
Expand existing service into existing developed areas with little transit coverage and begin new service to support growth	Improve existing service and begin new service to support growth	Maintain existing service and begin new service to support growth
Moderate increase in transit mobility beyond Baseline as additional areas and new growth areas are served *Moderate increase in percentage of people using transit*	*Slight increase in transit mobility beyond Baseline as existing areas are better served and new growth areas are served* *Slight increase in percentage of people using transit*	*Maintain Baseline level of transit mobility for existing service areas and serve new growth areas* *Maintain current percentage of people using transit*
Add a thru lane in each direction Add left turn lanes throughout corridor with raised medians at some locations	Add a thru lane in each direction Add left turn lanes with raised medians throughout corridor Median breaks at many minor streets and some entrances (minimum spacing of 600 feet)	Add a thru lane in each direction Add left turn lanes with raised medians throughout corridor Median breaks at major streets and major entrances only (minimum spacing of 1500 feet)
20% reduction in maximum frequency of entrances through consolidation of driveways	40% reduction in maximum frequency through consolidation of driveways and improved connections between parcels	Few entrances adjacent to thru lanes 20% reduction in driveways adjacent to turning lanes
Alleviates many safety problems in sections with medians *Alleviates much traffic congestion* *Access to some small businesses in sections with medians requires U-turns or access via side streets but traffic flow smoothed* *Landscaping opportunities increased in areas with medians*	*Alleviates safety problems throughout corridor* *Alleviates much traffic congestion* *Access to some small businesses requires U-turns or access via side streets but traffic flow smoothed* *Landscaping potential maximized*	*Alleviates many safety problems throughout corridor* *Alleviates much traffic congestion* *Access to some small businesses requires U-turns or access via side streets but traffic flow smoothed* *Landscaping potential maximized*

** See **Future Route 1 Characteristics** on page 6 for a list of improvements that are included in this concept.

Future Route 1 Characteristics

A successful improvement plan for Route 1 will aim to achieve a corridor with the characteristics listed on this page. Each of the Concepts (except the Baseline) is assumed to incorporate these improvements. With the implementation of a successful plan you would be able to travel on Route 1 in the year 2020 and see a corridor that has:

Balanced the needs of residents, businesses, and other users of the corridor
- Emphasizes movement of people, not just vehicles, in the corridor
- An improved Route 1 [not a freeway]

Continuity
- Consistent, appropriate roadway cross-section within each segment
- Smooth roadway cross-section transitions between segments
- Improved appearance and identity

Improved safety
- Left turn lanes
- Wider shoulders (in appropriate areas)
- Adequate clearances to bridge piers and utility poles
- Safer pedestrian crossings and walkways
- Improved lighting

Improved traffic flow
- No major traffic bottlenecks
- Strengthened access management policies (fewer and better defined entrances on Route 1)

Seamless transit service with coordinated schedules
- Local bus service in segments II-VII on Route 1 with no gaps in service and improved travel speeds
- Other services including "non-traditional," demand responsive transit service
- Enhanced VRE commuter rail services and capacity

Continuous sidewalks and/or trails
- Improved pedestrian access to local commercial, institutional, and residential areas
- Improved bus stops and access to bus stops

Special treatments for revitalization and historic areas
- Landscape materials
- Benches, bus shelters, trash cans
- Paving materials

Continuous landscape improvements throughout the corridor
- Highlighting commercial areas and key intersections
- Linking nodes with plantings

Improved signage
- Coordinated, adequate destination and directional signs
- Coordinated resource signs for historic and recreational areas
- Appearance and size of commercial signs
- Outdoor advertising signs—amortization program

Respect for environmental and cultural resources
- Historic places
- Environmental and recreational resources

Integrated Intelligent Transportation Systems (ITS)
- Variable message signs, overhead cameras, and traffic detectors on Route 1
- Arterial signal system coordinated with adjacent freeway surveillance on I-95
- Advanced features potentially including "in-vehicle-information" and computerized displays of transit information

Provisions for transportation beyond 2020
- Future potential transit facilities
- Technology changes

Do you have questions or would you like additional information?

Call Joe Langley of VDOT at 703/934-0604.

Be sure to attend the Public Information Meeting on October 22 or 23. See front page for details.

Route 1 Corridor Study

Fairfax and Prince William Counties

Comment Sheet – This pre-addressed sheet can be removed, folded, and mailed to VDOT—no postage required.

1. Do you have any questions related to information you have received on the Route 1 Corridor Study?

☐ Yes ☐ No

If yes, explain.

_____

_____

_____

2. Do you feel an appropriate range of concepts is being considered?

_____

_____

_____

. Are there any other concepts that should be considered to meet the long-term transportation needs of Route 1?

_____

_____

_____

4. Please provide any other comments that you feel would assist the study team during the course of this study.

_____

_____

_____

_____

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QUESTIONS OR COMMENTS ON THE STUDY? CALL 703-934-0604

Thank you for taking the time to complete this comment sheet. To mail, please cut this page off at the line indicated at left. Fold on the lines shown on the reverse side to allow the return address to be visible. Please secure the edge with tape. Do not use a staple.

Route 1 Corridor Study
JHK & Associates, Inc.
1900 N. Beauregard St.
Suite 300
Alexandria, Virginia 22311

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APPENDIX C

Specific Immediate Action Improvement Projects

IMMEDIATE ACTION IMPROVEMENTS

EXAMPLES OF PEDESTRIAN IMPROVEMENTS

- From end of River Oaks development to Powells Creek Boulevard (east side)
- From Longview Drive to Mount Pleasant Drive (east side)
- Route 1(east side) providing access to the Woodbridge VRE Station

EXAMPLES OF TURN LANE IMPROVEMENTS

Lengthening Selected Turn Lanes on Route 1

- Southbound left turn lane at Fuller Heights Road
- Southbound right turn lane at Four Year Trail
- Southbound right turn lane at Opitz Boulevard
- Southbound right turn lane at Route 123
- Northbound left turn lane at Memorial Drive

Constructing Selected Turn Lanes on Route 1

- Northbound right turn lane at Powells Creek Boulevard
- Northbound right turn lane at Reddy Drive
- Southbound right and left turn lane at Crest Drive
- Northbound right turn lane at Longview Drive
- Northbound right turn lane at Mount Pleasant Drive
- Southbound right turn lane at Occoquan Road
- Other selected locations particularly between Route 235 south and Route 235 north