

**COUNTYWIDE TRANSPORTATION PLAN  
AMENDMENT**

<b>Case Number</b>	<b>Project Name</b>	<b>Date Adopted</b>
CPAM 1997-0005	Route 50 Corridor Study - Eastern Segment	December 17, 1997



## Loudoun County, Virginia

Office of the County Administrator

1 Harrison Street, S.E., 5th Floor, P.O. Box 7000, Leesburg, VA 20177-7000  
703/777-0200 • Metro: 703/478-8439 • Fax: 703/777-0325

At a meeting of the Board of Supervisors of Loudoun County, Virginia, held in the County Administration Building, Board of Supervisors' Meeting Room, 1 Harrison St., S.E., Leesburg, Virginia, on Wednesday, December 17, 1997 at 9:00 a.m.

**PRESENT:** Dale Polen Myers, Chairman (Absent for the Vote)  
Joan G. Rokus, Vice Chairman  
Lawrence S. Beerman II  
James G. Burton  
Helen A. Marcum  
David G. McWatters  
Eleanore C. Towe  
Steven D. Whitener  
Scott K. York

**IN RE:** TRANSPORTATION/PUBLIC SAFETY COMMITTEE  
REPORT/COMPREHENSIVE PLAN AMENDMENT 1997-0005/ROUTE 50  
CORRIDOR STUDY/EASTERN SEGMENT (MERCER DISTRICT)

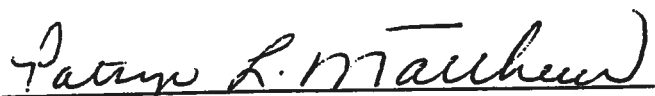
Mrs. Marcum moved that the Board of Supervisors approve the recommendation of the Transportation Public Safety Committee to accept, with approval, Comprehensive Plan Amendment 1997-0005, Planning Commission Report of October 29, 1997, for the Route 50 Corridor Study: Eastern Segment, with text modifications.

Mrs. Marcum further moved that two separate Comprehensive Plan Amendments be processed for the Arcola Community, and CLI zoned parcels along the Route 50 Corridor, and/or Zoning Ordinance Amendments for the CLI issue.

Seconded by Mr. McWatters.

Voting on the Item: Supervisors Beerman, Burton, Marcum, McWatters, Towe, York and Whitener - Yes; Rokus - No; Myers - Absent for the vote.

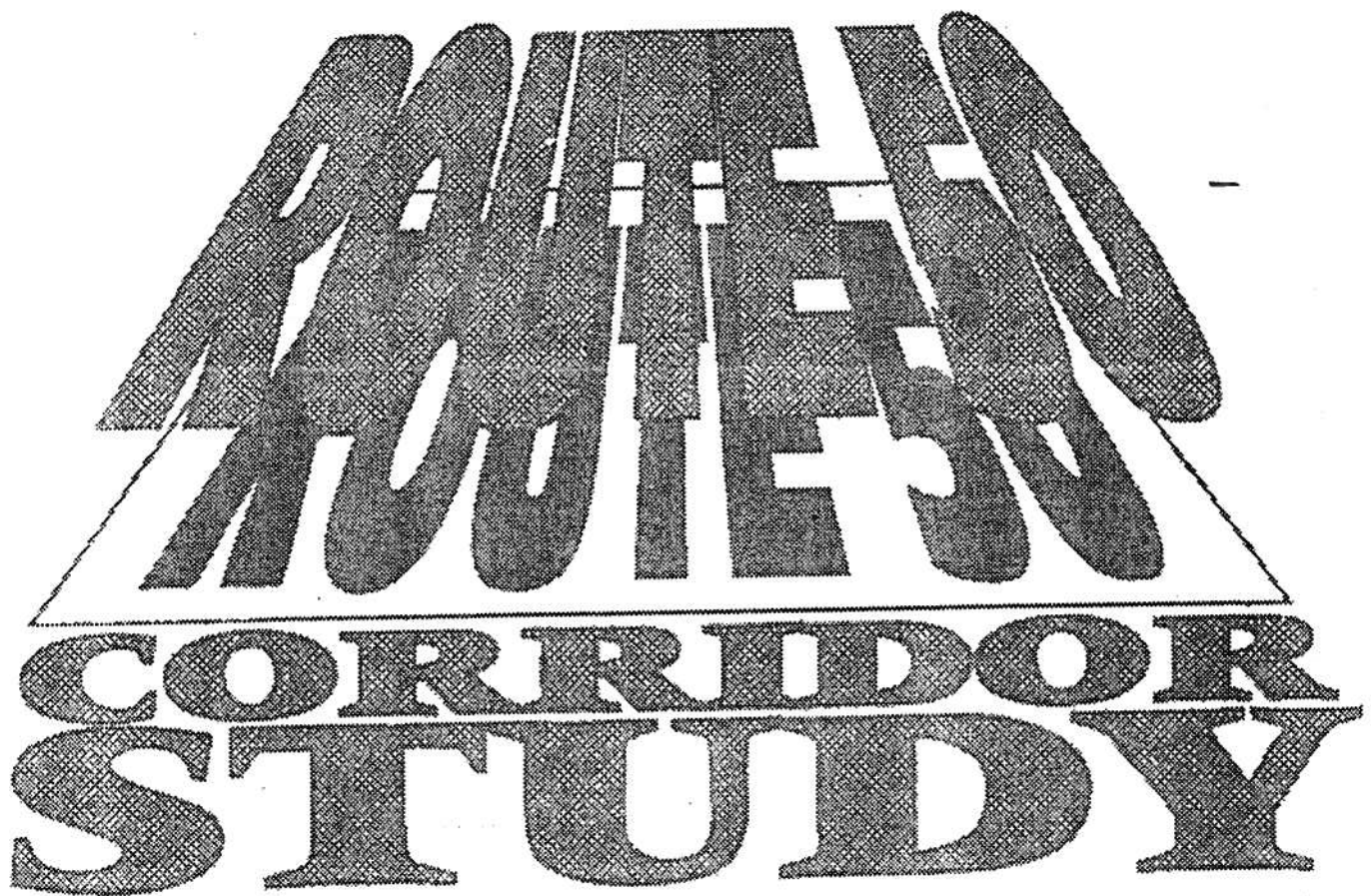
A COPY TESTE:

  
DEPUTY CLERK FOR THE LOUDOUN  
COUNTY BOARD OF SUPERVISORS

PLM:REDEC17C.97

# ROUTE 50 Corridor Study

Eastern Segment:  
Route 659 to Fairfax County Line



December 17, 1997

**ROUTE 50 CORRIDOR STUDY:  
EASTERN SEGMENT  
DECEMBER 17, 1997 REPORT**

<b><u>Section</u></b>	<b><u>Page</u></b>
<b>Background</b>	<b>1</b>
<b>Goal and Objectives</b>	<b>4</b>
<b>Corridor Plan Summary</b>	<b>5</b>
<b>Design Guidelines for Major Roadways</b>	<b>8</b>
<b>Corridor Maps</b>	<b>9</b>

## I. BACKGROUND

On March 19, 1997, the Board of Supervisors directed the Planning Commission and staff to restart the Eastern Segment of the Route 50 Corridor Study between the Fairfax County line and Route 659. The basic goal of the Corridor Study is to present a road network which will promote short-term development opportunities while providing sufficient system capacity in the long-term to serve anticipated levels of development in the future.

The initial Route 50 Corridor Study began on October 26, 1994. The three segments of the Route 50 Corridor were defined as follows:

East Segment: Fairfax County Line to Route 659

Middle Segment: Route 659 to Route 15 (Gilberts Corner)

West Segment: Route 15 (Gilberts Corner) to the west end of Middleburg Bypass

Public meetings for the Corridor Study were held on December 1, 1994 and January 12, 1995. A draft Background Report was distributed at the December meeting and an updated Background Report at the January meeting. An initial round of public work sessions were held in each of the three segments. Following these work sessions and the nature of the identified issues, the degree of perceived consensus as well as the time frame for impending development and road improvement projects, it was determined to focus first on resolution of issues in the Eastern Segment of the Corridor. This segment runs between the Fairfax County Line to the vicinity of the existing Route 659 and is shown in the Segment Map on the next page. A total of three work sessions were held on the Eastern Segment and a Community Meeting was held on April 20, 1995, at which time staff discussed its preliminary recommendations for roads and interchanges in the Eastern Segment. The Route 50 Corridor Study Subcommittee of the Planning Commission endorsed a number of these recommendations of the staff, but took no action on others.

In early May 1995, the Planning Commission suspended work on the Route 50 Corridor Study as it completed prioritization of major work elements it needed to complete by the end of its term.

In the same time frame, the Board of Supervisors was completing its work in reviewing the draft Countywide Transportation Plan (CTP). The CTP process had a full public participation process including community meetings and public hearings before the Planning Commission and Board of Supervisors. These Eastern Segment recommendations, which were endorsed by the PC Subcommittee, were subsequently included in the Countywide Transportation Plan and approved by the Board of Supervisors on July 5, 1995. This included endorsed road alignments and typical sections for some key roads. The Route 50 Corridor Study material, included in the CTP, received no opposition in the CTP

public process. The remainder of the approved CTP road network for the Eastern Segment of the Route 50 Corridor came from the transportation element of the Dulles South Area Management Plan (DSAMP). This was done with the understanding that future modifications to this road network could be accomplished when the Route 50 Corridor Study was restarted; which is now.

At the February 11, 1997 meeting of the Board of Supervisors Transportation/Public Safety Committee, Mr. Lou Canonico and Mr. Robert Buchanan made a presentation for the alignment and type of Route 50 North Collector Road east of Route 606. Currently this road is shown on the Countywide Transportation Plan (CTP) Map, and is included in the Dulles South Area Management Plan (DSAMP). It is specified as a 4-6 lanes, median divided road. The proposal relocated the road closer to Route 50 to serve the smaller parcels, generally zoned CLI, fronting on the north side of Route 50, and narrowed the typical section to four undivided lanes.

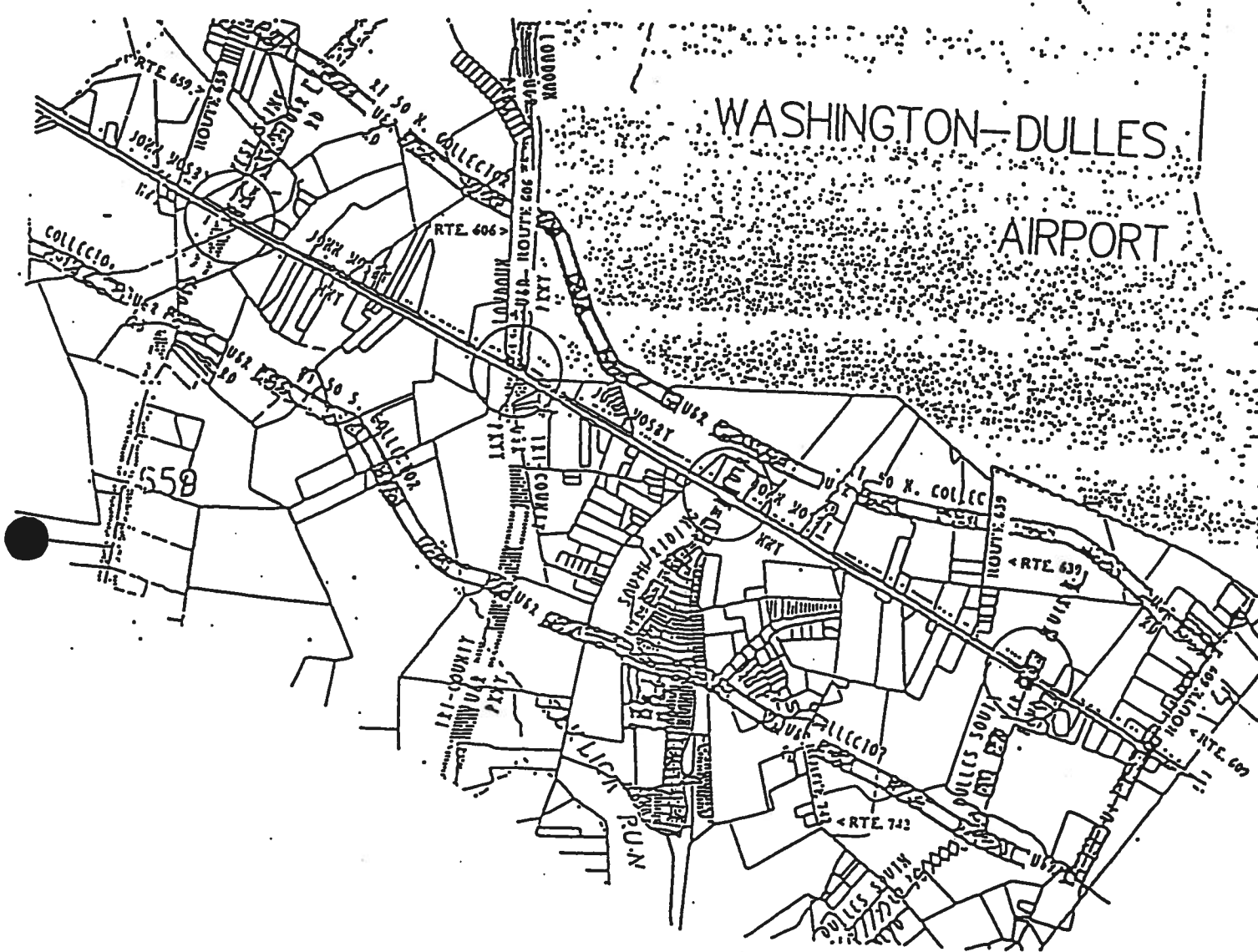
Following the presentation, the Committee directed the staff to bring back the Route 50 Corridor Study with the focus on the Eastern Segment for the review by the Committee. The issues to be considered would include all of those which were unresolved as of May 1995 plus any new issues which might be identified.

During the period in which it has participated in the Corridor Study process, the Planning Commission has held three public input meetings, a public hearing and five work sessions. It has received numerous comments, proposals and suggestions from the landowners and residents of the Route 50 Corridor. The Commission has carefully considered these inputs as it has crafted the proposed Corridor Transportation system shown in this report. This system should provide responsive, phased transportation service for many years as development, planned and zoned, in the Corridor occurs.

However, the planning efforts for the corridor must continue into the future. The complex problem of providing adequate access to CLI zoned parcels on both sides of Route 50, as well as incentives for development, needs continuing coordinated planning between the County and the Economic Development Commission to produce a balanced pro-active program. Planning coordination must also continue between Loudoun County, Fairfax County and the Metropolitan Washington Airports Authority to receive the full benefits of a limited access Route 50 east to Route 28 and perhaps beyond.

The CPAM 1997-0005 Vicinity Map, on the next page, shows the limits of the Route 50 Corridor Study Eastern Segment along with the road segments and alignments specified in the current County Transportation Plan. This Corridor Study recommends changes to this road network which are detailed in this report.

## CORRIDOR VICINITY MAP



Above map shows general area of the Corridor Study and the current (December 1, 1997) Countywide Transportation Plan Road Network in the Study Area.

## ROUTE 50 CORRIDOR STUDY: EASTERN SEGMENT

### GOALS AND OBJECTIVES

December 17, 1997

**GOAL:** To provide a transportation network which will promote short-term development opportunities while providing sufficient system capacity in the long-term to serve anticipated levels of development, with Route 50 ultimately becoming a limited access road.

#### OBJECTIVES:

- To provide a transportation system which can accommodate interim term development and planned longer term development in the Route 50 Corridor.
- To provide sufficient flexibility and options for connections with the transportation network bordering the Corridor including Fairfax County.
- To enhance the process of planning and implementing public transportation improvements in the Route 50 Corridor.
- To protect residential communities and streets from inappropriate commercial, industrial and cut-through traffic.
- To support the policies of the Dulles South Area Management Plan to make Route 50 a Gateway Corridor including landscaping, buffering and associated activities to promote a parkway theme.



## ROUTE 50 CORRIDOR PLAN SUMMARY

This Corridor Study provides a blueprint for the expansion of the transportation system in the Eastern Segment of the Route 50 Corridor over a considerable length of time. The centerpiece of the system is Route 50 itself. Route 50 in Loudoun County, east of existing Route 659, is primarily a median divided four-lane, rural, minor arterial. Currently, it has only one traffic signal in operation at Route 606 and there are numerous entrances to parcels fronting on the road. In addition, many of these entrances do not meet current VDOT standards and are not accessed by right turn lanes. The location of existing median crossovers are not necessarily connected with expected locations for growth. A modest doubling of Route 50's current daily traffic volumes in its Eastern Loudoun County Segment (currently 15,000 - 20,000 average daily traffic) will result in poor and increasingly unsafe road operations.

However, under this Corridor Study's plan, Route 50 will be converted in an interim timeframe to a six-lane median divided controlled access road. Traffic capacity at level of service (LOS) D (moderate congestion) will increase toward 60,000 average daily traffic. Finally, in the longer-term (20 years and more) interchanges will be added and Route 50 will become a limited access road. These interchanges will be constructed at the West Spine Road, Route 606 (the future Tri-County Parkway), South Riding Boulevard and just east of Route 639. This Corridor Study also provides the flexibility to construct an interchange at Route 609 if Fairfax County decides to implement limited access on its section of Route 50 east to Route 28 and/or expand to eight lanes.

Parallel Collector Roads will be added north and south of Route 50 as development occurs. The character of the North Collector Road and the South Collector Road will be considerably different because the nature of land uses in the areas served by these two roads are not the same and they produce different levels and types of traffic. The eastern section of the North Collector Road will run from Route 609 to the Dulles Airport Boundary in the vicinity of current Route 621 where it will terminate in a cul-de-sac. The road will have a four-lane undivided (called a U4) section. It will serve the mostly industrial traffic of that subarea.

The western section of the North Collector Road will begin at Route 606 and run westward to Route 659 and beyond. It will be a wider four to six-lane median divided road because of the commercial/retail development planned for the area.

The Route 50 South Collector Road will begin at the future Route 639 interchange vicinity and will curve to the southwest and then parallel Route 50. It will be a four to six-lane median divided road. It will serve the South Riding Town Center and continue west to the Tri-County Parkway and Route 659. The alignment and typical section of the South Collector Road west of Route 659 will be determined by a future corridor study and beyond. The next phase of the Route 50 Corridor Study will consider the alignments and size of these collector roads as well as Route 50's future cross section west of Route 659 out to Route 15.

The following are other highlights of the Route 50 Corridor Study Transportation Network:

1. **Access to Dulles Airport from U.S. Route 50:** Route 639 will be slightly realigned and expanded to a four-lane undivided road. It will provide a major entrance to commercial, industrial and cargo areas of Dulles Airport, but not the main passenger terminal. A secondary entrance will be provided at Route 609, which will also be expanded to a four-lane undivided road. The Airport will also be able to conveniently access Route 606 at its intersection with the North Collector Road.
2. **Retail Plan:** The realignment of the North Collector Road and the West Spine Road will facilitate retail development in the area north of Route 50 and east of Arcola.
3. **Future connections to Fairfax County and the Smithsonian Air and Space Museum Facility:** The Corridor Study provides the flexibility to reserve a right-of-way to extend the North Collector Road to connect with possible future roads in Fairfax County. This connection will be important if the two Counties work together to extend limited access on Route 50 east to Route 28. The Corridor Study allows the addition of a diamond interchange at Route 609/Route 50, if necessary, to support this desirable regional effort. The Corridor Study also allows for a second connecting road closer to Route 50. The current access plan for the Smithsonian Facility shows all public access will be from Route 28 via an interchange in the vicinity of Barnsfield Road. Should this access need to be expanded in the future, the planned ability for Loudoun and Fairfax Counties to upgrade Route 50 and to connect other local roads between the two jurisdictions will be useful to the Smithsonian facility.
4. **Protection of Residential Communities and Streets from Commercial, Industrial and Cut-Through Traffic:** This Corridor Study has responded to the requests of the South Riding Community and severed a direct connection between Edgewater Street and the planned Route 639/Route 50 interchange via the Dulles South Boulevard. Route 742 has been planned as a two-lane residentially oriented road which can be improved through the Six-Year Secondary Road Improvement Program with the full participation of the local citizens. It is planned that commercial, industrial and regional through traffic be served by the Tri-County Parkway and West Spine when these roads are constructed.
5. **Planning and Implementing Public Transportation Improvements in the Route 50 Corridor:** In response to requests from the South Riding Community, the Corridor Study recommends that the extension of community bus service to the Route 50 Corridor be studied as part of the bus operations plan being developed for the Western Regional Park-and-Ride Lot. Commuter bus service should be extended to Route 50 as soon as

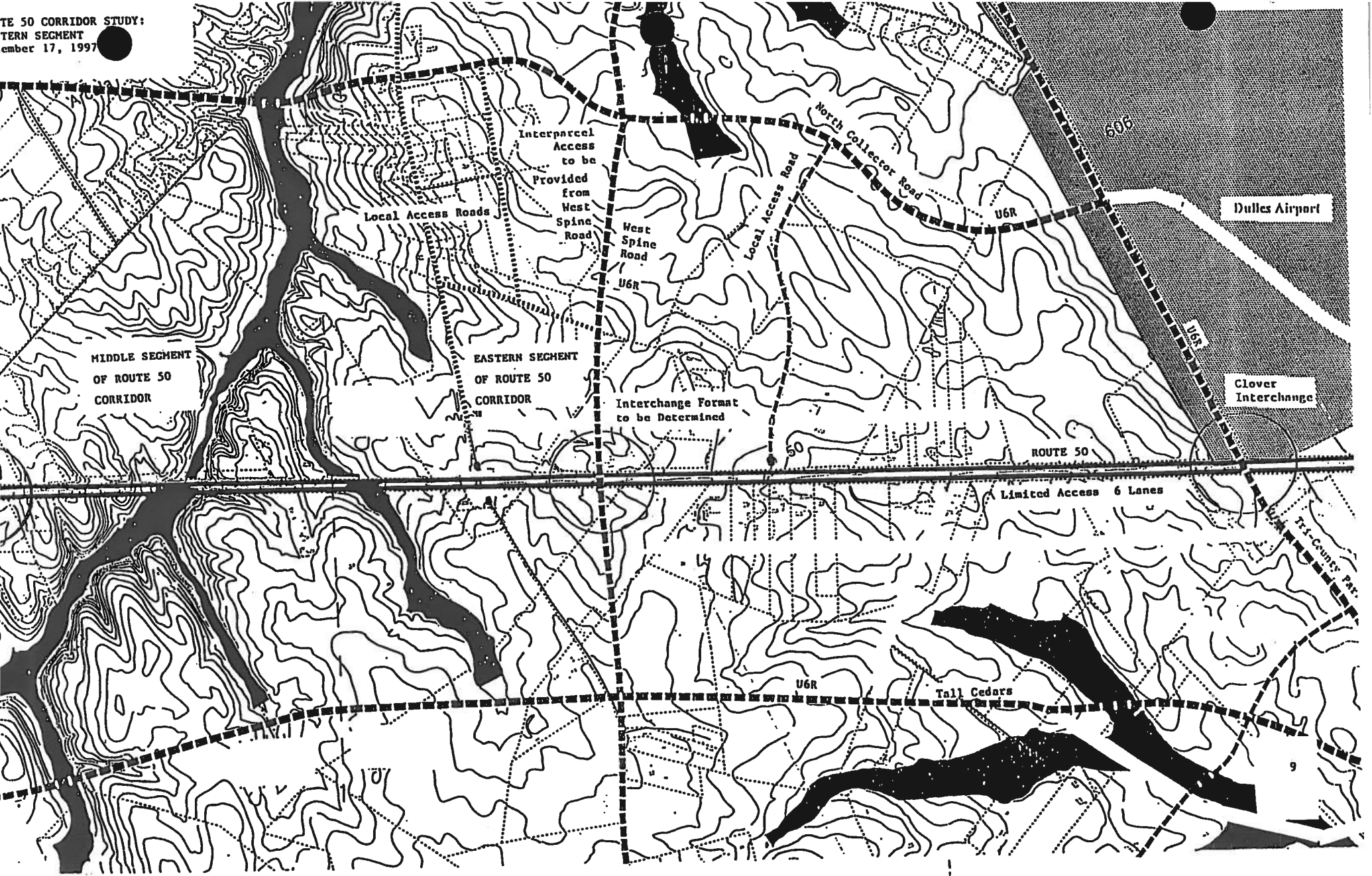
possible consistent with Board policies on transit funding. The County should place a high priority on the development of a park-and-ride lot in the Route 50 Corridor.

6. **CLI Lot Access:** The County should coordinate with the Economic Development Commission in their current efforts, mandated by the Board of Supervisors, to develop access and development incentives for CLI parcels on both sides of Route 50. The success of this effort is critical to the successful operation of Route 50 as a controlled access road in an interim timeframe and as a limited access road in the long-term. Techniques for consolidation of smaller lots and for the construction of CLI access roads will be important. It is intended that individual CLI parcel access roads be added to this Corridor Study as they are approved through the EDC recommendations being adopted through the County's public hearing process.
7. **Thresholds for Phased Route 50 Improvements:** In its interim phase, Route 50 will be improved to a six-lane median divided controlled access road. Controlled access means access to Route 50 will be concentrated at median crossovers. Individual parcel access is highly discourage, with access provided by interparcel connections and consolidated access points. Later, as level of service (LOS) on sections of Route 50 or at specific intersections reach LOS D, individual planned interchanges will be implemented. The threshold LOS D should be that of the whole intersection, not movements from roads connecting to Route 50. However, other sections of Route 50, where LOS remains at C or better can remain in a controlled access format . In addition, existing median crossovers on Route 50 can remain open so serve local businesses, land uses until such time as their closure is mandated by VDOT or closeby interchanges are constructed. These approaches balance acceptable performance on Route 50 with local access requirements and the substantial public or private resources needed to construct interchanges.

# **DESIGN GUIDELINES FOR MAJOR ROADWAYS**

**ROUTE 50 CORRIDOR: EASTERN SEGMENT**

**DECEMBER 17, 1997**



Dulles Airport

1-de-Sac: MWA will have  
cess to the North Collector  
ad at this point

North Collector Road  
to run along property  
line north of interchange

North Collector Road

limited access

Diamond  
Interchange

CLI Access Road to be  
located in this area  
as part of development  
process

Median Crossover  
Location Zone for  
Controlled Access

Potential  
Urban Drive  
Interchange

Defender  
Drive

South Riding Boulevard  
Interchange to be as  
preferred. Defender Drive  
platted/concept plan location  
to be maintained

South Riding Boulevard

Tall Cedars

South Collector Road

U6R

Route 742

2 Lane Road

Edgewater Street

10

# *DESIGN GUIDELINES FOR MAJOR ROADWAYS IN THE EASTERN SEGMENT OF THE ROUTE 50 CORRIDOR*

## **ROUTE 50 (JOHN MOSBY HIGHWAY)**

**LOCATION/SEGMENT:** DULLES SOUTH AREA/FAIRFAX COUNTY LINE WEST TO  
ROUTE 15

**EXISTING CONDITION:**

**FUNCTIONAL CLASSIFICATION:** MINOR ARTERIAL

**LANES/RIGHT OF WAY:** FOUR LANES FROM COUNTY LINE TO JUST WEST OF ROUTE  
616 AND TWO LANES FROM FOUR LANE SECTION TO ROUTE  
15/ROW VARIES

**DESCRIPTION:** R4R/R2. LOCAL ACCESS MEDIAN DIVIDED/UNDIVIDED RURAL  
ARTERIAL. INDIVIDUAL SITE ACCESS OCCURS ALONG  
SECTION. DESIGN SPEED VARIES AND MEDIAN CROSSOVER  
SPACING VARIES ON FOUR LANE SECTION.

**INTERIM CONDITION:**

**FUNCTIONAL CLASSIFICATION:** PRINCIPAL ARTERIAL

**LANES/RIGHT OF WAY:** SIX LANES/200 FOOT ROW

**DESCRIPTION:** R6R. CONTROLLED ACCESS MEDIAN DIVIDED RURAL  
ARTERIAL. LEFT AND RIGHT TURN LANES REQUIRED AT ALL  
INTERSECTIONS. EXISTING MEDIAN CROSSOVER LOCATIONS  
MAY BE ADJUSTED, AND ADDITIONAL MEDIAN BREAKS ADDED,  
SO AS TO PROVIDE SAFE AND CONVENIENT ACCESS TO  
PROPERTIES FRONTING ON ROADWAY. ALL MEDIAN  
CROSSOVERS TO BE SIGNALIZED. DESIGN SPEED TO BE  
DETERMINED BY VDOT.

**ULTIMATE CONDITION:**

**FUNCTIONAL CLASSIFICATION:** PRINCIPAL ARTERIAL

**LANES/RIGHT OF WAY:** SIX LANES/200 FOOT ROW, PLUS LAND DEDICATION  
REQUIRED FOR INTERCHANGES

**DESCRIPTION:** R6R CONTROLLED ACCESS FROM FAIRFAX COUNTY LINE TO  
JUST EAST OF ROUTE 639. MEDIAN CROSSOVERS LOCATED  
AT ROUTE 609 INTERSECTION, AND ONE ADDITIONAL MEDIAN  
CROSSOVER BETWEEN ROUTE 609 AND ROUTE 639. (IF  
FAIRFAX COUNTY PLANS FOR ROUTE 50 TO BECOME LIMITED  
ACCESS BETWEEN LOUDOUN COUNTY LINE AND ROUTE 28,  
LOUDOUN WILL IMPLEMENT LIMITED ACCESS ON THIS PORTION  
OF ROUTE 50. THE TWO MEDIAN BREAKS WILL BE CLOSED  
AND A GRADE-SEPARATED INTERCHANGE WILL BE PLANNED

DESIGN GUIDELINES FOR MAJOR ROADWAYS  
IN THE EASTERN SEGMENT OF THE ROUTE 50 CORRIDOR

FOR THE ROUTE 609/ROUTE 50 AREA. FROM JUST EAST OF ROUTE 639 TO ROUTE 15, LIMITED ACCESS MEDIAN DIVIDED RURAL ARTERIAL WITH GRADE-SEPARATED INTERCHANGES AT 1) ROUTE 639, 2) SOUTH RIDING SPINE ROAD, 3) ROUTE 606, 4) WEST SPINE ROAD. ALL AT-GRADE ACCESS WILL BE TERMINATED. GRADE-SEPARATED INTERCHANGES MAY BE OF CLOVER LEAF, DIAMOND, FOLDED DIAMOND, URBAN DIAMOND DESIGN DEPENDING ON TRAFFIC REQUIREMENTS. DESIGN SPEED TO BE DETERMINED BY VDOT.



## DULLES SOUTH AREA

### ROUTE 50 NORTH COLLECTOR ROAD (EAST SEGMENT)

LOCATION/SEGMENT: DULLES SOUTH AREA/1/2 MILE EAST OF ROUTE 639 TO DULLES AIRPORT BOUNDARY

ULTIMATE CONDITION:  
FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR

LANES/RIGHT OF WAY: FOUR LANES/70' RIGHT-OF-WAY, PLUS LAND DEDICATION MAY BE REQUIRED FOR LEFT AND RIGHT TURN LANES AT MAJOR INTERSECTIONS

DESCRIPTION: U4. LOCAL ACCESS UNDIVIDED URBAN COLLECTOR. LEFT AND RIGHT TURN LANES REQUIRED AT MAJOR INTERSECTIONS. 40 MPH DESIGN SPEED. (IF FAIRFAX COUNTY REPLANS THE ROUTE 50 CORRIDOR FROM ROUTE 28 TO THE LOUDOUN COUNTY LINE AS A LIMITED ACCESS HIGHWAY, THE NORTH COLLECTOR WILL BE EXTENDED ACROSS SAND BRANCH TO CONNECT TO EXISTING WADE DRIVE, AND WILL BE EXTENDED EAST OF EXISTING ROUTE 609 TO THE FAIRFAX COUNTY LINE.)

### ROUTE 50 NORTH COLLECTOR ROAD (WEST SEGMENT)

LOCATION/SEGMENT: DULLES SOUTH AREA/ROUTE 606 TO ROUTE 659 RELOCATED

INTERIM CONDITION:  
FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

LANES/RIGHT-OF-WAY: FOUR LANES/120' ROW

DESCRIPTION: U4R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR. LEFT AND RIGHT TURN LANES REQUIRED AT ALL INTERSECTIONS. 40 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 700 FEET.

ULTIMATE CONDITION:  
FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

LANES/RIGHT-OF-WAY: SIX LANES/120' ROW, PLUS LAND DEDICATION REQUIRED FOR TURN LANES AT INTERSECTIONS

DESCRIPTION: U6R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN WITH COLLECTOR INTERIM CONDITION UPGRADED TO SIX LANES. LEFT AND RIGHT TURN LANES AT ALL INTERSECTIONS. 40 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 700 FEET.

## ROUTE 50 SOUTH COLLECTOR ROAD (TALL CEDARS PARKWAY)

LOCATION/SEGMENT: DULLES SOUTH AREA/ROUTE 639 WEST TO ROUTE 860, APPROXIMATELY 1/2 MILE SOUTH OF ROUTE 50

INTERIM CONDITION:  
FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

LANES/RIGHT OF WAY: FOUR LANES/120' ROW

DESCRIPTION: U4R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR. LEFT AND RIGHT TURN LANES REQUIRED AT ALL INTERSECTIONS. 40 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 700 FEET.

ULTIMATE CONDITION:  
FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

LANES/RIGHT OF WAY: SIX LANES/120' ROW, PLUS LAND DEDICATION REQUIRED FOR TURN LANES AT INTERSECTIONS

DESCRIPTION: U6R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN WITH COLLECTOR INTERIM CONDITION UPGRADED TO SIX LANES. LEFT AND RIGHT TURN LANES AT ALL INTERSECTIONS. 40 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 700 FEET.

## ROUTE 606 EXTENDED/ROUTE 621 (TRI-COUNTY PARKWAY)

LOCATION/SEGMENT: DULLES SOUTH AREA/ROUTE 50 SOUTH TO FAIRFAX COUNTY LINE

INTERIM CONDITION:  
FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

LANES/RIGHT OF WAY: FOUR LANES/120' ROW

DESCRIPTION: U4R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR THAT CLOSELY FOLLOWS EXISTING ROUTE 621 ALIGNMENT. LEFT AND RIGHT TURN LANES REQUIRED AT ALL INTERSECTIONS. 45 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 800 FEET.

ULTIMATE CONDITION:  
FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

LANES/RIGHT OF WAY: SIX LANES/120' ROW, PLUS LAND DEDICATION REQUIRED FOR ROUTE 50 INTERCHANGE AND FOR TURN LANES AT INTERSECTIONS.

DESCRIPTION: U6R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR WITH GRADE SEPARATED INTERCHANGE AT THE

ROUTE 50. ROUTE 50 INTERCHANGE LOCATION WILL AT EXISTING ROUTE 606/ROUTE 50 AT-GRADE INTERSECTION. LEFT AND RIGHT TURN LANES AT ALL AT-GRADE INTERSECTIONS. ALIGNMENT WILL CONNECT TO THE PLANNED ROUTE 28 BYPASS IN FAIRFAX COUNTY. 45 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 800 FEET.

## ROUTE 609 (PLEASANT VALLEY ROAD)

LOCATION/SEGMENT: DULLES SOUTH AREA/ROUTE 50 NORTH COLLECTOR TO ROUTE 50 SOUTH COLLECTOR

EXISTING CONDITION:

FUNCTIONAL CLASSIFICATION: LOCAL SECONDARY ROAD

LANES/RIGHT OF WAY: TWO LANES/ROW VARIES

DESCRIPTION: U4. LOCAL ACCESS UNDIVIDED URBAN COLLECTOR WITH LEFT AND RIGHT TURN LANES REQUIRED AT MAJOR INTERSECTIONS. 40 MPH DESIGN SPEED. (IF FAIRFAX COUNTY REPLANS ROUTE 50 AS A LIMITED ACCESS FACILITY BETWEEN ROUTE 28 AND THE LOUDOUN COUNTY LINE, THE SIGNALIZED MEDIAN BREAK AT THE ROUTE 609/ROUTE 50 INTERSECTION WILL BE REPLACED WITH A GRADE-SEPARATED INTERCHANGE OF A DIAMOND OR FOLDED DIAMOND CONFIGURATION.)

ULTIMATE CONDITION:

FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR

LANES/RIGHT OF WAY: FOUR LANES/70' ROW, PLUS LAND DEDICATION MAY BE REQUIRE FOR LEFT AND RIGHT TURN LANES AT MAJOR INTERSECTIONS

DESCRIPTION: U4. LOCAL ACCESS UNDIVIDED URBAN COLLECTOR WITH LEFT AND RIGHT TURN LANES REQUIRED AT MAJOR INTERSECTIONS. 40 MPH DESIGN SPEED

## ROUTE 620 (BRADDOCK ROAD)

### EXISTING CONDITION:

LOCATION/SEGMENT: DULLES SOUTH AREA/FAIRFAX COUNTY LINE WEST TO ROUTE 15

FUNCTIONAL CLASSIFICATION: LOCAL SECONDARY ROAD

LANES/RIGHT OF WAY: TWO LANES/ROW VARIES

DESCRIPTION: R2. LOCAL ACCESS UNPAVED RURAL SECONDARY ROAD WITH 9-FOOT TRAVEL LANES.

### ULTIMATE CONDITION:

LOCATION/SEGMENT: DULLES SOUTH AREA/FAIRFAX COUNTY LINE WEST TO THE LENA CONNECTOR (WEST DULLES BOULEVARD)

FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

LANES/RIGHT OF WAY: FOUR LANES/90' ROW

DESCRIPTION: U4R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR. LEFT AND RIGHT TURN LANES REQUIRED AT ALL INTERSECTIONS. 45 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 800 FEET.

## ROUTE 659 (BELMONT RIDGE ROAD)

LOCATION/SEGMENT: DULLES SOUTH AREA/NORTH OF ROUTE 772 SOUTH THROUGH THE VILLAGE OF ARCOLA TO ROUTE 50

### EXISTING CONDITION:

FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

LANES/RIGHT OF WAY: TWO LANES/ROW VARIES

DESCRIPTION: R2. LOCAL ACCESS UNDIVIDED PAVED RURAL COLLECTOR WITH 9- TO 10-FOOT TRAVEL LANES. DESIGN SPEED VARIES.

### ULTIMATE CONDITION:

LOCATION/SEGMENT: DULLES SOUTH AREA/NORTH OF ROUTE 772 SOUTH TO ROUTE 621 RELOCATED (ARCOLA BYPASS)

FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR (WHEN ROUTE 659 RELOCATED IS CONSTRUCTED)

LANES/RIGHT OF WAY: FOUR LANES/70' ROW

DESCRIPTION: U4. LOCAL ACCESS UNDIVIDED URBAN COLLECTOR. 40 DESIGN SPEED. SEGMENT SOUTH OF ROUTE 621 BYPASS TO REMAIN IN EXISTING CONDITION WHILE ARCOLA REMAINS RESIDENTIAL. BECOMES LOCAL ACCESS ROAD WHEN ARCOLA

REDEVELOPS COMMERCIALLY. MINIMUM 38' CURB TO CURB  
WIDTH IN 52' RIGHT OF WAY. ROUTE 50 INTERSECTION  
TERMINATED WHEN ROUTE 50 BECOMES LIMITED ACCESS.

## OLD ROUTE 659 (WEST SPINE ROAD)

LOCATION/SEGMENT:	DULLES SOUTH AREA/ROUTE 50 SOUTH TO PRINCE WILLIAM COUNTY
<u>EXISTING CONDITION:</u>	
FUNCTIONAL CLASSIFICATION:	MAJOR COLLECTOR
LANES/RIGHT OF WAY:	TWO LANES/ROW VARIES
DESCRIPTION:	R2. LOCAL ACCESS PAVED RURAL COLLECTOR WITH 8- TO 10-FOOT TRAVEL LANES.
<u>INTERIM CONDITION:</u>	
FUNCTIONAL CLASSIFICATION:	MAJOR COLLECTOR
LANES/RIGHT OF WAY:	FOUR LANES/120' ROW, PLUS LAND DEDICATION FOR ROUTE 50 INTERCHANGE
DESCRIPTION:	U4R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR. ROUTE 50 INTERSECTION WILL BE JUST EAST OF EXISTING ROUTE 659/ROUTE 50 INTERSECTION. CONTINUE SOUTH APPROXIMATELY ALONG CURRENT ROUTE 659 ALIGNMENT TO PRINCE WILLIAM COUNTY. LEFT AND RIGHT TURN LANES REQUIRED AT ALL AT-GRADE INTERSECTIONS. 45 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 800 FEET.
<u>ULTIMATE CONDITION:</u>	
FUNCTIONAL CLASSIFICATION:	MAJOR COLLECTOR
LANES/RIGHT OF WAY:	SIX LANES/120' ROW, PLUS LAND DEDICATION FOR ROUTE 50 INTERCHANGE AND TURN LANES AT INTERSECTIONS.
DESCRIPTION:	U6R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR UPGRADED TO SIX LANES WITH GRADE SEPARATED INTERCHANGE AT ROUTE 50. LEFT AND RIGHT TURN LANES AT ALL AT-GRADE INTERSECTIONS. 45 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 800 FEET.

## SOUTH RIDING BOULEVARD

LOCATION/SEGMENT: DULLES SOUTH AREA/ROUTE 50 NORTH COLLECTOR SOUTH TO ROUTE 50 SOUTH COLLECTOR ROAD (SOUTH RIDING)

EXISTING CONDITION:

FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR

LANES/RIGHT OF WAY: FOUR LANES/90' ROW, PLUS LAND DEDICATION FOR TURN LANES AT INTERSECTIONS

DESCRIPTION: U4R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR. LEFT AND RIGHT TURN LANES REQUIRED AT ALL INTERSECTIONS. 40 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 700 FEET.

ULTIMATE CONDITION:

FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR

LANES/RIGHT OF WAY: FOUR LANES/90' ROW, PLUS LAND DEDICATION REQUIRED FOR TURN LANES AT INTERSECTIONS AND ROUTE 50 INTERCHANGE

DESCRIPTION: U4R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR WITH GRADE SEPARATED INTERCHANGE AT ROUTE 50. LEFT AND RIGHT TURN LANES AT ALL AT-GRADE INTERSECTIONS. 40 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 700 FEET.

## WEST SPINE ROAD

LOCATION/SEGMENT: DULLES SOUTH AREA/ ROUTE 606 AND LOUDOUN PKWY INTERSECTION (NEAR EXISTING ROUTE 842/ROUTE 606 INTERSECTION) SOUTH/WEST TO ROUTE 50

INTERIM CONDITION:

FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

LANES/RIGHT OF WAY: FOUR LANES/120' ROW

DESCRIPTION: U4R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR WITH LEFT AND RIGHT TURN LANES REQUIRED AT ALL INTERSECTIONS. ROUTE 50 INTERSECTION WILL BE JUST EAST OF EXISTING ROUTE 659/ROUTE 50 INTERSECTION. 50 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 900 FEET.

ULTIMATE CONDITION:

FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

LANES/RIGHT OF WAY: SIX LANES/120' ROW, PLUS LAND DEDICATION FOR ROUTE 50 INTERCHANGE AND TURN LANES AT INTERSECTIONS.

DESCRIPTION: U6R. CONTROLLED ACCESS MEDIAN DIVIDED URBAN COLLECTOR UPGRADED TO SIX LANES WITH GRADE SEPARATED INTERCHANGE AT ROUTE 50. ROUTE 50 INTERCHANGE WILL BE JUST EAST OF EXISTING ROUTE 659/ROUTE 50 INTERSECTION. LEFT AND RIGHT TURN LANES AT ALL INTERSECTIONS. 50 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 900 FEET.

## CUB RUN COLLECTOR ROAD

LOCATION/SEGMENT: ROUTE 50 SOUTH COLLECTOR ROAD TO ROUTE 609 (PLEASANT VALLEY ROAD).

FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR

LANES/RIGHT OF WAY: FOUR LANES/70' ROW

DESCRIPTION: U4. LOCAL ACCESS UNDIVIDED URBAN COLLECTOR WITH LEFT AND RIGHT TURN LANES REQUIRED AT MAJOR INTERSECTIONS. 40 MPH DESIGN SPEED.

## ROUTE 639 (WILLARD ROAD)

LOCATION/SEGMENT: DULLES SOUTH AREA/ROUTE 50 NORTH COLLECTOR SOUTH TO ROUTE 50.

EXISTING CONDITION:

FUNCTIONAL CLASSIFICATION: SECONDARY ROAD

LANES/RIGHT OF WAY: TWO LANES/ROW VARIES

DESCRIPTION: R2. LOCAL ACCESS UNDIVIDED SECONDARY ROAD. LEFT AND RIGHT TURN LANES REQUIRED AT ALL INTERSECTIONS. 40 MPH DESIGN SPEED AND DESIRABLE MEDIAN CROSSOVER SPACING 700 FEET.

INTERIM CONDITION:

FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR

LANES/RIGHT OF WAY: FOUR LANES/70' ROW

DESCRIPTION: U4. LOCAL ACCESS UNDIVIDED URBAN COLLECTOR WITH LEFT AND RIGHT TURN LANES REQUIRED AT MAJOR INTERSECTIONS. 40 MPH DESIGN SPEED.

ULTIMATE CONDITION:

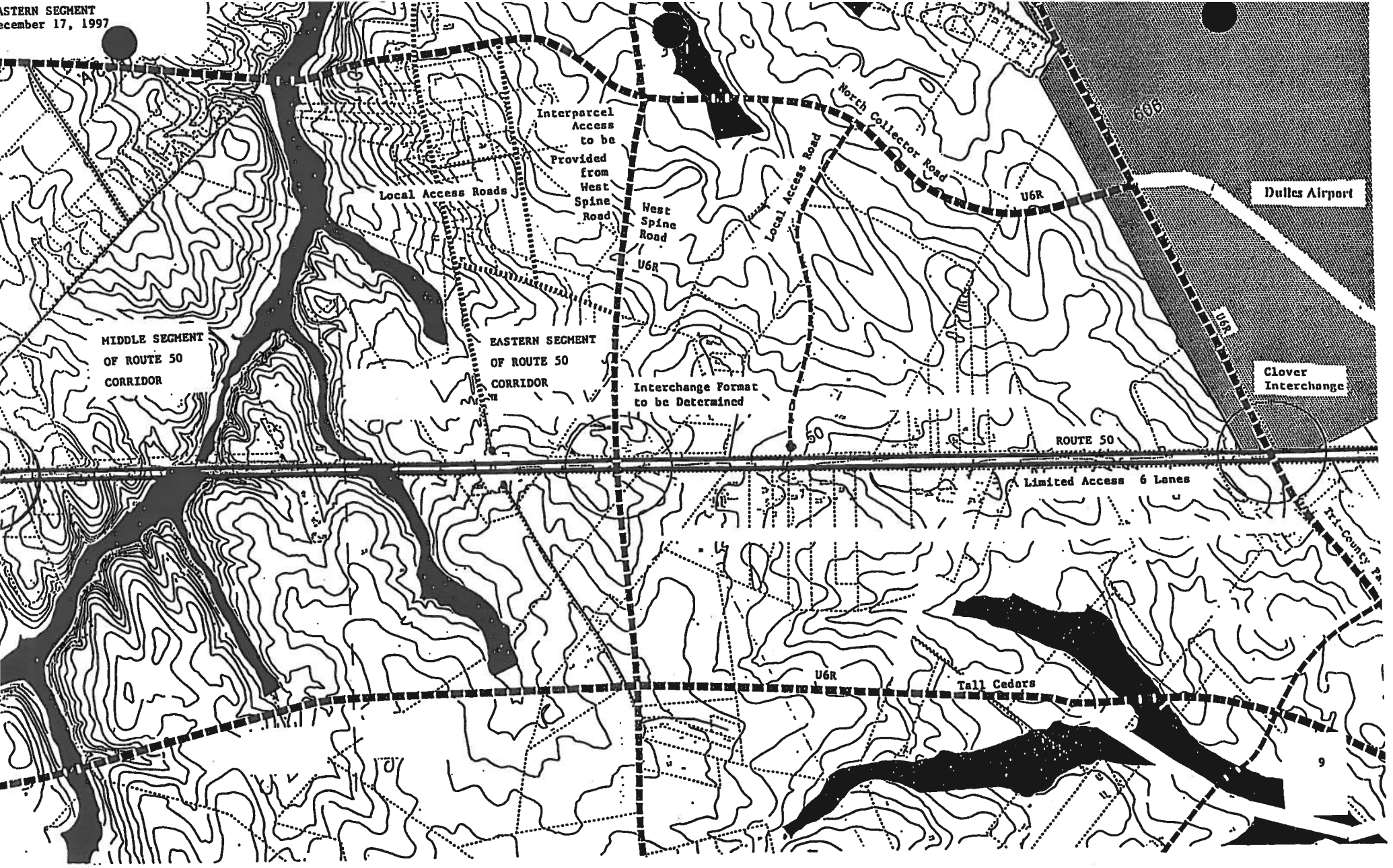
FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR

LANES/RIGHT OF WAY: U4. LOCAL ACCESS UNDIVIDED URBAN COLLECTOR WITH LEFT AND RIGHT TURN LANES REQUIRED AT MAJOR INTERSECTIONS.

ALIGNMENT SHIFTED TO THE EAST TO MINIMIZE IMPACT OF  
EXISTING PARCELS ALONG EAST SIDE OF EXISTING ALIGNMENT  
OF ROUTE 639 WITH THE CONSTRUCTION OF A GRADE  
SEPARATED URBAN DIAMOND INTERCHANGE ROUTE 50 AND THE  
SOUTH COLLECTOR ROAD. 40 MPH DESIGN SPEED.

C:\MSOFFICE\WINWORD\OFFICE\TRANSP\ROUTE50.DOC





MIDDLE SEGMENT  
OF ROUTE 50  
CORRIDOR

EASTERN SEGMENT  
OF ROUTE 50  
CORRIDOR

Interchange Format  
to be Determined

ROUTE 50  
Limited Access 6 Lanes

Dulles Airport

Clover  
Interchange

Tall Cedars

**ROUTE 50 CORRIDOR STUDY:  
EASTERN SEGMENT  
December 19, 1997**

Dulles Airport

Cul-de-Sac: MWA will have access to the North Collector Road at this point

North Collector Road to run along property line north of interchange

limited access

Diamond Interchange

CLI Access Road to be located in this area as part of development process

Median Crossover Location Zone for Controlled Access

Potential Urban Drive Interchange

Defender Drive

South Riding Boulevard Interchange to be as preferred. Defender Drive platted/concept plan location to be maintained

South Riding Boulevard

Tall Cedars

South Collector Road

South Collector Road

Final Alignment to be Determined as part of Development Review Process

Route 742

2 Lane Road

Edgewater Street

