Route 29 Corridor Development Study
(Combined Phases II/III)
North Carolina to I-64

Existing Conditions Report

Virginia Department of Transportation — 2003

U.S. Route 29 Corridor Development Study

Combined Phases II and III

From the North Carolina State Line to I-64 in Charlottesville, VA

Existing Conditions Report

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2003

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Chapter 1 – Introduction

The objective of the Route 29 Corridor Development Study is to evaluate all modes of transportation within the corridor and to develop both short- and long-term recommendations to preserve and enhance the transportation resources in this important corridor. The importance of U.S. Route 29 was recognized in the Intermodal Surface Transportation and Efficiency Act (ISTEA) passed by the United States Congress in 1991. In ISTEA, Congress designated the 240 miles of Route 29 from Greensboro, North Carolina to the District of Columbia as a high priority corridor of national significance and directed that comprehensive transportation studies of the corridor be performed. The designation of these high priority corridors was based upon the findings of Congress that:

- The construction of the Interstate Highway System connected the major population centers of the nation and greatly enhanced the economic growth in the United States;
- Many regions of the nation are not now adequately served by the Interstate System or comparable highways and require further highway development in order to serve the travel and economic development needs of the region; and,
- The development of transportation corridors is the most efficient and effective way of integrating regions and improving efficiency and safety of commerce and travel and further promoting economic development.

More recent legislation, the 1998 Transportation Equity Act for the 21st Century (TEA-21), renewed the commitment to completion of important transportation projects by increasing allocations of federal funds to the states. This national legislation affirmed the long-held recognition of Route 29 by the Virginia Department of Transportation (VDOT) as a vitally important principal arterial highway through central Virginia.

For purposes of study, the Route 29 Corridor in Virginia was divided into four sections. The first section, extending from Warrenton to Interstate 66, was studied as part of transportation needs in the I-66 Corridor. The second section extends from Charlottesville to Warrenton, and was studied in the Route 29 Corridor Development Study (Phase I). This Phase I study was completed in the Fall of 1996. The third and fourth sections extend from Lynchburg to Charlottesville and Danville to Lynchburg, respectively. Both of these sections are included in this current study, which is formally entitled the Route 29 Corridor Development Study (Combined Phases II/III).

The background, methodologies and findings of this study are documented in three separate reports. This report, the first of the three, describes the existing transportation system and its operations, as well as current land uses, socioeconomic conditions, and environmental constraints. The second report, *Route 29 Corridor Development Study (Combined Phases II/III) Technical Report*, describes the development of a statement of purpose and need for transportation improvements, the development of transportation demand forecasts, and the development and refinement of various improvement alternatives. The third report, *Route 29 Corridor Development Study (Combined Phases II/III) Recommended Transportation Concept*, describes the final study recommendations for all modes of travel in the corridor.

1.1 Study Area, Study Window, and Study Corridor

This study encompasses the Route 29 Corridor from the North Carolina line to I-64 in Charlottesville (shown in Exhibit 1). Because transportation provides both regional and localized benefits and impacts, the analysis performed for this study was performed at several levels. At the regional level, a **study area** was defined which encompasses five counties (Pittsylvania, Campbell, Amherst, Nelson, and Albemarle) and three cities (Danville, Lynchburg, and Charlottesville). The study area was used primarily for determining the generalized economic benefits and impacts, which accrue at a county or regional scale.

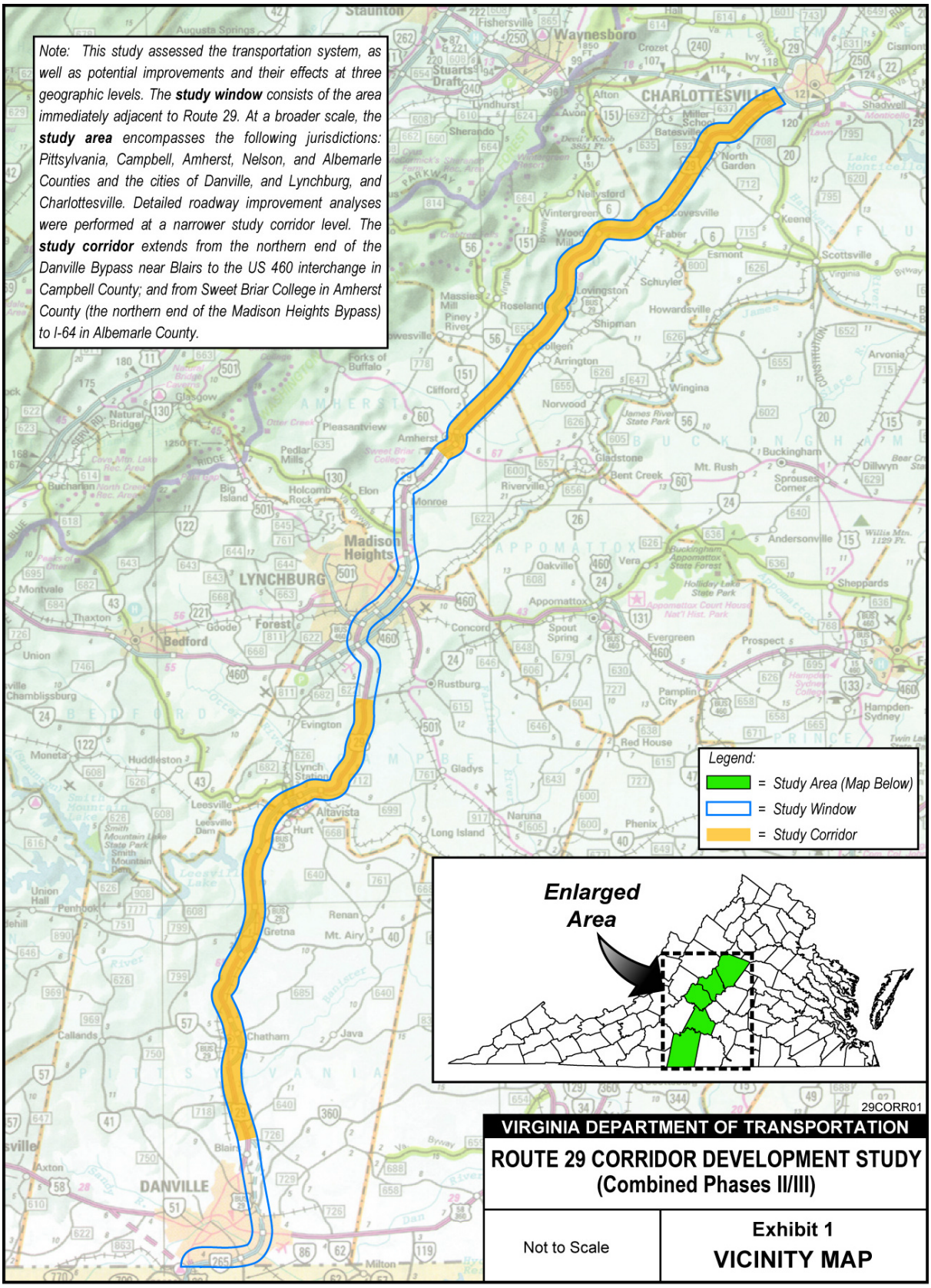
Many transportation benefits, such as changes in traffic flow resulting from roadway improvements or improvements to other modes of travel (such as rail), would occur at a more localized level. Similarly, the impacts of these improvements would also be felt at this localized level. A **study window** was, therefore, also defined and used for much of the detailed study. This study window was defined as a mile-wide corridor centered on Route 29 (½ mile on each side of the highway). For most of the detailed roadway analysis, this study window was further refined to exclude areas in the immediate vicinity of Danville and Lynchburg. These areas were excluded for the detailed operational analysis because limited access bypasses for Route 29 are either in operation or planned around each of these cities. Once these planned bypasses are constructed to match current plans, minimal additional environmental impacts and no further changes in access were expected on these sections of Route 29 based on this study. These sections of Route 29 were, therefore, excluded from detailed data collection. The detailed traffic, engineering, environmental, and socioeconomic impact analyses therefore cover a **study corridor**, defined as extending from the northern end of the Danville Bypass, near Blairs, to the Route 460 interchange in Campbell County, and from Sweet Briar College, in Amherst County (the northern end of the programmed Lynchburg/Madison Heights Bypass), to I-64 in Albemarle County.

While the areas around Danville and Lynchburg were excluded from detailed data collection and analysis, the Danville and Lynchburg/Madison Heights Bypasses are included within this study in terms of overall recommendations. Analysis necessary to support recommendations for these bypass segments was performed as part of this study.

1.2 Report Data

The information contained in this report was developed based on data collection and analysis activities conducted in 1997 and 1998. This data is summarized in the following five chapters:

Chapter 2: Transportation System Physical Features
This chapter describes the physical aspects of the existing transportation system in the Route 29 Corridor. The geometrics of existing Route 29 (number of lanes, condition of shoulders, numbers of entrances and crossovers, etc.) is described. This chapter includes information on other transportation facilities in the corridor including rail, airports, as well as bicycle and pedestrian facilities. For each of these modes of travel, this chapter also provides information on existing travel demand, as well as information on existing operations and deficiencies.


Note: This study assessed the transportation system, as well as potential improvements and their effects at three geographic levels. The study window consists of the area immediately adjacent to Route 29. At a broader scale, the study area encompasses the following jurisdictions: Pittsylvania, Campbell, Amherst, Nelson, and Albemarle Counties and the cities of Danville, and Lynchburg, and Charlottesville. Detailed roadway improvement analyses were performed at a narrower study corridor level. The study corridor extends from the northern end of the Danville Bypass near Blairs to the US 460 interchange in Campbell County; and from Sweet Briar College in Amherst County (the northern end of the Madison Heights Bypass) to I-64 in Albemarle County.
Legend:
= Study Area (Map Below)
= Study Window
= Study Corridor
Enlarged Area
29CORR01
VIRGINIA DEPARTMENT OF TRANSPORTATION
ROUTE 29 CORRIDOR DEVELOPMENT STUDY
(Combined Phases II/III)
Not to Scale
Exhibit 1
VICINITY MAP

Chapter 3: Corridor Land Use and Demographics
The study area includes a mix of urban and rural land uses, including commercial, residential, industrial, institutional, agricultural, historical, recreational, and forestal. Population densities and characteristics vary across the study area — from the urban centers of Danville, Lynchburg, and Charlottesville, to the sparsely populated rural regions of Nelson County. This chapter describes the land uses and demographics of the localities within the study area and then focuses in greater detail on the study corridor.

Chapter 4: Existing Economic Conditions
Economic conditions include the existing industrial and commercial bases that comprise employment, business, and shopping opportunities in the study area. This chapter describes these conditions, presents employment statistics, and discusses the relationships between transportation and economic development.

Chapter 5: Environmental and Socio-Economic Features and Constraints
Environmental constraints are features of the natural or manmade environment that might pose limitations on implementing certain transportation improvements. They include those natural resources protected by law, such as wetlands and endangered species, and sensitive human resources, such as residential areas and historic sites. This chapter describes these features within the study corridor.

Chapter 6: Engineering Constraints
Engineering constraints, such as utilities, railroad lines, and major physical features and described in this chapter.

Chapter 2 – Transportation System Physical Features

Within the study area for the Route 29 Corridor Development Study (Combined Phases II/III), the transportation system includes 134 roadway miles of Route 29, 132 miles of railroad mainline, three train stations, four major airports, three intercity bus stations, and numerous pedestrian and bicycle facilities which are concentrated in the urban areas of Danville, Lynchburg, and Charlottesville. This chapter provides detail on this existing transportation system.

2.1 Roadway

Route 29 is classified as a principal arterial. One of the major functions of principal arterials is to provide transportation service for regional, statewide, and interstate travel, and movements between major urban areas. Route 29 is the only multi-lane north-south highway through central Virginia that provides for this longer, interstate travel. It connects the towns and cities between Greensboro, North Carolina and Washington, DC, including Danville, Lynchburg, Charlottesville, Culpeper, Warrenton, Manassas, and other, smaller communities. The only other multi-lane north-south highways through Virginia are I-95 to the east and I-81 to the west, on the other side of the Blue Ridge Mountains. At Greensboro to the south, Route 29 provides connections to major interstate highways such as I-40, I-85, and US 220. To the north, Route 29 provides connections to the National Capital Region and points north via I-66/I-81 and I-95 north of Washington.

Route 29 also connects with other principal arterial and interstate routes in Virginia, such as US 58, US 460, US 60, I-64, US 33, US 522, VA 3, US 17, and I-66. Considered together, these routes comprise the major state and regional highway network in central Virginia, providing vital arteries for the movement of people and goods both within and through the state.

Within the study area, Route 29 connects with many secondary roads and provides the central artery for collecting and distributing traffic throughout the region. It is the principal commuter route for workers traveling to employment centers along and near the corridor. The connecting secondary roads provide access to the farms, rural residential areas, and tourist attractions throughout the counties within the corridor.

Along with its role in carrying longer distance traffic, Route 29 serves local traffic generated by adjacent land uses. It is the means by which motorists get to some of the primary retail and business areas within each county. The high number of driveways and side roads along some sections of Route 29 (discussed in more detail below) illustrates this local role for Route 29.

2.1.1 Physical Characteristics

Throughout its length in the study corridor, Route 29 is a four-lane divided highway. For most of the corridor, it functions as a multi-lane rural highway with a posted speed limit of 55 miles per hour. In and near the urbanized areas of Danville, Lynchburg, and Charlottesville, the road serves more as an arterial facility with multiple access points to

adjacent commercial, industrial, and residential land uses. In these areas, the speed limit is reduced to either 45 or 35 miles per hour. Depending on the area, access to and from Route 29 is provided at both at-grade intersections with stop sign or signal control, or via grade-separated interchanges. For much of the study area, Route 29 was widened in the 1970's from two to four lanes by constructing two new lanes parallel to the older ones. These new lanes were constructed to higher standards than the older ones and are generally straighter (both vertically and horizontally) with wider travel lanes and shoulders. Depending on where you are in the corridor, therefore, either the northbound or southbound lanes of Route 29 more closely meet current roadway standards.

A detailed inventory of Route 29 was performed as part of this study. The VDOT-maintained roadway inventory system (called SHiPS) was used as the starting point. The study inventory identified roadway geometric features, including intersection and interchange controls and features, as well as driveway and crossover locations. Areas with potential safety concerns such as limited sight distance were also identified at a preliminary planning level through a windshield survey. As indicated in Chapter 1, this inventory focussed on the study corridor (excluding areas around Danville and Lynchburg with existing or planned bypasses).

For purposes of analysis, the study corridor was divided into 135 segments with endpoints defined by major intersections or interchanges where traffic counts were performed. Unique identifying numbers (node numbers) were developed for each endpoint so that the segments could be described using the node numbers (shown in Exhibit 2). These node numbers were also used in the development of the computerized transportation model for the corridor (described in the *Route 29 Corridor Development Study (Combined Phases II/III) Technical Report*). For this discussion, the segments defined by these node numbers are termed "analysis segments", and the endpoint intersections (or node points) are termed "analysis intersections". Detailed information on each analysis segment is included on the segment data sheets included in Appendix A.

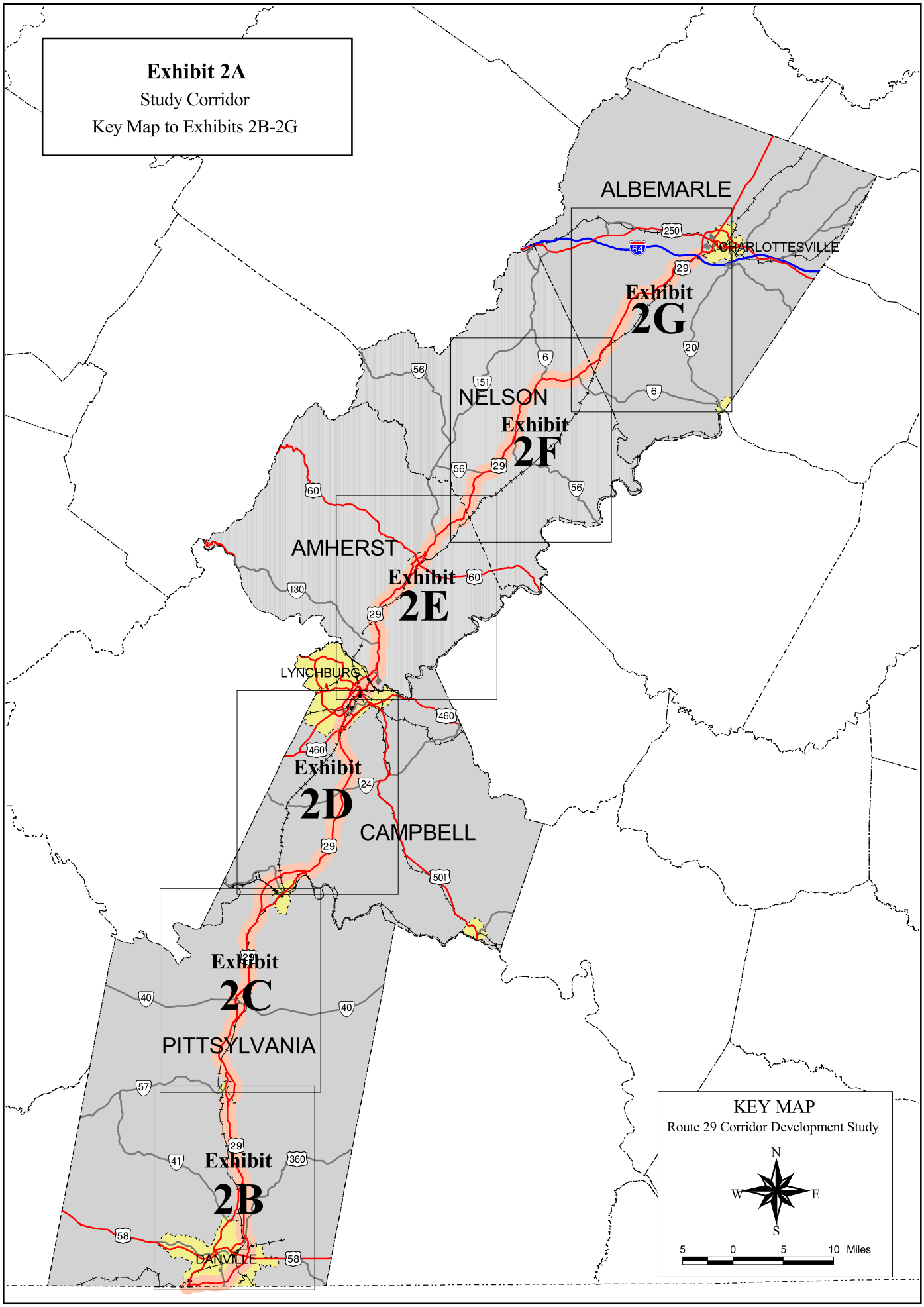


Exhibit 2A
Study Corridor
Key Map to Exhibits 2B-2G
ALBEMARLE
CHARLOTTESVILLE
Exhibit 2G
NELSON
Exhibit 2F
AMHERST
Exhibit 2E
LYNCHBURG
Exhibit 2D
CAMPBELL
Exhibit 2C
PITTSYLVANIA
Exhibit 2B
DANVILLE
KEY MAP
Route 29 Corridor Development Study
N
W
E
S
5 0 5 10 Miles

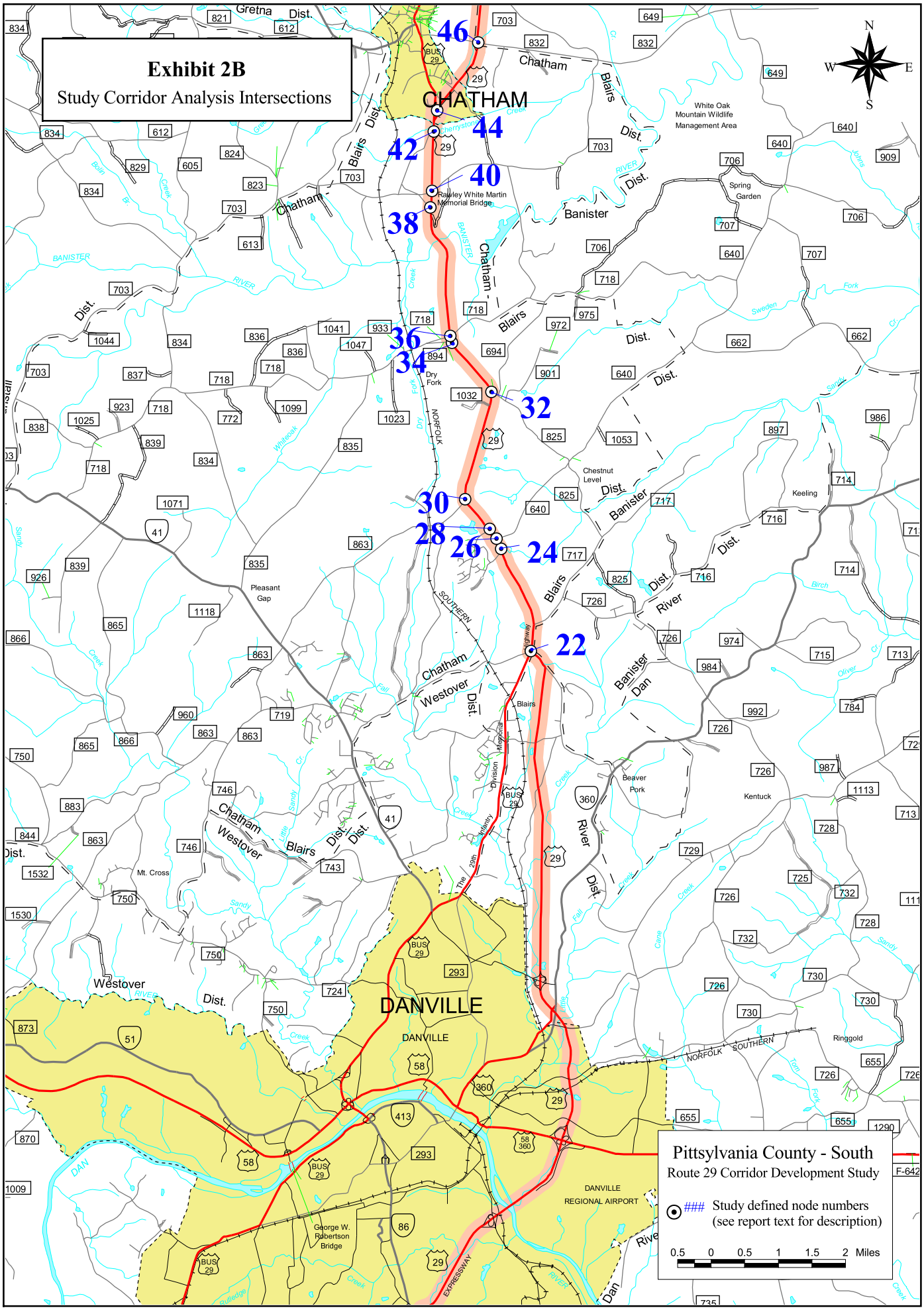


Exhibit 2B
Study Corridor Analysis Intersections
CHATHAM
DANVILLE
Pittsylvania County - South
Route 29 Corridor Development Study
Study defined node numbers
(see report text for description)
0.5 0 0.5 1 1.5 2 Miles
46
44
42
40
38
36
34
32
30
28
26
24
22
Gretna Dist.
Chatham
Blairs Dist.
White Oak Mountain Wildlife Management Area
Spring Garden
Banister
Ralney White Martin Memorial Bridge
Chatham - Blairs Dist.
Dry Fork
Chestnut Level
Keeling
Pleasant Gap
Chatham Westover Dist.
Blairs
Banister Dan River Dist.
Beaver Pork
Kentuck
Mt. Cross
Westover Dist.
DANVILLE REGIONAL AIRPORT
George W. Robertson Bridge
Ringgold
NORFOLK SOUTHERN
EXPRESSWAY

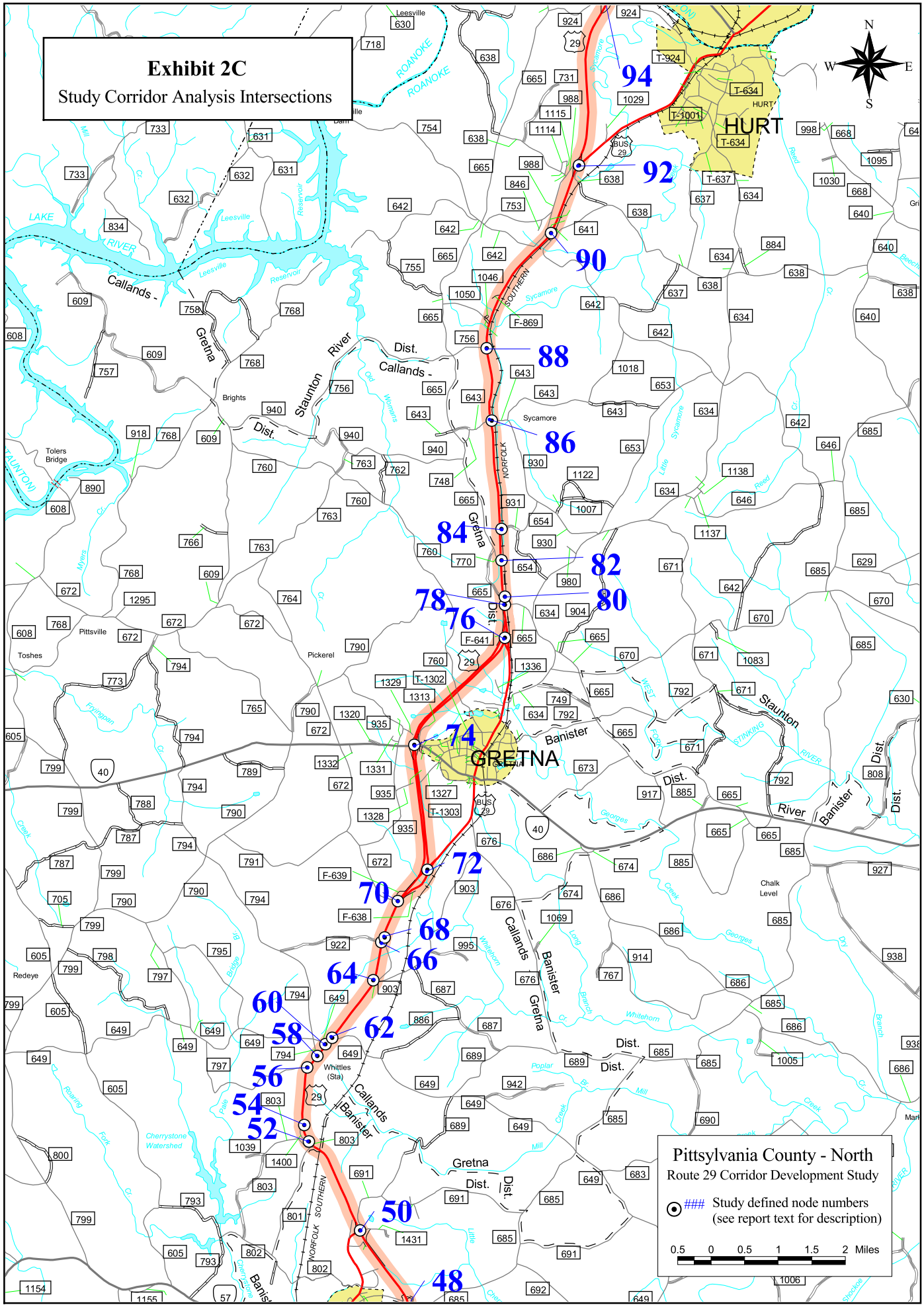


Exhibit 2C
Study Corridor Analysis Intersections
Pittsylvania County - North
Route 29 Corridor Development Study
Study defined node numbers
(see report text for description)
0.5 0 0.5 1 1.5 2 Miles
HURT
GRETNA
Callands - Gretna
Gretna - Callands
Banister River
Staunton River
Dist.
Sycamore
Brights
Tolers Bridge
Pittsville
Toshes
Pickerel
Redeye
Chalk Level
Whittles (Sta)
Cherrystone Watershed
Leesville Reservoir
LAKE
RIVER
ROANOKE
SOUTHERN
NORFOLK
94
92
90
88
86
84
82
80
78
76
74
72
70
68
66
64
62
60
58
56
54
52
50
48

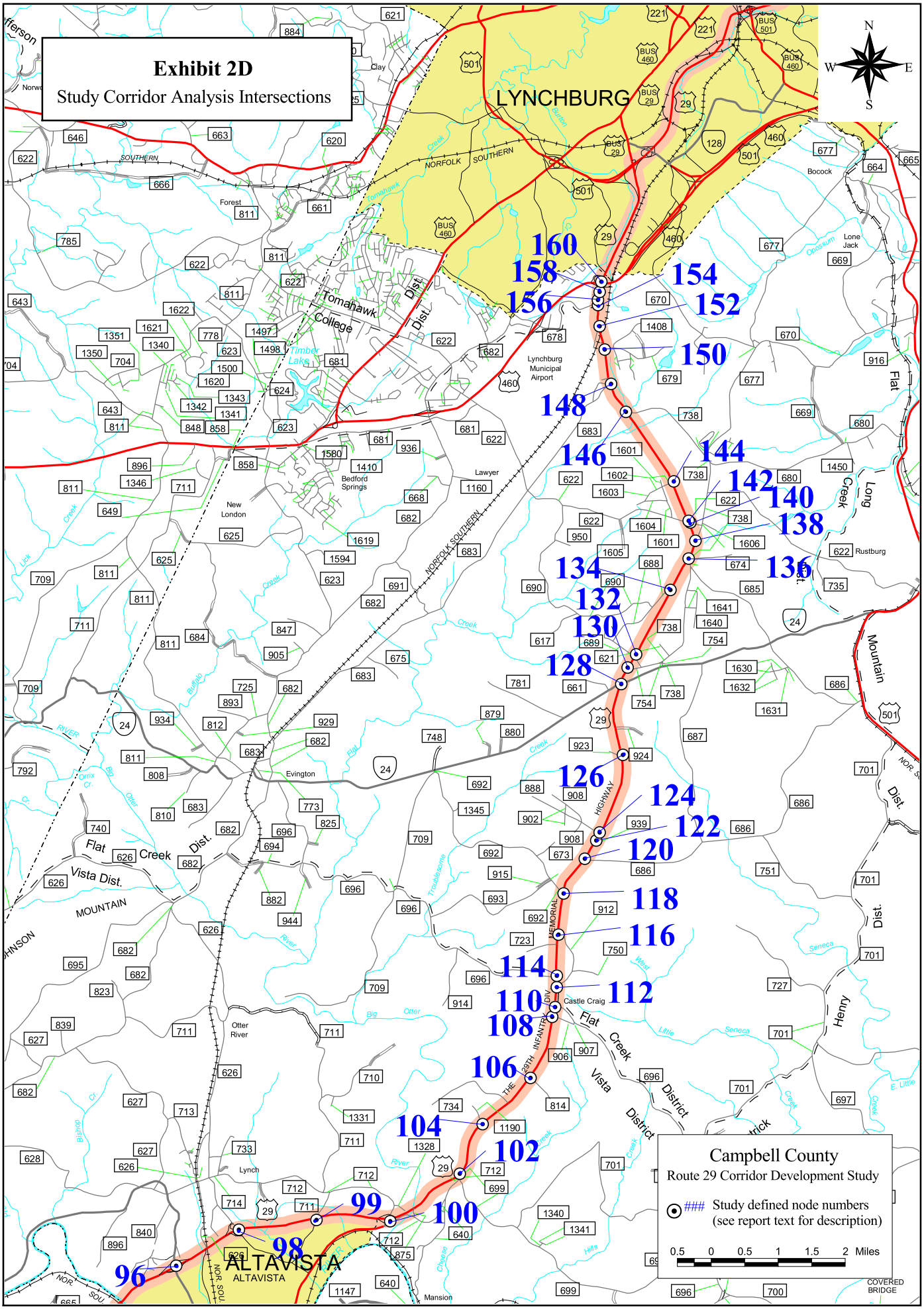


Exhibit 2D
Study Corridor Analysis Intersections
LYNCHBURG
ALTAVISTA
Campbell County
Route 29 Corridor Development Study
Study defined node numbers
(see report text for description)
0.5 0 0.5 1 1.5 2 Miles
160
158
156
154
152
150
148
146
144
142
140
138
136
134
132
130
128
126
124
122
120
118
116
114
112
110
108
106
104
102
100
99
98
96

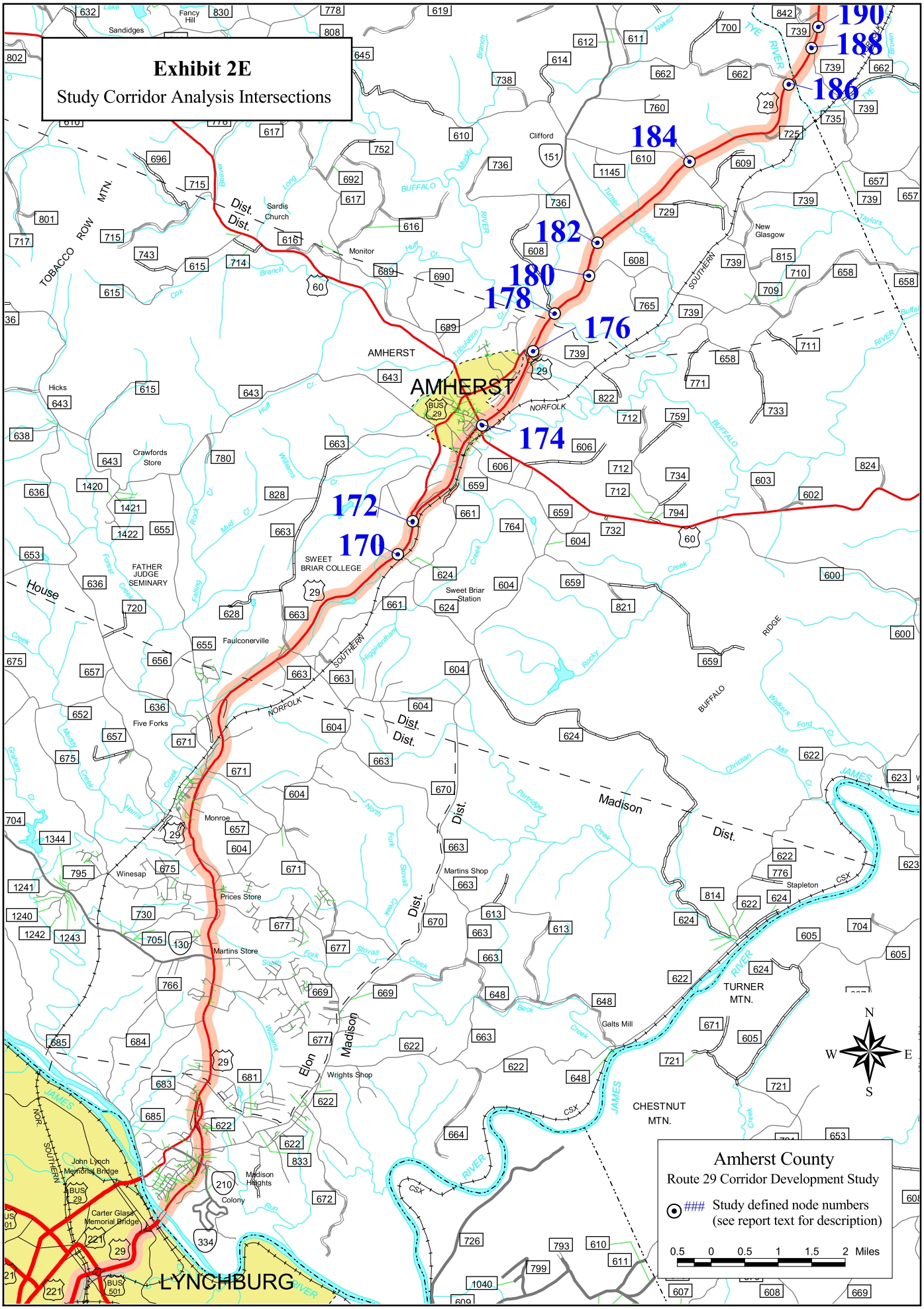


Exhibit 2E
Study Corridor Analysis Intersections
190
188
186
184
182
180
178
176
174
172
170
AMHERST
LYNCHBURG
Clifford
New Glasgow
Monitor
Sardis Church
Fancy Hill
Sandidges
Hicks
Crawfords Store
FATHER JUDGE SEMINARY
SWEET BRIAR COLLEGE
Sweet Briar Station
Faulconerville
Five Forks
Monroe
Winesap
Prices Store
Martins Store
Wrights Shop
Madison Heights
Colony
John Lynch Memorial Bridge
Carter Glass Memorial Bridge
Stapleton
Galts Mill
TURNER MTN.
CHESTNUT MTN.
TOBACCO ROW MTN.
RIDGE
BUFFALO
SOUTHERN
NORFOLK
Dist.
Madison
Elon
JAMES RIVER
TYE RIVER
Amherst County
Route 29 Corridor Development Study
Study defined node numbers (see report text for description)
0.5 0 0.5 1 1.5 2 Miles
N
W
E
S

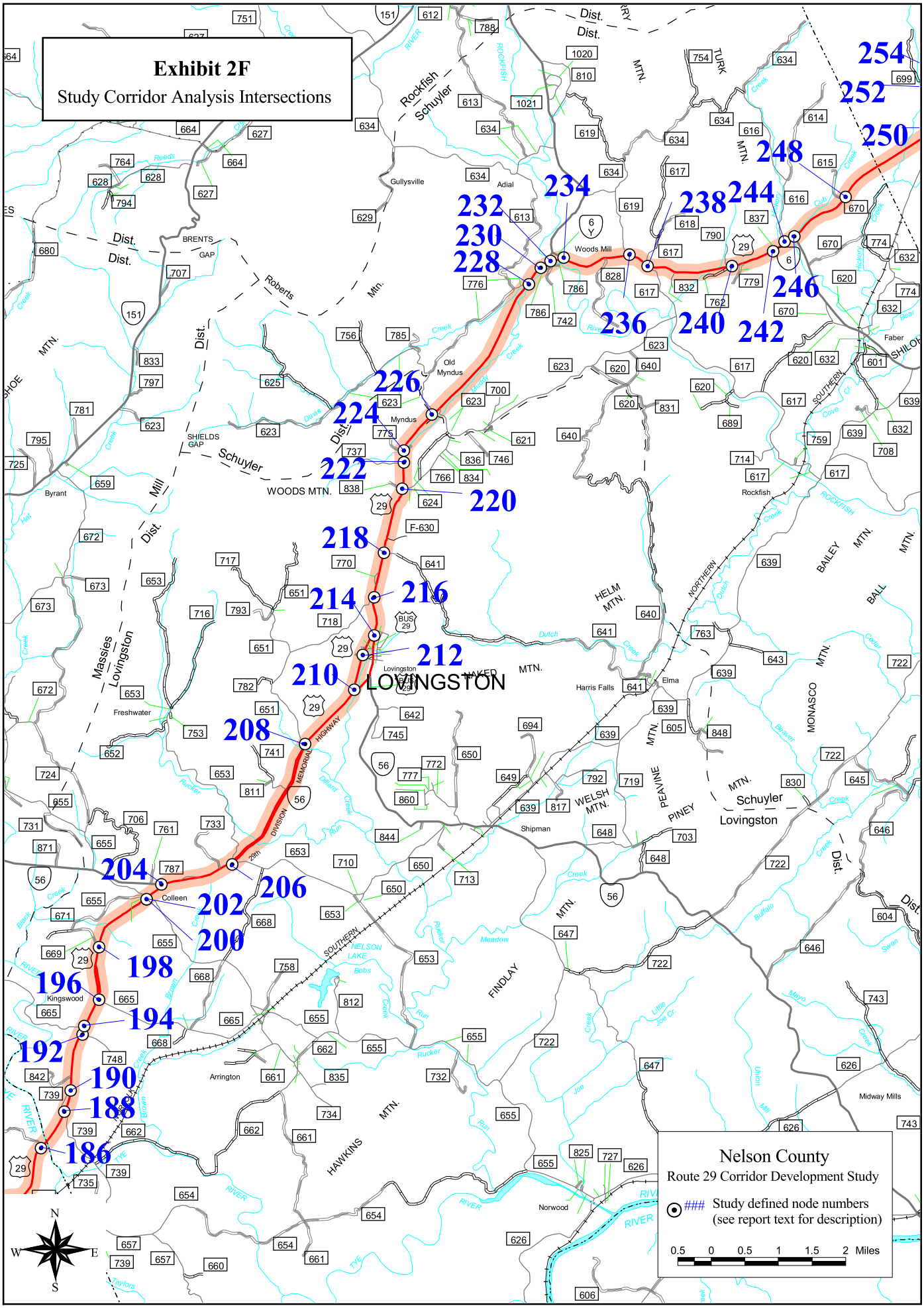


Exhibit 2F
Study Corridor Analysis Intersections
LOVINGSTON
Lovingston
Schuyler
Woods Mill
Gullysville
Adial
Old Myndus
Myndus
WOODS MTN.
Rockfish
Shipman
Harris Falls
Elma
Freshwater
Colleen
Kingswood
Arrington
Norwood
Midway Mills
Faber
Byrant
SHIELDS GAP
BRENTS GAP
Roberts Mtn.
Rockfish Schuyler Dist.
Massies Mill Dist.
Dist.
MTN.
HELM MTN.
WELSH MTN.
PEAVINE
PINEY
FINDLAY
HAWKINS
BAILEY
BALL
MONASCO
HIGHWAY
MEMORIAL
DIVISION
NELSON LAKE
SOUTHERN
NORTHERN
ROCKFISH
RIVER
Creek
Run
Nelson County
Route 29 Corridor Development Study
Study defined node numbers
(see report text for description)
0.5 0 0.5 1 1.5 2 Miles
N
W
E
S

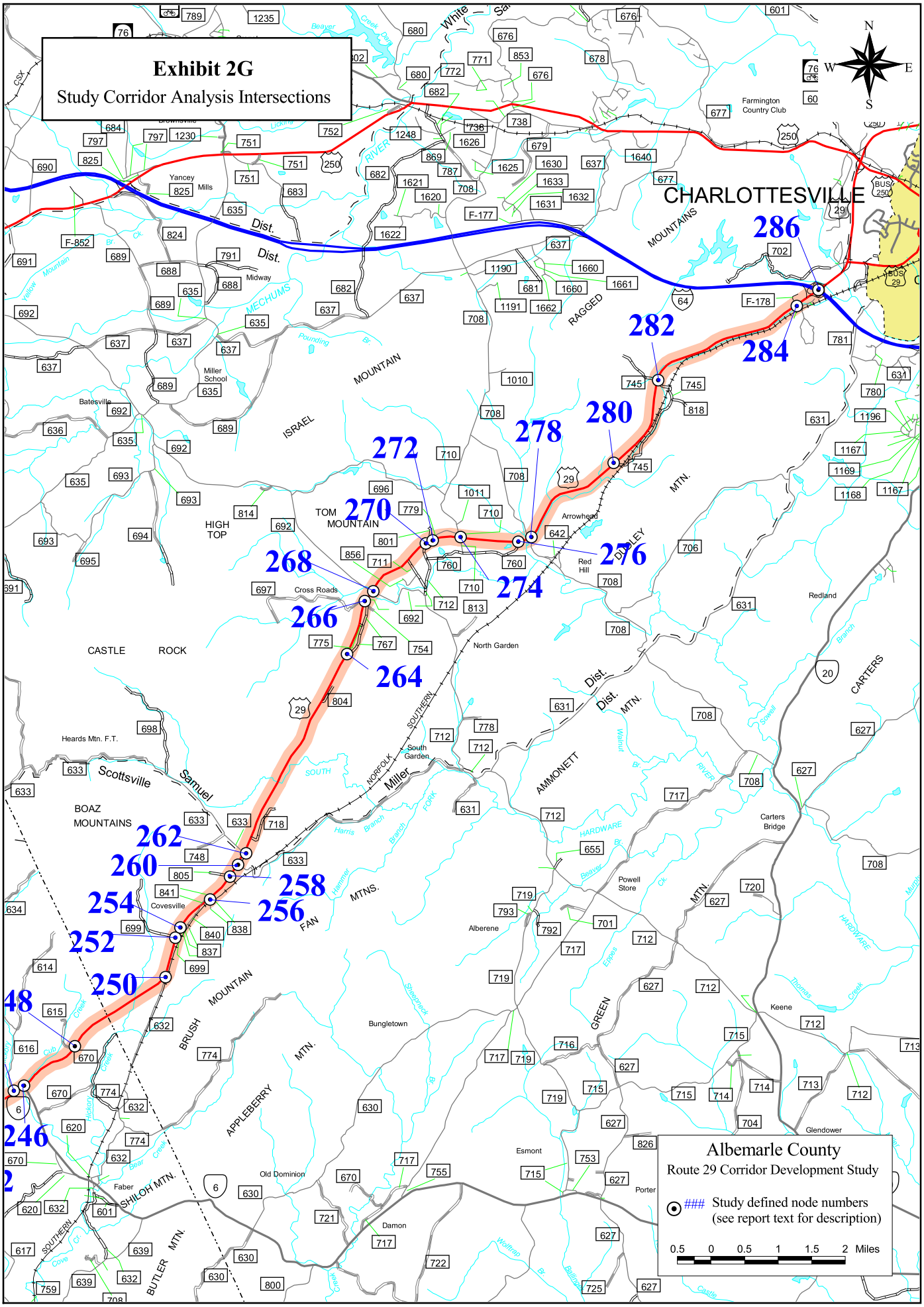


Exhibit 2G
Study Corridor Analysis Intersections
CHARLOTTESVILLE
MOUNTAINS
Farmington Country Club
Yancey Mills
Midway
MECHUMS
RIVER
Dist.
Miller School
Batesville
ISRAEL
MOUNTAIN
RAGGED
282
284
286
280
278
272
270
276
274
268
266
264
262
260
258
256
254
252
250
248
246
TOM MOUNTAIN
HIGH TOP
Arrowhead
Red Hill
DUDLEY
MTN.
Redland
Cross Roads
CASTLE ROCK
North Garden
South Garden
SOUTHERN
NORFOLK
Miller
Scottsville
Samuel
BOAZ MOUNTAINS
Heards Mtn. F.T.
Covesville
FAN
MTNS.
Alberene
AMMONETT
Carters Bridge
HARDWARE
Powell Store
CARTERS
Bungletown
BRUSH MOUNTAIN
APPLEBERRY MTN.
GREEN
Keene
Glendower
Esmont
Porter
Old Dominion
Faber
SHILOH MTN.
BUTLER MTN.
Damon
Albemarle County
Route 29 Corridor Development Study
Study defined node numbers
(see report text for description)
0.5 0 0.5 1 1.5 2 Miles
N
S
E
W

The physical characteristics of existing Route 29 are summarized by county in Exhibit 3 and by analysis segment in Exhibit 4.

Exhibit 3 – Summary of Route 29 Physical Features By Jurisdiction

Existing Conditions

Jurisdiction	Miles of Route 29 [1]	Number of Side Access Points [2]	Number of Median Breaks
Pittsylvania County [3]	31	393	67
Campbell County	21	617	68
Amherst County [4]	10	86	19
Nelson County	23	319	60
Albemarle County	15	214	44
TOTALS	**100**	**1629**	**258**

[1] – Portion within the study corridor (excludes existing or planned bypass areas around Danville and Lynchburg); see limits in Notes 3 and 4 below.
[2] – Includes roads and driveways on both sides of Route 29. For example, a road that fully crosses Route 29, rather than forming a T-intersection, would represent two side access points (one for the northbound lanes and one for the southbound lanes).
[3] – From Route 29 Business North at Blairs to Campbell County.
[4] – From Route 624 at Sweetbrier to Nelson County.

One of the key roadway features that affect the functionality, capacity, and safety of any roadway is the number and type of connections to other local and regional roadways. As indicated above, preliminary reconnaissance for this study identified 135 intersecting roadways that carry more than very localized traffic (i.e., serving more than a handful of homes). Over the course of the study, one new interchange opened (Route 711 in Altavista), and several access points were closed (just south of Route 460 as part of the construction of the new Route 29/Route 460 interchange at the south end of Lynchburg). A final listing of 128 intersecting roadways (analysis intersections) is shown in Exhibit 5 (this table does not show intersecting roadways on Route 29 in the Danville region south of Blairs and in the Lynchburg region between Route 460 and Route 624 at Sweebrier). Of these 128 analysis intersections, 18 are grade-separated interchanges, 6 are signalized at-grade intersections, and the remaining 104 are unsignalized intersections.

Many sections of Route 29, particularly the older lanes that were constructed prior to the widening to four lanes, do not meet current design standards for rural principal arterials at observed operating speeds. Deficiencies include narrow pavement, narrow shoulders, and limited sight distances. Limited sight distances can create safety concerns, narrow shoulders present difficulties for disabled vehicles in getting off the traveled way creating other hazards, narrow pavement restricts room to maneuver on the roadway, especially when traveling alongside of or passing larger vehicles or trucks. Areas of particular concern were identified through the field surveys performed for this study and are noted on the segment data sheets in Appendix A. Exhibit 6 summarizes some of the areas noted as part of these field surveys.

Exhibit 4

Roadway/Access Point Inventory

End Nodes					Mileposts		Distance	# of Access Points [2]			# of Access Points per Mile [2]			# of Median	Terrain (Level,	Access Control
From	To	Jurisdiction [1]	From	To	From	To	(miles)	NB	SB	Total	NB	SB	Total	Breaks	Rolling)	(1=Controlled)
22	24	Pittsylvania	US 29 Bus	VA 946	15.80	16.37	0.57	4	5	9	7.0	8.8	15.8	3	L	0
24	26	Pittsylvania	VA 946	VA 640	16.37	16.56	0.19	2	3	5	10.5	15.8	26.3	0	L	0
26	28	Pittsylvania	VA 640	VA 1701	16.56	16.72	0.16	2	3	5	12.5	18.8	31.3	1	L	0
28	30	Pittsylvania	VA 1701	VA 863	16.72	17.29	0.57	13	3	16	22.8	5.3	28.1	2	L	0
30	32	Pittsylvania	VA 863	VA 825	17.29	18.94	1.65	24	18	42	14.5	10.9	25.5	4	L	0
32	34	Pittsylvania	VA 825	VA 894	18.94	20.00	1.06	6	5	11	5.7	4.7	10.4	2	R	0
34	36	Pittsylvania	VA 894	VA 718	20.00	20.05	0.05	0	3	3	0.0	60.0	60.0	0	L	0
36	38	Pittsylvania	VA 718	VA 1434	20.05	21.96	1.91	19	27	46	9.9	14.1	24.1	7	R	0
38	40	Pittsylvania	VA 1434	VA 703	21.96	22.23	0.27	10	10	20	37.0	37.0	74.1	1	R	0
40	42	Pittsylvania	VA 703	VA 1433	22.23	23.15	0.92	17	14	31	18.5	15.2	33.7	3	R	0
42	44	Pittsylvania	VA 1433	US 29 Bus	23.15	23.37	0.22	2	1	3	9.1	4.5	13.6	1	L	0
44	46	Pittsylvania	US 29 Bus	VA 832	23.37	24.53	1.16	0	0	0	0.0	0.0	0.0	0	R	1
46	48	Pittsylvania	VA 832	VA 685	24.53	25.66	1.13	0	0	0	0.0	0.0	0.0	0	R	1
48	50	Pittsylvania	VA 685	US 29 Bus	25.66	26.95	1.29	0	0	0	0.0	0.0	0.0	0	R	1
50	54	Pittsylvania	US 29 Bus	VA 1400	26.95	28.63	1.47	16	20	36	10.9	13.6	24.5	10	L	0
52	54	Pittsylvania	VA 1400	VA 1400	28.42	28.63	0.21	2	1	3	9.5	4.8	14.3	1	L	0
54	56	Pittsylvania	VA 1400	VA 797	28.63	29.51	0.88	15	6	21	17.0	6.8	23.9	5	L	0
56	58	Pittsylvania	VA 797	VA 794	29.51	29.72	0.21	1	4	5	4.8	19.0	23.8	1	L	0
58	60	Pittsylvania	VA 794	VA 649	29.72	29.96	0.24	3	1	4	12.5	4.2	16.7	2	L	0
60	62	Pittsylvania	VA 649	VA 649	29.96	30.06	0.10	1	3	4	10.0	30.0	40.0	1	L	0
62	64	Pittsylvania	VA 649	VA 903	30.06	31.13	1.07	11	12	23	10.3	11.2	21.5	6	L	0
64	66	Pittsylvania	VA 903	VA 922	31.13	31.73	0.60	6	4	10	10.0	6.7	16.7	3	R	0
66	68	Pittsylvania	VA 922	VA 1080	31.73	31.80	0.07	0	1	1	0.0	14.3	14.3	0	R	0
68	70	Pittsylvania	VA 1080	VA 672/F638	31.80	32.37	0.57	20	2	22	35.1	3.5	38.6	2	R	0
70	72	Pittsylvania	VA 672/F638	US 29 Bus	32.37	32.89	0.52	1	1	2	1.9	1.9	3.8	1	L	1
72	74	Pittsylvania	US 29 Bus	VA 40	32.89	34.90	2.01	0	0	0	0.0	0.0	0.0	0	R	1
74	76	Pittsylvania	VA 40	US 29 Bus	34.90	37.20	2.30	0	0	0	0.0	0.0	0.0	0	L	1
76	78	Pittsylvania	US 29 Bus	VA 665	37.20	37.54	0.34	0	0	0	0.0	0.0	0.0	0	L	1
78	80	Pittsylvania	VA 665	VA 665	37.54	37.66	0.12	1	0	1	8.3	0.0	8.3	1	R	1
80	82	Pittsylvania	VA 665	VA 770	37.66	38.23	0.57	2	3	5	3.5	5.3	8.8	1	L	0
82	84	Pittsylvania	VA 770	VA 931	38.23	38.64	0.41	0	6	6	0.0	14.6	14.6	0	L	0
84	86	Pittsylvania	VA 931	VA 643	38.64	40.28	1.64	5	16	21	3.0	9.8	12.8	3	L	0
86	88	Pittsylvania	VA 643	VA 756	40.28	41.36	1.08	8	7	15	7.4	6.5	13.9	2	L	0
88	90	Pittsylvania	VA 756	VA 642	41.36	43.34	1.98	3	18	21	1.5	9.1	10.6	3	R	0
90	92	Pittsylvania	VA 642	US 29 Bus	43.34	44.49	1.15	1	1	2	0.9	0.9	1.7	1	L	1
92	94	Pittsylvania	US 29 Bus	VA 924	44.49	46.76	2.27	0	0	0	0.0	0.0	0.0	0	L	1
94	96	Campbell	VA 924	VA 43	46.76	48.42	1.66	0	0	0	0.0	0.0	0.0	0	R	1
96	98	Campbell	VA 43	VA 714	48.42	49.44	1.02	0	0	0	0.0	0.0	0.0	0	R	1

Exhibit 4

Roadway/Access Point Inventory

End Nodes					Mileposts		Distance	# of Access Points [2]			# of Access Points per Mile [2]			# of Median	Terrain (Level,	Access Control
From	To	Jurisdiction [1]	From	To	From	To	(miles)	NB	SB	Total	NB	SB	Total	Breaks	Rolling)	(1=Controlled)
98	100	Campbell	VA 714	US 29 Bus	49.44	51.87	2.43	0	0	0	0.0	0.0	0.0	0	R	1
100	102	Campbell	US 29 Bus	VA 699	51.87	53.02	1.15	5	5	10	4.3	4.3	8.7	2	R	0
102	104	Campbell	VA 699	VA 734	53.02	54.43	1.41	18	45	63	12.8	31.9	44.7	4	L	0
104	106	Campbell	VA 734	VA 814	54.43	54.93	0.50	11	15	26	22.0	30.0	52.0	2	L	0
106	108	Campbell	VA 814	VA 906	54.93	55.91	0.98	21	22	43	21.4	22.4	43.9	3	R	0
108	110	Campbell	VA 906	VA 696	55.91	56.11	0.20	5	7	12	25.0	35.0	60.0	1	R	0
110	112	Campbell	VA 696	VA 750	56.11	56.36	0.25	2	5	7	8.0	20.0	28.0	1	L	0
112	114	Campbell	VA 750	VA 696	56.36	56.44	0.08	1	2	3	12.5	25.0	37.5	0	L	0
114	116	Campbell	VA 696	VA 912	56.44	57.12	0.68	18	7	25	26.5	10.3	36.8	3	R	0
116	118	Campbell	VA 912	VA 692	57.12	57.75	0.63	12	10	22	19.0	15.9	34.9	3	R	0
118	120	Campbell	VA 692	VA 686	57.75	58.34	0.59	18	11	29	30.5	18.6	49.2	2	L	0
120	122	Campbell	VA 686	VA 939	58.34	58.70	0.36	6	6	12	16.7	16.7	33.3	1	L	0
122	124	Campbell	VA 939	VA 888	58.70	58.72	0.02	1	0	1	50.0	0.0	50.0	0	L	0
124	126	Campbell	VA 888	VA 923	58.72	59.42	0.70	18	11	29	25.7	15.7	41.4	2	L	0
126	128	Campbell	VA 923	VA 24	59.42	61.10	1.68	37	32	69	22.0	19.0	41.1	7	L	0
128	130	Campbell	VA 24	VA 754	61.10	61.35	0.25	4	10	14	16.0	40.0	56.0	2	L	0
130	132	Campbell	VA 754	VA 689	61.35	61.65	0.30	8	9	17	26.7	30.0	56.7	2	R	0
132	134	Campbell	VA 689	VA 688	61.65	62.63	0.98	16	18	34	16.3	18.4	34.7	3	L	0
134	136	Campbell	VA 688	VA 685	62.63	63.22	0.59	9	14	23	15.3	23.7	39.0	3	L	0
136	138	Campbell	VA 685	VA 738	63.22	63.51	0.29	3	6	9	10.3	20.7	31.0	1	R	0
138	140	Campbell	VA 738	VA 622	63.51	63.80	0.29	7	5	12	24.1	17.2	41.4	1	R	0
140	142	Campbell	VA 622	VA 622	63.80	63.87	0.07	2	3	5	28.6	42.9	71.4	1	R	0
142	144	Campbell	VA 622	VA 1602	63.87	64.44	0.57	11	5	16	19.3	8.8	28.1	2	R	0
144	146	Campbell	VA 1602	VA 738	64.44	65.68	1.24	8	12	20	6.5	9.7	16.1	5	R	0
146	148	Campbell	VA 738	VA 683	65.68	66.19	0.51	14	14	28	27.5	27.5	54.9	3	L	0
148	150	Campbell	VA 683	VA 679	66.19	66.69	0.50	26	17	43	52.0	34.0	86.0	5	L	0
150	152	Campbell	VA 679	VA 1433	66.69	67.02	0.33	7	2	9	21.2	6.1	27.3	3	L	0
152	154	Campbell	VA 1433	Airport Entrance	67.02	67.20	0.18	10	1	11	55.6	5.6	61.1	1	L	0
154	156	Campbell	Airport Entrance	VA 678	67.20	67.41	0.21	5	2	7	23.8	9.5	33.3	2	L	0
156	158	Campbell	VA 678	VA 758/F905	67.41	67.50	0.09	4	5	9	44.4	55.6	100.0	1	L	0
158	160	Campbell	VA 758/F905	US 460	67.50	67.70	0.20	2	7	9	10.0	35.0	45.0	2	L	0
170	172	Amherst	Sweetbriar/VA 624	US 29 Bus	85.83	86.38	0.55	2	1	3	3.6	1.8	5.5	1	L	0
172	174	Amherst	US 29 Bus	US 60	86.38	88.29	1.91	0	1	1	0.0	0.5	0.5	1	L	1
174	176	Amherst	US 60	US 29 Bus/VA 739	88.29	89.45	1.16	0	0	0	0.0	0.0	0.0	0	R	1
176	178	Amherst	US 29 Bus/VA 739	VA 608	89.45	90.28	0.83	1	0	1	1.2	0.0	1.2	0	R	0
178	180	Amherst	VA 608 W	VA 608 E	90.28	91.04	0.76	8	6	14	10.5	7.9	18.4	3	R	0
180	182	Amherst	VA 608 W	VA 151	91.04	91.55	0.51	7	5	12	13.7	9.8	23.5	1	R	0
182	184	Amherst	VA 151	VA 610	91.55	93.41	1.86	26	9	35	14.0	4.8	18.8	7	R	0

Exhibit 4

Roadway/Access Point Inventory

End Nodes					Mileposts		Distance	# of Access Points [2]			# of Access Points per Mile [2]			# of Median	Terrain (Level,	Access Control
From	To	Jurisdiction [1]	From	To	From	To	(miles)	NB	SB	Total	NB	SB	Total	Breaks	Rolling)	(1=Controlled)
184	186	Amherst	VA 610	VA 662	93.41	95.49	2.08	6	11	17	2.9	5.3	8.2	5	R	0
186	188	Amherst	VA 662	VA 739 S	95.49	96.13	0.64	2	1	3	3.1	1.6	4.7	1	R	0
188	190	Nelson	VA 739 S	VA 739 N	96.13	96.46	0.33	2	1	3	6.1	3.0	9.1	1	R	0
190	192	Nelson	VA 739 N	VA 748	96.46	97.36	0.90	12	10	22	13.3	11.1	24.4	4	L	0
192	194	Nelson	VA 748	VA 665 W	97.36	97.45	0.09	1	0	1	11.1	0.0	11.1	0	R	0
194	196	Nelson	VA 665 W	VA 665 E	97.45	97.93	0.48	5	7	12	10.4	14.6	25.0	1	R	0
196	198	Nelson	VA 665 E	VA 669	97.93	98.70	0.77	7	3	10	9.1	3.9	13.0	3	R	0
198	200	Nelson	VA 669	VA 655	98.70	99.79	1.09	7	13	20	6.4	11.9	18.3	4	R	0
200	202	Nelson	VA 655	VA 671	99.79	99.89	0.10	2	3	5	20.0	30.0	50.0	1	L	0
202	204	Nelson	VA 671	VA 56	99.89	100.12	0.23	1	2	3	4.3	8.7	13.0	0	L	0
204	206	Nelson	VA 56	VA 653	100.12	101.25	1.13	10	12	22	8.8	10.6	19.5	4	R	0
206	208	Nelson	VA 653	VA 651	101.25	103.30	2.05	8	7	15	3.9	3.4	7.3	4	R	0
208	210	Nelson	VA 651	US 29 Bus/VA 56	103.30	104.40	1.10	16	9	25	14.5	8.2	22.7	4	R	0
210	212	Nelson	US 29 Bus/VA 56	VA 1001	104.40	104.93	0.53	1	1	2	1.9	1.9	3.8	1	L	1
212	214	Nelson	VA 1001	US 29 Bus	104.93	105.22	0.29	1	1	2	3.4	3.4	6.9	1	L	1
214	216	Nelson	US 29 Bus	VA 718	105.22	105.85	0.63	3	3	6	4.8	4.8	9.5	3	R	0
216	218	Nelson	VA 718	VA 641	105.85	106.42	0.57	7	15	22	12.3	26.3	38.6	2	R	0
218	220	Nelson	VA 641	VA 766/624	106.42	107.58	1.16	10	11	21	8.6	9.5	18.1	2	R	0
220	222	Nelson	VA 766/624	VA 737	107.58	107.94	0.36	4	3	7	11.1	8.3	19.4	1	R	0
222	224	Nelson	VA 737	VA 775	107.94	108.15	0.21	1	1	2	4.8	4.8	9.5	1	R	0
224	226	Nelson	VA 775	VA 623	108.15	108.99	0.84	3	2	5	3.6	2.4	6.0	2	L	0
226	228	Nelson	VA 623	VA 776	108.99	111.31	2.32	13	9	22	5.6	3.9	9.5	4	L	0
228	230	Nelson	VA 776	VA 786	111.31	111.58	0.27	0	6	6	0.0	22.2	22.2	1	L	0
230	232	Nelson	VA 786	VA 6W	111.58	111.73	0.15	1	1	2	6.7	6.7	13.3	1	L	0
232	234	Nelson	VA 6W	VA 6Y	111.73	111.95	0.22	0	1	1	0.0	4.5	4.5	1	L	0
234	236	Nelson	VA 6Y	VA 619	111.95	113.00	1.05	12	6	18	11.4	5.7	17.1	2	R	0
236	238	Nelson	VA 619	VA 617	113.00	113.30	0.30	2	3	5	6.7	10.0	16.7	1	R	0
238	240	Nelson	VA 617	VA 790/VA 762	113.30	114.54	1.24	5	9	14	4.0	7.3	11.3	1	R	0
240	242	Nelson	VA 790/VA 762	VA 837	114.54	114.97	0.43	4	2	6	9.3	4.7	14.0	1	R	0
242	244	Nelson	VA 837	VA 616	114.97	115.50	0.53	3	2	5	5.7	3.8	9.4	2	R	0
244	246	Nelson	VA 616	VA 6E	115.50	115.67	0.17	1	1	2	5.9	5.9	11.8	1	R	0
246	248	Nelson	VA 6E	VA 615	115.67	116.63	0.96	9	0	9	9.4	0.0	9.4	1	R	0
248	250	Nelson	VA 615	VA 632	116.63	118.32	1.69	8	9	17	4.7	5.3	10.1	4	R	0
250	252	Nelson	VA 632	VA 699	118.32	118.98	0.66	3	4	7	4.5	6.1	10.6	1	R	0
252	254	Albemarle	VA 699	VA 837	118.98	119.12	0.14	0	1	1	0.0	7.1	7.1	1	L	0
254	256	Albemarle	VA 837	VA 838	119.12	119.70	0.58	1	7	8	1.7	12.1	13.8	2	L	0
256	258	Albemarle	VA 838	VA 805	119.70	120.22	0.52	10	2	12	19.2	3.8	23.1	2	L	0
258	260	Albemarle	VA 805	VA 633	120.22	120.43	0.21	1	1	2	4.8	4.8	9.5	1	L	0

Exhibit 4

Roadway/Access Point Inventory

End Nodes					Mileposts		Distance	# of Access Points [2]			# of Access Points per Mile [2]			# of Median	Terrain (Level,	Access Control
From	To	Jurisdiction [1]	From	To	From	To	(miles)	NB	SB	Total	NB	SB	Total	Breaks	Rolling)	(1=Controlled)
260	262	Albemarle	VA 633S	VA 633N	120.43	120.63	0.20	4	1	5	20.0	5.0	25.0	1	L	0
262	264	Albemarle	VA 633N	VA 775	120.63	124.46	3.83	16	39	55	4.2	10.2	14.4	8	R	0
264	266	Albemarle	VA 775	VA 697/VA 767	124.46	124.84	0.38	1	2	3	2.6	5.3	7.9	1	L	0
266	268	Albemarle	VA 697/VA 767	VA 692	124.84	125.00	0.16	1	1	2	6.3	6.3	12.5	1	L	0
268	270	Albemarle	VA 692	VA 712	125.00	126.10	1.10	10	13	23	9.1	11.8	20.9	4	R	0
270	272	Albemarle	VA 712	VA 801	126.10	126.19	0.09	1	1	2	11.1	11.1	22.2	1	L	0
272	274	Albemarle	VA 801	VA 710	126.19	126.63	0.44	5	3	8	11.4	6.8	18.2	2	R	0
274	276	Albemarle	VA 710	VA 760	126.63	127.46	0.83	9	6	15	10.8	7.2	18.1	2	R	0
276	278	Albemarle	VA 760	VA 708	127.46	127.69	0.23	2	1	3	8.7	4.3	13.0	1	L	0
278	280	Albemarle	VA 708	VA 745S	127.69	129.46	1.77	8	6	14	4.5	3.4	7.9	5	L	0
280	282	Albemarle	VA 745S	VA 745N	129.46	130.90	1.44	8	9	17	5.6	6.3	11.8	3	R	0
282	284	Albemarle	VA 745N	F178/VA 1106	130.90	133.32	2.42	17	17	34	7.0	7.0	14.0	7	R	0
284	286	Albemarle	F178/VA 1106	I-64	133.32	133.68	0.36	4	6	10	11.1	16.7	27.8	2	L	0

Notes: [1] -- The jurisdiction shown is that located at the start of the segment. Many of the segments at jurisdiction boundaries are located in both bordering jurisdictions.

[2] -- NB = Access points adjacent to northbound lanes, SB = Access points adjacent to southbound lanes

Exhibit 5

Connection Types at Cross-Roads in the Route 29 Study Corridor

Node	Locality	Cross Route Number	Cross Road/Street Name	Control Type
20	Pittsylvania	US 29 Bus		Interchange
24	Pittsylvania	VA 946		Unsignalized
26	Pittsylvania	VA 640		Unsignalized
28	Pittsylvania	VA 1701		Unsignalized
30	Pittsylvania	VA 863		Unsignalized
32	Pittsylvania	VA 825		Unsignalized
34	Pittsylvania	VA 894		Unsignalized
36	Pittsylvania	VA 718	Dry Fork Road/Snakepath Road	Unsignalized
38	Pittsylvania	VA 1434		Unsignalized
40	Pittsylvania	VA 703	Tightsqueeze Road/Fairview Road	Signalized
42	Pittsylvania	VA 1433	Cherrystone Road	Unsignalized
44	Pittsylvania	US 29 Bus	Main Street	Interchange
46	Pittsylvania	VA 832	Halifax Road	Interchange
48	Pittsylvania	VA 685	Chalk Level Road	Interchange
50	Pittsylvania	US 29 Bus	Main Street	Interchange
52	Pittsylvania	VA 1400 South	no name	Unsignalized
54	Pittsylvania	VA 1400 North	no name	Unsignalized
56	Pittsylvania	VA 797	Riddle Road	Unsignalized
58	Pittsylvania	VA 794	Old Mine Road	Unsignalized
60	Pittsylvania	VA 649 South	Anderson Mill Road	Unsignalized
62	Pittsylvania	VA 649 North	Payneton Road	Unsignalized
64	Pittsylvania	VA 903	Galveston Road	Unsignalized
66	Pittsylvania	VA 922	Andrew Road	Unsignalized
68	Pittsylvania	VA 1080	Belaire Road	Unsignalized
70	Pittsylvania	VA 672/ F638	Colton Hatch Road/Squirrel Road	Unsignalized
72	Pittsylvania	US 29 Bus		Interchange
74	Pittsylvania	VA 40	Gretna Road	Interchange
76	Pittsylvania	US 29 Bus		Interchange
78	Pittsylvania	VA 665 South	Rockford School Road	Unsignalized
80	Pittsylvania	VA 665 North	Rockford School Road	Unsignalized
82	Pittsylvania	VA 770	Keesee Road	Unsignalized
84	Pittsylvania	VA 931		Unsignalized
86	Pittsylvania	VA 643	Derby Road	Unsignalized
88	Pittsylvania	VA 756	Dewberry Road	Unsignalized
90	Pittsylvania	VA 642	Shula Drive	Unsignalized
92	Pittsylvania	US 29 Bus		Interchange
94	Pittsylvania	VA 924	Pocket Road	Interchange
96	Campbell	VA 43	Bedford Avenue	Interchange
98	Campbell	VA 714	Lynch Mill Road	Interchange
99	Campbell	VA 711		Interchange
100	Campbell	US 29 Bus	Main Street	Interchange
102	Campbell	VA 699	Gladys Road	Unsignalized
104	Campbell	VA 734		Unsignalized
106	Campbell	VA 814	Penuel Lane	Unsignalized
108	Campbell	VA 906	Eastward Drive	Unsignalized
110	Campbell	VA 696 South	Marysville Road	Unsignalized
112	Campbell	VA 750	Nickland Drive	Unsignalized
114	Campbell	VA 696 North	Dearborn Road	Unsignalized
116	Campbell	VA 912	Castle Craig Drive	Unsignalized
118	Campbell	VA 692	Masons Mill Road	Unsignalized
120	Campbell	VA 686	Brown Mill Road	Unsignalized
122	Campbell	VA 939	Central Drive	Unsignalized
124	Campbell	VA 888	Hawkins Road	Unsignalized
126	Campbell	VA 923	Elmwood Road	Unsignalized
128	Campbell	VA 24	Colonial Highway	Signalized
130	Campbell	VA 754	Antsey Road	Unsignalized
132	Campbell	VA 689	Moorman Mill Road/Amy Road	Unsignalized
134	Campbell	VA 688	Patterson Road	Unsignalized
136	Campbell	VA 685	Callohan Road	Signalized
138	Campbell	VA 738 South	English Tavern	Unsignalized
140	Campbell	VA 622 South	Leland Road	Unsignalized
142	Campbell	VA 622 North	Lynbrook Road	Unsignalized
144	Campbell	VA 1602	Highland Drive	Unsignalized
146	Campbell	VA 738 North		Unsignalized

Exhibit 5

Connection Types at Cross-Roads in the Route 29 Study Corridor

Node	Locality	Cross Route Number	Cross Road/Street Name	Control Type
148	Campbell	VA 683	Lawyers Road	Signalized
150	Campbell	VA 679	Russell Woods Drive	Signalized
152	Campbell	VA 1433	Rangoon Street	Unsignalized
154	Campbell	Airport Entrance		Signalized
160	Campbell	US 460		Interchange
170	Amherst	Sweetbriar/ VA 624	Sweetbriar Drive	Unsignalized
172	Amherst	US 29 Bus	South Main Street	Unsignalized
174	Amherst	US 60		Interchange
176	Amherst	US 29 Bus/ VA 739	Main Street/Boxwood Farm Road	Interchange
178	Amherst	VA 608 South	Campbells Mill Road	Unsignalized
180	Amherst	VA 608 North	Toytown Road	Unsignalized
182	Amherst	VA 151		Unsignalized
184	Amherst	VA 610	Fletcher's Level/New Glasgow Road	Unsignalized
186	Amherst	VA 662	Geddes Mountain Road	Unsignalized
188	Nelson	VA 739 South	Napier Loop/Tye River Road	Unsignalized
190	Nelson	VA 739 North	Napier Loop	Unsignalized
192	Nelson	VA 748	Morse Lane	Unsignalized
194	Nelson	VA 665 South	Old Rose Mill Road	Unsignalized
196	Nelson	VA 665 North	Wilson Hill Road	Unsignalized
198	Nelson	VA 669	Bowling Drive	Unsignalized
200	Nelson	VA 655	Colleen Road/Arrington Road	Unsignalized
202	Nelson	VA 671	Stage Road	Unsignalized
204	Nelson	VA 56	Tye Brook Highway	Unsignalized
206	Nelson	VA 653	Oak Ridge Road	Unsignalized
208	Nelson	VA 651	Stevens Cove Road	Unsignalized
210	Nelson	US 29 Bus/VA 56		Unsignalized
212	Nelson	VA 1001	Ridge Lane/Main Street	Unsignalized
214	Nelson	US 29 Bus		Unsignalized
216	Nelson	VA 718	Mountain Cove Road	Unsignalized
218	Nelson	VA 641	Eades Lane	Unsignalized
220	Nelson	VA 624	Stagebridge Road	Unsignalized
222	Nelson	VA 737	Penton Lane	Unsignalized
224	Nelson	VA 775	Anderson Lane	Unsignalized
226	Nelson	VA 623	Davis Creek Lane/Myndus Lane	Unsignalized
228	Nelson	VA 776	Grapelawn Drive	Unsignalized
230	Nelson	VA 786	Woods Mill Road	Unsignalized
232	Nelson	VA 6 South	River Road	Unsignalized
234	Nelson	VA 6Y	Tidbit Trail	Unsignalized
236	Nelson	VA 619	Twin Poplars Loop	Unsignalized
238	Nelson	VA 617	Buck Creek Lane/Rockfish River Road	Unsignalized
240	Nelson	VA 790/ VA 762	Floyd Lane/Northstage Road	Unsignalized
242	Nelson	VA 837	Jackson Lane	Unsignalized
244	Nelson	VA 616	Hickory Creek Road	Unsignalized
246	Nelson	VA 6 North		Unsignalized
248	Nelson	VA 615		Unsignalized
250	Albemarle	VA 632	Faber Road	Unsignalized
252	Albemarle	VA 699	Boaz Road	Unsignalized
254	Albemarle	VA 837	Covesville Hill	Unsignalized
256	Albemarle	VA 838	Lackey Lane	Unsignalized
258	Albemarle	VA 805	Henderson Lane/Fan Mountain Road	Unsignalized
260	Albemarle	VA 633 South	Cove Garden Road	Unsignalized
262	Albemarle	VA 633 North	Heards Mountain Road	Unsignalized
264	Albemarle	VA 775	Rabbit Valley Lane	Unsignalized
266	Albemarle	VA 697/ VA 767	Sutherland Road/Rabbit Valley Road	Unsignalized
268	Albemarle	VA 692	Plank Road	Unsignalized
270	Albemarle	VA 712	North Garden Lane	Unsignalized
272	Albemarle	VA 801	Rock Branch Lane	Unsignalized
274	Albemarle	VA 710	Taylors Gap Road/Taylor Gap Road	Unsignalized
276	Albemarle	VA 760	Red Hill School Road	Unsignalized
278	Albemarle	VA 708	Red Hill Road	Unsignalized
280	Albemarle	VA 745 South	Arrowhead Valley Road	Unsignalized
282	Albemarle	VA 745 North	Poorhouse Road/Arrowhead Valley Road	Unsignalized
284	Albemarle	F178/ VA 1106	Gold Eagle Drive/Teel Lane	Unsignalized
286	Albemarle	I-64		Interchange

Exhibit 6

Existing Geometric Deficiencies

(As Identified by Windshield Surveys)

End Nodes						Potential Deficiencies Identified		
From	To	Jurisdiction	From	To	Distance (miles)	Lane Width	Shoulder	Sight Distance
22	24	Pittsylvania	US 29 Bus	VA 946	0.57			
24	26	Pittsylvania	VA 946	VA 640	0.19	X		
26	28	Pittsylvania	VA 640	VA 1701	0.16			
28	30	Pittsylvania	VA 1701	VA 863	0.57			
30	32	Pittsylvania	VA 863	VA 825	1.65	X		X
32	34	Pittsylvania	VA 825	VA 894	1.06			X
34	36	Pittsylvania	VA 894	VA 718	0.05			
36	38	Pittsylvania	VA 718	VA 1434	1.91	X		
38	40	Pittsylvania	VA 1434	VA 703	0.27			
40	42	Pittsylvania	VA 703	VA 1433	0.92	X		X
42	44	Pittsylvania	VA 1433	US 29 Bus	0.22	X		
44	46	Pittsylvania	US 29 Bus	VA 832	1.16			
46	48	Pittsylvania	VA 832	VA 685	1.13			
48	50	Pittsylvania	VA 685	US 29 Bus	1.29			
50	54	Pittsylvania	US 29 Bus	VA 1400 South	1.47			X
52	54	Pittsylvania	VA 1400 South	VA 1400 North	0.21			
54	56	Pittsylvania	VA 1400 North	VA 797	0.88			X
56	58	Pittsylvania	VA 797	VA 794	0.21	X		X
58	60	Pittsylvania	VA 794	VA 649 South	0.24	X		X
60	62	Pittsylvania	VA 649 South	VA 649 North	0.10	X		X
62	64	Pittsylvania	VA 649 North	VA 903	1.07	X		X
64	66	Pittsylvania	VA 903	VA 922	0.60	X		
66	68	Pittsylvania	VA 922	VA 1080	0.07	X		
68	70	Pittsylvania	VA 1080	VA 672/F638	0.57			
70	72	Pittsylvania	VA 672/F638	US 29 Bus	0.52			
72	74	Pittsylvania	US 29 Bus	VA 40	2.01			
74	76	Pittsylvania	VA 40	US 29 Bus	2.30			
76	78	Pittsylvania	US 29 Bus	VA 665 South	0.34			
78	80	Pittsylvania	VA 665 South	VA 665 North	0.12	X		
80	82	Pittsylvania	VA 665 North	VA 770	0.57	X		X
82	84	Pittsylvania	VA 770	VA 931	0.41	X		
84	86	Pittsylvania	VA 931	VA 643	1.64			
86	88	Pittsylvania	VA 643	VA 756	1.08	X	X	X
88	90	Pittsylvania	VA 756	VA 642	1.98	X		X
90	92	Pittsylvania	VA 642	US 29 Bus	1.15	X	X	
92	94	Pittsylvania	US 29 Bus	VA 924	2.27	X		
94	96	Campbell	VA 924	VA 43	1.66	X	X	
96	98	Campbell	VA 43	VA 714	1.02	X	X	
98	100	Campbell	VA 714	US 29 Bus	2.43	X	X	
100	102	Campbell	US 29 Bus	VA 699	1.15	X		
102	104	Campbell	VA 699	VA 734	1.41	X		
104	106	Campbell	VA 734	VA 814	0.50			
106	108	Campbell	VA 814	VA 906	0.98			
108	110	Campbell	VA 906	VA 696	0.20			
110	112	Campbell	VA 696	VA 750	0.25			X
112	114	Campbell	VA 750	VA 696	0.08			
114	116	Campbell	VA 696	VA 912	0.68	X		X
116	118	Campbell	VA 912	VA 692	0.63	X		
118	120	Campbell	VA 692	VA 686	0.59	X		
120	122	Campbell	VA 686	VA 939	0.36	X		

Exhibit 6

Existing Geometric Deficiencies

(As Identified by Windshield Surveys)

End Nodes						Potential Deficiencies Identified		
From	To	Jurisdiction	From	To	Distance (miles)	Lane Width	Shoulder	Sight Distance
122	124	Campbell	VA 939	VA 888	0.02	X		
124	126	Campbell	VA 888	VA 923	0.70	X		
126	128	Campbell	VA 923	VA 24	1.68	X		
128	130	Campbell	VA 24	VA 754	0.25	X		
130	132	Campbell	VA 754	VA 689	0.30	X		
132	134	Campbell	VA 689	VA 688	0.98			
134	136	Campbell	VA 688	VA 685	0.59			
136	138	Campbell	VA 685	VA 738	0.29			
138	140	Campbell	VA 738	VA 622 South	0.29			
140	142	Campbell	VA 622 South	VA 622 North	0.07			
142	144	Campbell	VA 622 North	VA 1602	0.57			
144	146	Campbell	VA 1602	VA 738	1.24	X		
146	148	Campbell	VA 738	VA 683	0.51	X		
148	150	Campbell	VA 683	VA 679	0.50			
150	152	Campbell	VA 679	VA 1433	0.33			
152	154	Campbell	VA 1433	Airport Entrance	0.18			
154	156	Campbell	Airport Entrance	VA 678	0.21			
156	158	Campbell	VA 678	VA 758/F905	0.09			
158	160	Campbell	VA 758/F905	US 460	0.20			
170	172	Amherst	Sweetbriar/VA 624	US 29 Bus	0.55	X		
172	174	Amherst	US 29 Bus	US 60	1.91	X		
174	176	Amherst	US 60	US 29 Bus/VA 739	1.16	X		
176	178	Amherst	US 29 Bus/VA 739	VA 608	0.83	X		
178	180	Amherst	VA 608 W	VA 608 E	0.76	X		X
180	182	Amherst	VA 608 W	VA 151	0.51	X		X
182	184	Amherst	VA 151	VA 610	1.86	X		
184	186	Amherst	VA 610	VA 662	2.08	X		X
186	188	Amherst	VA 662	VA 739 South	0.64	X		
188	190	Nelson	VA 739 South	VA 739 North	0.33	X		
190	192	Nelson	VA 739 North	VA 748	0.90	X		
192	194	Nelson	VA 748	VA 665 South	0.09	X		
194	196	Nelson	VA 665 South	VA 665 North	0.48	X		
196	198	Nelson	VA 665 North	VA 669	0.77	X		X
198	200	Nelson	VA 669	VA 655	1.09	X		X
200	202	Nelson	VA 655	VA 671	0.10	X		
202	204	Nelson	VA 671	VA 56	0.23	X		
204	206	Nelson	VA 56	VA 653	1.13	X		X
206	208	Nelson	VA 653	VA 651	2.05	X		
208	210	Nelson	VA 651	US 29 Bus/VA 56	1.10	X		
210	212	Nelson	US 29 Bus/VA 56	VA 1001	0.53	X		
212	214	Nelson	VA 1001	US 29 Bus	0.29	X		
214	216	Nelson	US 29 Bus	VA 718	0.63	X		
216	218	Nelson	VA 718	VA 641	0.57	X		X
218	220	Nelson	VA 641	VA 766/624	1.16	X		
220	222	Nelson	VA 766/624	VA 737	0.36	X		
222	224	Nelson	VA 737	VA 775	0.21	X		
224	226	Nelson	VA 775	VA 623	0.84	X		
226	228	Nelson	VA 623	VA 776	2.32	X		X
228	230	Nelson	VA 776	VA 786	0.27	X		
230	232	Nelson	VA 786	VA 6 South	0.15	X		

Exhibit 6

Existing Geometric Deficiencies

(As Identified by Windshield Surveys)

End Nodes						Potential Deficiencies Identified		
From	To	Jurisdiction	From	To	Distance (miles)	Lane Width	Shoulder	Sight Distance
232	234	Nelson	VA 6 South	VA 6Y	0.22	X		
234	236	Nelson	VA 6Y	VA 619	1.05	X		
236	238	Nelson	VA 619	VA 617	0.30	X		
238	240	Nelson	VA 617	VA 790/VA 762	1.24	X		
240	242	Nelson	VA 790/VA 762	VA 837	0.43	X		X
242	244	Nelson	VA 837	VA 616	0.53	X		
244	246	Nelson	VA 616	VA 6 North	0.17	X		
246	248	Nelson	VA 6 North	VA 615	0.96	X		
248	250	Nelson	VA 615	VA 632	1.69	X		X
250	252	Nelson	VA 632	VA 699	0.66	X		X
252	254	Albemarle	VA 699	VA 837	0.14	X		
254	256	Albemarle	VA 837	VA 838	0.58	X		
256	258	Albemarle	VA 838	VA 805	0.52	X		
258	260	Albemarle	VA 805	VA 633 South	0.21	X		
260	262	Albemarle	VA 633 South	VA 633 North	0.20	X		
262	264	Albemarle	VA 633 North	VA 775	3.83	X		X
264	266	Albemarle	VA 775	VA 697/VA 767	0.38	X		
266	268	Albemarle	VA 697/VA 767	VA 692	0.16	X		
268	270	Albemarle	VA 692	VA 712	1.10	X	X	X
270	272	Albemarle	VA 712	VA 801	0.09	X		
272	274	Albemarle	VA 801	VA 710	0.44	X		
274	276	Albemarle	VA 710	VA 760	0.83	X		X
276	278	Albemarle	VA 760	VA 708	0.23	X		
278	280	Albemarle	VA 708	VA 745 South	1.77	X		
280	282	Albemarle	VA 745 South	VA 745 North	1.44	X		
282	284	Albemarle	VA 745 North	F178/VA 1106	2.42	X		
284	286	Albemarle	F178/VA 1106	I-64	0.36			

2.1.2 Traffic Volumes

Based on 1997 traffic counts performed for this study, Route 29 through the study corridor (excluding Madison Heights and Route 29 south of Blairs) carries between 10,000 and 30,000 vehicles per day. Overall, traffic volumes are lower north of Lynchburg than south of Lynchburg, with the lowest volumes in Nelson County. The highest traffic volumes occur just south of Lynchburg in Campbell County. Afternoon peak and daily traffic volumes for the study corridor are shown in Exhibit 7.

The amount of traffic entering, exiting, and crossing Route 29 was determined through turning movement counts at 135 analysis intersections or interchanges in the study corridor. These volumes are shown in Exhibit 8. The node numbers shown in this table for each analysis intersections are keyed to the study area maps in Exhibit 2.

2.1.3 Roadway Operations

Traffic operations in the Route 29 Corridor were quantified for roadway segments, intersections and interchanges using level of service methodologies from the *1997 Highway Capacity Manual* (HCM). The HCM provides standards used throughout the traffic engineering profession that allow for "grading" the operations of roads using a scale from A to F, with A representing excellent traffic flow with minimal delays and F representing failure in traffic operations and very high levels of delay. For most areas in Virginia, VDOT rates levels of service A, B, or C as acceptable and levels of service D, E, or F represent deficient operations. An alternative, planning method allows for operations to be assessed at a more general level with rankings of "under", "near", or "over" capacity. Operations at "near" or "under" were judged acceptable, while "over" capacity operations represent deficient operations. Additional details on the analysis techniques used for operations analysis for this study are included in a separate document, *Route 29 Corridor Development Study (Combined Phases II/III) Technical Report*.

For most roads, traffic operations are most affected by delays that can occur at intersections or interchanges. The traffic analysis performed for this study confirmed that this is the case for Route 29 in the base year of 1997. All segments of Route 29 in the study corridor operated at level of service A or B (acceptable) in 1997. Segments that operated at level of service B in either the northbound or southbound directions are shown in Exhibit 9; all other segments operated at level of service A.

Exhibit 7

1997 Base Year Segment Traffic Volumes

End Nodes					PM Peak Vol		1997 Daily	% Truck/Buses	
From	To	Jurisdiction [1]	From	To	NB	SB	Volume	NB	SB
22	24	Pittsylvania	US 29 Bus	VA 946	660	611	15,000	15.3%	13.7%
24	26	Pittsylvania	VA 946	VA 640	649	614	15,000	15.3%	13.7%
26	28	Pittsylvania	VA 640	VA 1701	587	593	14,000	15.3%	13.7%
28	30	Pittsylvania	VA 1701	VA 863	587	595	14,000	15.3%	13.7%
30	32	Pittsylvania	VA 863	VA 825	568	657	14,000	15.3%	13.7%
32	34	Pittsylvania	VA 825	VA 894	575	672	15,000	15.3%	13.7%
34	36	Pittsylvania	VA 894	VA 718	575	657	14,000	15.3%	13.7%
36	38	Pittsylvania	VA 718	VA 1434	583	667	15,000	15.3%	13.7%
38	40	Pittsylvania	VA 1434	VA 703	558	623	14,000	12.1%	12.2%
40	42	Pittsylvania	VA 703	VA 1433	650	645	15,000	12.1%	12.2%
42	44	Pittsylvania	VA 1433	US 29 Bus	614	689	15,000	12.1%	12.2%
44	46	Pittsylvania	US 29 Bus	VA 832	471	508	12,000	12.1%	12.2%
46	48	Pittsylvania	VA 832	VA 685	436	464	11,000	12.1%	12.2%
48	50	Pittsylvania	VA 685	US 29 Bus	459	427	10,000	12.1%	12.2%
50	52	Pittsylvania	US 29 Bus	VA 1400	581	503	13,000	12.1%	12.2%
52	54	Pittsylvania	VA 1400	VA 1400	517	439	11,000	12.1%	12.2%
54	56	Pittsylvania	VA 1400	VA 797	517	437	11,000	12.1%	12.2%
56	58	Pittsylvania	VA 797	VA 794	521	434	11,000	12.1%	12.2%
58	60	Pittsylvania	VA 794	VA 649	513	426	11,000	12.1%	12.2%
60	62	Pittsylvania	VA 649	VA 649	512	427	11,000	12.1%	12.2%
62	64	Pittsylvania	VA 649	VA 903	498	422	11,000	12.1%	12.2%
64	66	Pittsylvania	VA 903	VA 922	506	423	11,000	13.9%	9.7%
66	68	Pittsylvania	VA 922	VA 1080	507	423	11,000	13.9%	9.7%
68	70	Pittsylvania	VA 1080	VA 672/F638	513	424	11,000	13.9%	9.7%
70	72	Pittsylvania	VA 672/F638	US 29 Bus	605	532	13,000	13.9%	9.7%
72	74	Pittsylvania	US 29 Bus	VA 40	405	462	10,000	13.9%	9.7%
74	76	Pittsylvania	VA 40	US 29 Bus	433	501	11,000	13.9%	9.7%
76	78	Pittsylvania	US 29 Bus	VA 665	608	638	15,000	13.9%	9.7%
78	80	Pittsylvania	VA 665	VA 665	511	566	13,000	13.9%	9.7%
80	82	Pittsylvania	VA 665	VA 770	517	565	13,000	13.9%	9.7%
82	84	Pittsylvania	VA 770	VA 931	517	556	13,000	13.9%	9.7%
84	86	Pittsylvania	VA 931	VA 643	504	555	12,000	13.9%	9.7%
86	88	Pittsylvania	VA 643	VA 756	508	586	13,000	13.9%	9.7%
88	90	Pittsylvania	VA 756	VA 642	507	602	13,000	13.9%	9.7%
90	92	Pittsylvania	VA 642	US 29 Bus	485	612	13,000	8.9%	7.9%
92	94	Pittsylvania	US 29 Bus	VA 924	423	409	10,000	8.9%	7.9%
94	96	Campbell	VA 924	VA 43	465	427	10,000	8.9%	7.9%
96	98	Campbell	VA 43	VA 714	461	484	11,000	8.9%	7.9%
98	100	Campbell	VA 714	US 29 Bus	484	433	11,000	8.9%	7.9%
100	102	Campbell	US 29 Bus	VA 699	752	741	18,000	8.9%	7.9%
102	104	Campbell	VA 699	VA 734	649	729	16,000	8.9%	7.9%
104	106	Campbell	VA 734	VA 814	635	733	16,000	8.9%	7.9%
106	108	Campbell	VA 814	VA 906	650	732	16,000	8.9%	7.9%
108	110	Campbell	VA 906	VA 696	647	733	16,000	8.9%	7.9%
110	112	Campbell	VA 696	VA 750	662	759	17,000	8.9%	7.9%
112	114	Campbell	VA 750	VA 696	652	759	17,000	8.9%	7.9%
114	116	Campbell	VA 696	VA 912	640	773	17,000	9.1%	4.7%
116	118	Campbell	VA 912	VA 692	650	795	17,000	9.1%	4.7%
118	120	Campbell	VA 692	VA 686	642	813	17,000	9.1%	4.7%
120	122	Campbell	VA 686	VA 939	639	844	17,000	9.1%	4.7%
122	124	Campbell	VA 939	VA 888	647	844	18,000	9.1%	4.7%
124	126	Campbell	VA 888	VA 923	640	847	17,000	9.1%	4.7%
126	128	Campbell	VA 923	VA 24	631	850	17,000	9.1%	4.7%
128	130	Campbell	VA 24	VA 754	636	905	18,000	9.1%	4.7%

Exhibit 7

1997 Base Year Segment Traffic Volumes

End Nodes					PM Peak Vol		1997 Daily	% Truck/Buses	
From	To	Jurisdiction [1]	From	To	NB	SB	Volume	NB	SB
130	132	Campbell	VA 754	VA 689	636	903	18,000	9.1%	4.7%
132	134	Campbell	VA 689	VA 688	641	915	18,000	9.1%	4.7%
134	136	Campbell	VA 688	VA 685	665	946	19,000	9.1%	4.7%
136	138	Campbell	VA 685	VA 738	899	1299	26,000	9.1%	4.7%
138	140	Campbell	VA 738	VA 622	868	1296	25,000	9.1%	4.7%
140	142	Campbell	VA 622	VA 622	878	1332	26,000	9.1%	4.7%
142	144	Campbell	VA 622	VA 1602	796	1282	24,000	9.1%	4.7%
144	146	Campbell	VA 1602	VA 738	772	1297	24,000	5.3%	4.4%
146	148	Campbell	VA 738	VA 683	864	1455	27,000	5.3%	4.4%
148	150	Campbell	VA 683	VA 679	878	1470	28,000	5.3%	4.4%
150	152	Campbell	VA 679	VA 1433	884	1472	28,000	5.3%	4.4%
152	154	Campbell	VA 1433	Airport Entrance	881	1488	28,000	5.3%	4.4%
154	156	Campbell	Airport Entrance	VA 678	881	1507	28,000	5.3%	4.4%
156	158	Campbell	VA 678	VA 758/F905	829	1378	26,000	5.3%	4.4%
158	160	Campbell	VA 758/F905	US 460	840	1375	26,000	5.3%	4.4%
170	172	Amherst	Sweetbriar/VA 624	US 29 Bus	938	819	21,000	8.5%	10.8%
172	174	Amherst	US 29 Bus	US 60	764	673	17,000	8.5%	10.8%
174	176	Amherst	US 60	US 29 Bus/VA 739	599	553	14,000	8.5%	10.8%
176	178	Amherst	US 29 Bus/VA 739	VA 608	662	505	14,000	8.5%	10.8%
178	180	Amherst	VA 608 W	VA 608 E	662	506	14,000	8.5%	10.8%
180	182	Amherst	VA 608 W	VA 151	665	502	14,000	12.1%	13.3%
182	184	Amherst	VA 151	VA 610	505	437	11,000	12.1%	13.3%
184	186	Amherst	VA 610	VA 662	486	491	11,000	12.1%	13.3%
186	188	Amherst	VA 662	VA 739 S	482	490	11,000	12.1%	13.3%
188	190	Nelson	VA 739 S	VA 739 N	482	496	12,000	12.1%	13.3%
190	192	Nelson	VA 739 N	VA 748	487	508	12,000	12.1%	13.3%
192	194	Nelson	VA 748	VA 665 W	484	508	12,000	12.1%	13.3%
194	196	Nelson	VA 665 W	VA 665 E	486	509	12,000	12.1%	13.3%
196	198	Nelson	VA 665 E	VA 669	477	499	11,000	12.1%	13.3%
198	200	Nelson	VA 669	VA 655	477	504	12,000	11.3%	8.4%
200	202	Nelson	VA 655	VA 671	495	547	12,000	11.3%	8.4%
202	204	Nelson	VA 671	VA 56	495	549	12,000	11.3%	8.4%
204	206	Nelson	VA 56	VA 653	511	562	13,000	11.3%	8.4%
206	208	Nelson	VA 653	VA 651	503	572	13,000	11.3%	8.4%
208	210	Nelson	VA 651	US 29 Bus/VA 56	501	575	13,000	11.3%	8.4%
210	212	Nelson	US 29 Bus/VA 56	VA 1001	438	547	12,000	11.3%	8.4%
212	214	Nelson	VA 1001	US 29 Bus	440	561	12,000	11.3%	8.4%
214	216	Nelson	US 29 Bus	VA 718	464	572	12,000	11.3%	8.4%
216	218	Nelson	VA 718	VA 641	455	568	12,000	11.3%	8.4%
218	220	Nelson	VA 641	VA 766/624	449	569	12,000	11.3%	8.4%
220	222	Nelson	VA 766/624	VA 737	438	566	12,000	11.3%	8.4%
222	224	Nelson	VA 737	VA 775	436	567	12,000	11.3%	8.4%
224	226	Nelson	VA 775	VA 623	430	568	12,000	11.6%	7.0%
226	228	Nelson	VA 623	VA 776	434	558	12,000	11.6%	7.0%
228	230	Nelson	VA 776	VA 786	433	559	12,000	11.6%	7.0%
230	232	Nelson	VA 786	VA 6W	427	560	12,000	11.6%	7.0%
232	234	Nelson	VA 6W	VA 6Y	353	453	9,000	11.6%	7.0%
234	236	Nelson	VA 6Y	VA 619	353	495	10,000	11.6%	7.0%
236	238	Nelson	VA 619	VA 617	338	486	10,000	11.6%	7.0%
238	240	Nelson	VA 617	VA 790/VA 762	338	507	10,000	11.6%	7.0%
240	242	Nelson	VA 790/VA 762	VA 837	335	519	10,000	11.6%	7.0%
242	244	Nelson	VA 837	VA 616	336	519	10,000	11.6%	7.0%
244	246	Nelson	VA 616	VA 6E	331	518	10,000	11.6%	7.0%
246	248	Nelson	VA 6E	VA 615	318	592	11,000	11.6%	7.0%

Exhibit 7

1997 Base Year Segment Traffic Volumes

End Nodes					PM Peak Vol		1997 Daily	% Truck/Buses	
From	To	Jurisdiction [1]	From	To	NB	SB	Volume	NB	SB
248	250	Nelson	VA 615	VA 632	321	599	11,000	11.6%	7.0%
250	252	Nelson	VA 632	VA 699	320	601	11,000	11.6%	7.0%
252	254	Albemarle	VA 699	VA 837	320	612	11,000	10.4%	5.1%
254	256	Albemarle	VA 837	VA 838	322	616	11,000	10.4%	5.1%
256	258	Albemarle	VA 838	VA 805	322	619	11,000	10.4%	5.1%
258	260	Albemarle	VA 805	VA 633	324	630	11,000	10.4%	5.1%
260	262	Albemarle	VA 633S	VA 633N	325	633	11,000	10.4%	5.1%
262	264	Albemarle	VA 633N	VA 775	323	663	12,000	10.4%	5.1%
264	266	Albemarle	VA 775	VA 697/VA 767	329	665	12,000	10.4%	5.1%
266	268	Albemarle	VA 697/VA 767	VA 692	339	667	12,000	10.4%	5.1%
268	270	Albemarle	VA 692	VA 712	353	691	12,000	10.4%	5.1%
270	272	Albemarle	VA 712	VA 801	358	704	12,000	10.4%	5.1%
272	274	Albemarle	VA 801	VA 710	358	711	13,000	10.4%	5.1%
274	276	Albemarle	VA 710	VA 760	371	752	13,000	10.4%	5.1%
276	278	Albemarle	VA 760	VA 708	363	769	13,000	10.4%	5.1%
278	280	Albemarle	VA 708	VA 745S	372	844	14,000	6.5%	4.9%
280	282	Albemarle	VA 745S	VA 745N	373	859	14,000	6.5%	4.9%
282	284	Albemarle	VA 745N	F178/VA 1106	376	867	15,000	6.5%	4.9%
284	286	Albemarle	F178/VA 1106	I-64	401	945	16,000	6.5%	4.9%

Notes: [1] -- The jurisdiction shown is that located at the start of the segment. Many of the segments at jurisdiction boundaries are located in both bordering jurisdictions.

Exhibit 8

1997 Base Year Intersection/Interchange Turning Movement Volumes

Node	Jurisdiction	Location	PM Peak Hour Turning Movement Volumes [1]														Rt 29 Through	Other
			NBL	NBT	NBR	NBU	SBL	SBT	SBR	SBU	EBL	EBT	EBR	WBL	WBT	WBR		
22	Pittsylvania	US 29 Bus	118	125	95	0	94	235	282	0	477	101	88	0	83	58	360	1396
24	Pittsylvania	VA 946	13	647		0		608	6	0	2		3				1255	24
26	Pittsylvania	VA 640	6	576	67	0	24	564	1	4	0	0	4	46	0	7	1140	155
28	Pittsylvania	VA 1701	0	587				588	7		0		5				1175	12
30	Pittsylvania	VA 863	40	542		5		559	98	0	26		31				1101	195
32	Pittsylvania	VA 825		556	12	0	22	641		9				16		10	1197	60
34	Pittsylvania	VA 894	0	575				653	4		0		19				1228	23
36	Pittsylvania	VA 718	15	546	14	0	10	641	16	0	30	3	7	9	0	7	1187	111
38	Pittsylvania	VA 1434	26	557		0		616	7	0	1		51				1173	85
40	Pittsylvania	VA 703	107	423	28	0	80	488	77	0	203	42	105	30	27	24	911	723
42	Pittsylvania	VA 1433	80	570		0		639	7	43	1		6				1209	94
44	Pittsylvania	US 29 Bus S	143	471				508	0		0		181				979	324
46	Pittsylvania	VA 832	32	417	22	0	7	449	8	0	13	37	39	20	43	6	866	227
48	Pittsylvania	VA 685	14	410	12	0	27	380	20	0	32	52	46	38	41	17	790	299
50	Pittsylvania	US 29 Bus N		459			12	397	94	0	108	60	18	12	31	14	856	349
52	Pittsylvania	VA 1400 S	0	517		64		439	0	0	0		0				956	0
54	Pittsylvania	VA 1400 N	0	517		0		437	0	0	0		2				954	2
56	Pittsylvania	VA 797	3	514		0		426	8	0	7		11				940	29
58	Pittsylvania	VA 794	11	510		0		424	2	0	3		10				934	26
60	Pittsylvania	VA 649 S	15	498		0		417	10	0	14		9				915	48
62	Pittsylvania	VA 649 N		494	18	0	8	414		0				13		4	908	43
64	Pittsylvania	VA 903		492	6	0	3	420		0				2		14	912	25
66	Pittsylvania	VA 922	0	506		0		421	2	0	1		2				927	5
68	Pittsylvania	VA 1080		507	0	0	1	423		0				0		6	930	7
70	Pittsylvania	VA 672	17	495	1	0	1	517	14	0	3	1	7	2	1	5	1012	52
72	Pittsylvania	US 29 Bus S		405	200			462						70			867	270
74	Pittsylvania	VA 40	24	367	14	0	13	422	66	0	38	182	28	12	283	28	789	688
76	Pittsylvania	US 29 Bus N		433			137	501								175	934	312
78	Pittsylvania	VA 665 S		492	39	77	22	544		0				17		19	1036	97
80	Pittsylvania	VA 665 N	0	511		0		558	4	3	3		8				1069	15

Exhibit 8

1997 Base Year Intersection/Interchange Turning Movement Volumes

Node	Jurisdiction	Location	PM Peak Hour Turning Movement Volumes [1]														Rt 29 Through	Other
			NBL	NBT	NBR	NBU	SBL	SBT	SBR	SBU	EBL	EBT	EBR	WBL	WBT	WBR		
82	Pittsylvania	VA 770		517				553	3				12				1070	15
84	Pittsylvania	VA 931	5	507	5	0	0	553	2	0	0	0	0	0	0	0	1060	12
86	Pittsylvania	VA 643	13	485	6	0	1	550	35	0	15	3	5	0	0	8	1035	86
88	Pittsylvania	VA 756	10	498		0		576	26	0	9		10				1074	55
90	Pittsylvania	VA 642	25	460	22	0	35	573	4	0	3	18	15	14	16	22	1033	174
92	Pittsylvania	US 29 Bus S	6	393	86	0	16	386	7	0	11	80	6	220	89	19	779	540
94	Pittsylvania	VA 924	5	418	0	0	21	400	6	0	26	7	7	2	19	21	818	114
96	Campbell	VA 43	61	387	17	0	73	387	24	0	26	91	18	22	126	48	774	506
98	Campbell	VA 714	1	430	30	0	10	412	11	0	17	75	9	63	163	37	842	416
100	Campbell	US 29 Bus N	8	461	15	0	308	416	17	0	22	0	3	14	2	269	877	658
102	Campbell	VA 699		607	145	0	50	679		0				62		42	1286	299
104	Campbell	VA 734	18	631		0		720	13	0	4		9				1351	44
106	Campbell	VA 814		634	1	0	5	727		0				6		16	1361	28
108	Campbell	VA 906		645	5	0	2	731		0				1		2	1376	10
110	Campbell	VA 696 S		632	15	0	26	726		7				7		23	1358	71
112	Campbell	VA 750		645	17			759								7	1404	24
114	Campbell	VA 696 N	16	631		5		746	27	0	9		8				1377	60
116	Campbell	VA 912	2	638	0	0	20	767	8	0	4	0	3	3	0	8	1405	48
118	Campbell	VA 692	23	627		0		783	30	0	15		12				1410	80
120	Campbell	VA 686		630	12	0	36	807		1				6		8	1437	62
122	Campbell	VA 939		634	5			844								13	1478	18
124	Campbell	VA 888	18	626		3		829	18	0	14		12				1455	62
126	Campbell	VA 923	10	615	15	0	10	836	4	0	5	1	7	4	0	11	1451	67
128	Campbell	VA 24	18	579	34	0	16	792	97	0	42	9	5	53	18	15	1371	307
130	Campbell	VA 754		629	7	0	3	900		0				5		7	1529	22
132	Campbell	VA 689	11	624	1	0	10	898	7	0	9	1	5	0	0	8	1522	52
134	Campbell	VA 688	6	635		0		911	35	0	30		4				1546	75
136	Campbell	VA 685	8	631	26	0	393	904	2	0	1	2	2	40	2	267	1535	743
138	Campbell	VA 738 S		859	40	0	20	####		0				23		9	2135	92
140	Campbell	VA 622 S		851	17	0	40	####		0				4		27	2143	88

Exhibit 8

1997 Base Year Intersection/Interchange Turning Movement Volumes

Node	Jurisdiction	Location	PM Peak Hour Turning Movement Volumes [1]														Rt 29 Through	Other
			NBL	NBT	NBR	NBU	SBL	SBT	SBR	SBU	EBL	EBT	EBR	WBL	WBT	WBR		
142	Campbell	VA 622 N	92	786		0		####	18	0	10		68				2050	188
144	Campbell	VA 1602	22	759	15	0	3	####	18	0	13	0	6	0	0	0	2035	77
146	Campbell	VA 738 N	1	761	10	0	162	####	2	0	0	0	0	6	2	103	2052	286
148	Campbell	VA 683	1	837	26	0	38	####	4	0	10	0	10	17	0	31	2265	137
150	Campbell	VA 679	0	869	9	0	11	####	0	0				9		15	2330	44
152	Campbell	VA 1433	5	838	41	0	24	####	22	0	10	0	14	16	0	33	2280	165
154	Campbell	Airport Ent	12	869		0		####	30	0	12		11				2346	65
156	Campbell	VA 678 [2]	87	793	1	0	3	####	10	0	36	1	133	9	5	0	2158	285
158	Campbell	VA 758 [2]	2	827	0	0	0	####	10	0	12	0	13	0	0	1	2192	38
160	Campbell	US 460 [3]	113	632	95	0	61	####	328	0	173	581	74	178	774	126	1755	2503
172	Amherst	US 29 Bus S	210	728		0		626	47	0	36		193				1354	486
174	Amherst	US 60	205	506	53	0	27	462	64	0	79	124	160	51	92	14	968	869
176	Amherst	US 29 Bus N	19	561	19	0	32	466	7	0	80	4	9	78	44	21	1027	313
178	Amherst	VA 608 S	2	660		0		502	4	0	2		3				1162	11
180	Amherst	VA 608 N		659	3	0	2	500		0				6		6	1159	17
182	Amherst	VA 151	177	470	18	0	11	406	20	0	16	3	87	9	11	19	876	371
184	Amherst	VA 610	16	473	16	0	4	432	55	0	9	6	1	4	9	4	905	124
186	Amherst	VA 662	6	480		0		485	5	0	2		6				965	19
188	Nelson	VA 739 S	2	478	2	0	1	486	9	0	2	2	2	2	2	2	964	26
190	Nelson	VA 739 N	7	474	1	0	8	487	5	8	4	0	8	1	0	1	961	35
192	Nelson	VA 748		477	10			508								7	985	17
194	Nelson	VA 665 S		484	0			505	4				3			2	989	9
196	Nelson	VA 665 N		463	11	8	5	493		1				8		9	956	33
198	Nelson	VA 669		477				497	7				2				974	9
200	Nelson	VA 655	13	453	9	2	37	483	25	2	12	8	8	11	8	28	936	159
202	Nelson	VA 671		495				542	7				5				1037	12
204	Nelson	VA 56	10	481	0	4	4	532	26	0	28	0	13	0	0	2	1013	83
206	Nelson	VA 653	7	486	18	0	18	543	11	0	2	0	3	16	0	15	1029	90
208	Nelson	VA 651	3	500		0		569	6	0	1		3				1069	13
210	Nelson	US 29 Bus S [4]		416	85	0	37	510		0				65		22	926	209

Exhibit 8

1997 Base Year Intersection/Interchange Turning Movement Volumes

Node	Jurisdiction	Location	PM Peak Hour Turning Movement Volumes [1]														Rt 29 Through	Other
			NBL	NBT	NBR	NBU	SBL	SBT	SBR	SBU	EBL	EBT	EBR	WBL	WBT	WBR		
212	Nelson	VA 1001	9	384	45	0	82	467	12	0	5	12	8	72	8	51	851	304
214	Nelson	US 29 Bus N		432	8	0	31	541		0				20		32	973	91
216	Nelson	VA 718	11	453		0		564	4	0	2		8				1017	25
218	Nelson	VA 641		445	10	0	7	562		0				6		4	1007	27
220	Nelson	VA 624		432	17	0	8	558		0				11		6	990	42
222	Nelson	VA 737	3	435		0		561	6	0	1		5				996	15
224	Nelson	VA 775	2	429	5	0	1	565	2	0	1	0	2	0	0	0	994	13
226	Nelson	VA 623	1	426	3	0	10	545	3	0	5	0	14	9	0	3	971	48
228	Nelson	VA 776	2	432		0		555	4	0	1		3				987	10
230	Nelson	VA 786		426	7	0	2	558		0				1		1	984	11
232	Nelson	VA 6 S	101	326		0		435	18	0	27		125				761	271
234	Nelson	VA 6Y		353				453	42				0				806	42
236	Nelson	VA 619	2	335		16		477	9	0	3		2				812	16
238	Nelson	VA 617	2	332	4	0	21	478	8	0	2	3	0	8	1	4	810	53
240	Nelson	VA 790	4	334	0	0	2	507	10	0	1	0	0	0	0	0	841	17
242	Nelson	VA 837	0	335		0		518	1	0	1		1				853	3
244	Nelson	VA 616	8	328		0		516	2	0	3		3				844	16
246	Nelson	VA 6 N		286	45	0	109	483		0				35		32	769	221
248	Nelson	VA 615	5	313		0		585	14	0	8		7				898	34
250	Albemarle	VA 632		314	7	0	6	595		0				4		6	909	23
252	Albemarle	VA 699	2	318		0		598	14	0	2		3				916	21
254	Albemarle	VA 837		320	0	0	5	611		0				1		2	931	8
256	Albemarle	VA 838	2	314	6	0	1	614	4	0	2	0	1	1	0	6	928	23
258	Albemarle	VA 805	2	320	0	0	5	616	9	0	3	0	2	1	0	1	936	23
260	Albemarle	VA 633 S		314	10	0	5	628		0				2		11	942	28
262	Albemarle	VA 633 N	7	318		0		628	35	0	5		5				946	52
264	Albemarle	VA 775		322	1	0	5	660		0				3		7	982	16
266	Albemarle	VA 697	3	326	0	0	2	658	7	0	10	0	5	2	1	3	984	33
268	Albemarle	VA 692	1	337	1	0	12	664	15	0	6	3	2	1	1	10	1001	52
270	Albemarle	VA 712		352	1	0	13	691		0				0		6	1043	20

Exhibit 8

1997 Base Year Intersection/Interchange Turning Movement Volumes

Node	Jurisdiction	Location	PM Peak Hour Turning Movement Volumes [1]														Rt 29 Through	Other
			NBL	NBT	NBR	NBU	SBL	SBT	SBR	SBU	EBL	EBT	EBR	WBL	WBT	WBR		
272	Albemarle	VA 801	4	354		0		700	11	0	4		4				1054	23
274	Albemarle	VA 710	2	350	6	0	31	695	26	0	5	4	5	11	1	16	1045	107
276	Albemarle	VA 760		358	13	0	19	750		0				2		5	1108	39
278	Albemarle	VA 708	1	345	17	0	84	754	6	0	6	8	3	12	2	21	1099	160
280	Albemarle	VA 745 S	1	370	1	0	14	843	2	0	1	0	1	0	0	2	1213	22
282	Albemarle	VA 745 N	0	371	2	0	7	858	2	0	2	0	1	0	0	3	1229	17
284	Albemarle	F-178	1	368	7	0	65	861	19	0	14	0	1	5	0	19	1229	131

Notes:

[1] -- Shaded cells indicate that this movement does not exist at this location.

[2] -- Since traffic was counted at this location, the intersection has been removed due to reconstruction of Route 460 interchange.

[3] -- Route 460 interchange has been reconstructed since traffic was counted.

[4] -- This intersection has become a 4-leg intersection since traffic was counted (Food Lion Shopping Center).

Abbreviations: NBL = northbound left, NBT = northbound through, NBR = northbound right, NBU = northbound U-turn, SBL = southbound left, SBT = southbound through, SBR = southbound right, SBU = southbound U-turn, EBL = eastbound left, EBT = eastbound through, EBR = eastbound right WBL = westbound left, WBT = westbound through, WBR = westbound right. Route 29 is north-south.

Exhibit 9 – Corridor Analysis Segments Not Operating at Level of Service A

(All Segments Shown Operate at Level of Service B)

End Nodes				
From	To	Jurisdiction	From	To
130	132	Campbell	VA 754	VA 689
136	138	Campbell	VA 685	VA 738
138	140	Campbell	VA 738	VA 622
140	142	Campbell	VA 622	VA 622
142	144	Campbell	VA 622	VA 1602
144	146	Campbell	VA 1602	VA 738
146	148	Campbell	VA 738	VA 683
148	150	Campbell	VA 683	VA 679
150	152	Campbell	VA 679	VA 1433
152	154	Campbell	VA 1433	Airport Entrance
154	156	Campbell	Airport Entrance	US 460

As shown in Exhibit 10, all but five intersections and interchanges in the study corridor operated at acceptable levels of service in 1997. Note that interchange level of service analysis is performed for all conflict points within the interchange (i.e., off-ramps diverge points, on-ramp merge points, weaving areas, and/or intersections at the end of ramps). The level of service reported for interchanges in Exhibit 10 is the worst for all conflict points within the interchange. The deficient locations included three unsignalized intersections in Campbell County (Route 738 North, Route 1433, and Route 758), one unsignalized intersection in Amherst County (Route 29 Business just south of the Town of Amherst), and one interchange in Albemarle County (I-64). Since the traffic counts and analysis were completed, the intersection of Route 29 and Route 758 was closed as part of the reconstruction of the Route 460 interchange.

2.1.4 Roadway Safety

Roadway safety was determined based on an analysis of vehicle crash records for the three-year period from September 1994 to August 1997. Because many crashes relate to intersections, segments for the safety analysis were defined as centered on the analysis intersections identified for this study (as opposed to the analysis segments, which are defined as between analysis intersections). Based on length of each safety analysis segment, a rate of crashes per annual million vehicle miles was calculated. This calculation allowed for the identification of segments with high crash incident of crashes relative to the rest of the corridor. It is important to note that this analysis was performed at a generalized planning level and was intended to identify locations with potential safety deficiencies. Crash information for each safety analysis segment is shown in Exhibit 11. In 1996, the statewide average crash rate on primary roads was 1.35 per million vehicle miles. Exhibit 12 lists those locations with crash rates that exceed this statewide average.

Exhibit 10 -- Summary of Intersection/Interchange Operations

Node	Jurisdiction	Location	Type of Connection [1]	Operations [2]
22	Pittsylvania	US 29 Bus	Interchange	LOS B
24	Pittsylvania	VA 946	Unsignalized	Under
26	Pittsylvania	VA 640	Unsignalized	Under
28	Pittsylvania	VA 1701	Unsignalized	Under
30	Pittsylvania	VA 863	Unsignalized	Under
32	Pittsylvania	VA 825	Unsignalized	Under
34	Pittsylvania	VA 894	Unsignalized	Under
36	Pittsylvania	VA 718	Unsignalized	Under
38	Pittsylvania	VA 1434	Unsignalized	Under
40	Pittsylvania	VA 703	Signalized	LOS B
42	Pittsylvania	VA 1433	Unsignalized	Under
44	Pittsylvania	US 29 Bus S	Interchange	LOS B
46	Pittsylvania	VA 832	Interchange	LOS B
48	Pittsylvania	VA 685	Interchange	LOS A
50	Pittsylvania	US 29 Bus N	Interchange	LOS A
52	Pittsylvania	VA 1400 S	Unsignalized	Under
54	Pittsylvania	VA 1400 N	Unsignalized	Under
56	Pittsylvania	VA 797	Unsignalized	Under
58	Pittsylvania	VA 794	Unsignalized	Under
60	Pittsylvania	VA 649 S	Unsignalized	Under
62	Pittsylvania	VA 649 N	Unsignalized	Under
64	Pittsylvania	VA 903	Unsignalized	Under
66	Pittsylvania	VA 922	Unsignalized	Under
68	Pittsylvania	VA 1080	Unsignalized	Under
70	Pittsylvania	VA 672	Unsignalized	Under
72	Pittsylvania	US 29 Bus S	Interchange	LOS B
74	Pittsylvania	VA 40	Interchange	LOS B
76	Pittsylvania	US 29 Bus N	Interchange	LOS A
78	Pittsylvania	VA 665 S	Unsignalized	Under
80	Pittsylvania	VA 665 N	Unsignalized	Under
82	Pittsylvania	VA 770	Unsignalized	Under
84	Pittsylvania	VA 931	Unsignalized	Under
86	Pittsylvania	VA 643	Unsignalized	Under
88	Pittsylvania	VA 756	Unsignalized	Under
90	Pittsylvania	VA 642	Unsignalized	Under
92	Pittsylvania	US 29 Bus S	Interchange	LOS B
94	Pittsylvania	VA 924	Interchange	LOS A
96	Campbell	VA 43	Interchange	LOS B
98	Campbell	VA 714	Interchange	LOS A

Exhibit 10 -- Summary of Intersection/Interchange Operations

Node	Jurisdiction	Location	Type of Connection [1]	Operations [2]
100	Campbell	US 29 Bus N	Interchange	LOS B
102	Campbell	VA 699	Unsignalized	Under
104	Campbell	VA 734	Unsignalized	Under
106	Campbell	VA 814	Unsignalized	Under
108	Campbell	VA 906	Unsignalized	Under
110	Campbell	VA 696 S	Unsignalized	Under
112	Campbell	VA 750	Unsignalized	Under
114	Campbell	VA 696 N	Unsignalized	Under
116	Campbell	VA 912	Unsignalized	Under
118	Campbell	VA 692	Unsignalized	Under
120	Campbell	VA 686	Unsignalized	Under
122	Campbell	VA 939	Unsignalized	Under
124	Campbell	VA 888	Unsignalized	Under
126	Campbell	VA 923	Unsignalized	Under
128	Campbell	VA 24	Signalized	LOS B
130	Campbell	VA 754	Unsignalized	Under
132	Campbell	VA 689	Unsignalized	Under
134	Campbell	VA 688	Unsignalized	Under
136	Campbell	VA 685	Signalized	LOS B
138	Campbell	VA 738 S	Unsignalized	Near
140	Campbell	VA 622 S	Unsignalized	Near
142	Campbell	VA 622 N	Unsignalized	Over
144	Campbell	VA 1602	Unsignalized	Near
146	Campbell	VA 738 N	Unsignalized	Over
148	Campbell	VA 683	Signalized	LOS B
150	Campbell	VA 679	Signalized	LOS B
152	Campbell	VA 1433	Unsignalized	Over
154	Campbell	Airport Ent	Signalized	LOS B
156	Campbell	VA 678 [3]	Signalized	LOS A
158	Campbell	VA 758 [3]	Unsignalized	Over
160	Campbell	US 460 [4]	Interchange	LOS B
172	Amherst	US 29 Bus S	Unsignalized	Over
174	Amherst	US 60	Interchange	LOS B
176	Amherst	US 29 Bus N	Interchange	LOS B
178	Amherst	VA 608 S	Unsignalized	Under
180	Amherst	VA 608 N	Unsignalized	Under
182	Amherst	VA 151	Unsignalized	Under
184	Amherst	VA 610	Unsignalized	Under
186	Amherst	VA 662	Unsignalized	Under

Exhibit 10 -- Summary of Intersection/Interchange Operations

Node	Jurisdiction	Location	Type of Connection [1]	Operations [2]
188	Nelson	VA 739 S	Unsignalized	Under
190	Nelson	VA 739 N	Unsignalized	Under
192	Nelson	VA 748	Unsignalized	Under
194	Nelson	VA 665 S	Unsignalized	Under
196	Nelson	VA 665 N	Unsignalized	Under
198	Nelson	VA 669	Unsignalized	Under
200	Nelson	VA 655	Unsignalized	Under
202	Nelson	VA 671	Unsignalized	Under
204	Nelson	VA 56	Unsignalized	Under
206	Nelson	VA 653	Unsignalized	Under
208	Nelson	VA 651	Unsignalized	Under
210	Nelson	US 29 Bus S [5]	Unsignalized	Under
212	Nelson	VA 1001	Unsignalized	Under
214	Nelson	US 29 Bus N	Unsignalized	Under
216	Nelson	VA 718	Unsignalized	Under
218	Nelson	VA 641	Unsignalized	Under
220	Nelson	VA 624	Unsignalized	Under
222	Nelson	VA 737	Unsignalized	Under
224	Nelson	VA 775	Unsignalized	Under
226	Nelson	VA 623	Unsignalized	Under
228	Nelson	VA 776	Unsignalized	Under
230	Nelson	VA 786	Unsignalized	Under
232	Nelson	VA 6 S	Unsignalized	Under
234	Nelson	VA 6Y	Unsignalized	Under
236	Nelson	VA 619	Unsignalized	Under
238	Nelson	VA 617	Unsignalized	Under
240	Nelson	VA 790	Unsignalized	Under
242	Nelson	VA 837	Unsignalized	Under
244	Nelson	VA 616	Unsignalized	Under
246	Nelson	VA 6 N	Unsignalized	Under
248	Nelson	VA 615	Unsignalized	Under
250	Albemarle	VA 632	Unsignalized	Under
252	Albemarle	VA 699	Unsignalized	Under
254	Albemarle	VA 837	Unsignalized	Under
256	Albemarle	VA 838	Unsignalized	Under
258	Albemarle	VA 805	Unsignalized	Under
260	Albemarle	VA 633 S	Unsignalized	Under
262	Albemarle	VA 633 N	Unsignalized	Under
264	Albemarle	VA 775	Unsignalized	Under

Exhibit 10 -- Summary of Intersection/Interchange Operations

Node	Jurisdiction	Location	Type of Connection [1]	Operations [2]
266	Albemarle	VA 697	Unsignalized	Under
268	Albemarle	VA 692	Unsignalized	Under
270	Albemarle	VA 712	Unsignalized	Under
272	Albemarle	VA 801	Unsignalized	Under
274	Albemarle	VA 710	Unsignalized	Under
276	Albemarle	VA 760	Unsignalized	Under
278	Albemarle	VA 708	Unsignalized	Under
280	Albemarle	VA 745 S	Unsignalized	Under
282	Albemarle	VA 745 N	Unsignalized	Under
284	Albemarle	F-178	Unsignalized	Under
286	Albemarle	I-64	Interchange	LOS D

Notes:

[1] -- Interchange = grade separated interchange, Unsignalized = unsignalized at-grade intersection, Signalized = signalized at-grade intersection.

[2] -- LOS = level of service grade, Under = under capacity, Near = near capacity, Over= over capacity (under, near, over based on planning-level operations analysis).

The level of service analysis at interchanges was performed for all conflict points within the interchange (i.e., off-ramps diverge points, on-ramp merge points, weaving areas, and/or intersections at the end of ramps). The level of service reported here for interchanges is the worst for all conflict points within the interchange.

[3] -- Since traffic was counted at this location, the intersection has been removed due to reconstruction of Route 460 interchange.

[4] -- Route 460 interchange has been reconstructed since traffic was counted.

[5] -- This intersection has become a 4-leg intersection since traffic was counted (Food Lion Shopping Center).

Exhibit 11 -- Summary of Vehicle Crashes in the Study Corridor (9/94 through 8/97)

Point at Center of Segment [1]			Segment	Total		Horiz/Vert	1997 Daily	Crash
Node	Roadway	Jurisdiction	Length (mi)	Crashes [2]	Fatalities	Issues [3]	Traffic	Rate [4]
22	US 29 Bus	Pittsylvania	0.29	8			15,000	1.68
24	VA 946	Pittsylvania	0.38	5		NB	15,050	0.80
26	VA 640	Pittsylvania	0.18	9			14,550	3.14
28	VA 1701	Pittsylvania	0.37	1			14,100	0.18
30	VA 863	Pittsylvania	1.11	19	1	NB/SB	14,300	1.09
32	VA 825	Pittsylvania	1.36	14		NB	14,400	0.65
34	VA 894	Pittsylvania	0.56	4			14,350	0.45
36	VA 718	Pittsylvania	0.98	13		NB	14,550	0.83
38	VA 1434	Pittsylvania	1.09	17			14,550	0.98
40	VA 703	Pittsylvania	0.60	18		NB	15,200	1.80
42	VA 1433	Pittsylvania	0.57	2		NB/SB	15,050	0.21
44	US 29 Bus S	Pittsylvania	0.69	9			11,750	1.01
46	VA 832	Pittsylvania	1.15	3	1		9,300	0.26
48	VA 685	Pittsylvania	1.21	0		SB	9,100	0.00
50	US 29 Bus N	Pittsylvania	1.38	5		SB	9,550	0.35
52	VA 1400 S	Pittsylvania	0.84	3			10,000	0.33
54	VA 1400 N	Pittsylvania	0.55	3		SB	9,400	0.53
56	VA 797	Pittsylvania	0.55	3		SB	8,250	0.60
58	VA 794	Pittsylvania	0.23	1		SB	7,650	0.52
60	VA 649 S	Pittsylvania	0.17	1		SB	7,750	0.69
62	VA 649 N	Pittsylvania	0.59	8	2	SB	8,000	1.55
64	VA 903	Pittsylvania	0.84	7			8,300	0.92
66	VA 922	Pittsylvania	0.34	1			8,600	0.31
68	VA 1080	Pittsylvania	0.32	3			8,850	0.97
70	VA 672	Pittsylvania	0.55	4			9,200	0.72
72	US 29 Bus S	Pittsylvania	1.27	1			8,100	0.09
74	VA 40	Pittsylvania	2.16	3			7,450	0.17
76	US 29 Bus N	Pittsylvania	1.32	2			10,300	0.13
78	VA 665 S	Pittsylvania	0.23	4			12,350	1.29
80	VA 665 N	Pittsylvania	0.35	1		SB	12,200	0.21
82	VA 770	Pittsylvania	0.49	4			12,000	0.62
84	VA 931	Pittsylvania	1.03	9			11,550	0.69
86	VA 643	Pittsylvania	1.36	10	1	NB	11,350	0.59
88	VA 756	Pittsylvania	1.53	5		NB	11,400	0.26
90	VA 642	Pittsylvania	1.57	16	2		11,250	0.83
92	US 29 Bus S	Pittsylvania	1.71	4			9,250	0.23
94	VA 924	Pittsylvania	1.97	6			7,750	0.36
96	VA 43	Campbell	1.34	14	1		8,250	1.16
98	VA 714	Campbell	1.73	13			8,100	0.85
100	US 29 Bus N	Campbell	1.79	13		NB	11,450	0.58
102	VA 699	Campbell	1.28	20			14,850	0.96
104	VA 734	Campbell	0.96	3			14,500	0.20
106	VA 814	Campbell	0.74	5			14,150	0.44
108	VA 906	Campbell	0.59	3			14,050	0.33
110	VA 696 S	Campbell	0.23	3		SB	14,450	0.82
112	VA 750	Campbell	0.17	0		SB	14,800	0.00
114	VA 696 N	Campbell	0.38	4		NB	15,000	0.64
116	VA 912	Campbell	0.66	7			15,200	0.64
118	VA 692	Campbell	0.61	4			15,200	0.39
120	VA 686	Campbell	0.48	6			15,300	0.75
122	VA 939	Campbell	0.19	3			15,750	0.92
124	VA 888	Campbell	0.36	5			16,150	0.79
126	VA 923	Campbell	1.19	9			16,550	0.42
128	VA 24	Campbell	0.97	14			17,150	0.77

Exhibit 11 -- Summary of Vehicle Crashes in the Study Corridor (9/94 through 8/97)

Point at Center of Segment [1]			Segment	Total		Horiz/Vert	1997 Daily	Crash
Node	Roadway	Jurisdiction	Length (mi)	Crashes [2]	Fatalities	Issues [3]	Traffic	Rate [4]
130	VA 754	Campbell	0.28	4			17,400	0.75
132	VA 689	Campbell	0.64	15			17,150	1.25
134	VA 688	Campbell	0.79	11			17,050	0.75
136	VA 685	Campbell	0.44	8			20,400	0.81
138	VA 738 S	Campbell	0.29	4			23,400	0.54
140	VA 622 S	Campbell	0.18	6			23,450	1.30
142	VA 622 N	Campbell	0.32	6			22,850	0.75
144	VA 1602	Campbell	0.91	5			21,850	0.23
146	VA 738 N	Campbell	0.88	13			23,350	0.58
148	VA 683	Campbell	0.51	24			25,150	1.71
150	VA 679	Campbell	0.42	28		NB/SB	25,450	2.39
152	VA 1433	Campbell	0.26	10			25,400	1.38
154	Airport Ent	Campbell	0.20	12			25,700	2.13
156	VA 678	Campbell	0.15	20			25,500	4.78
158	VA 758	Campbell	0.15	9			25,550	2.14
160	US 460	Campbell	0.10	14			26,200	4.88
170	VA 624	Amherst	0.28	17			8,500	6.52
172	US 29 Bus S	Amherst	1.23	19			9,400	1.50
174	US 60	Amherst	1.54	11	1		8,800	0.74
176	US 29 Bus N	Amherst	1.00	2		NB	7,450	0.25
178	VA 608 S	Amherst	0.80	4		NB	7,550	0.60
180	VA 608 N	Amherst	0.64	4		NB	7,300	0.78
182	VA 151	Amherst	1.19	19	1		7,600	1.92
184	VA 610	Amherst	1.97	11		NB	7,950	0.64
186	VA 662	Amherst	1.36	11	1		7,850	0.94
188	VA 739 S	Nelson	0.49	5			8,000	1.16
190	VA 739 N	Nelson	0.62	1			8,000	0.18
192	VA 748	Nelson	0.50	6	1		7,800	1.40
194	VA 665 S	Nelson	0.29	2			7,700	0.82
196	VA 665 N	Nelson	0.63	4		SB	7,900	0.73
198	VA 669	Nelson	0.93	3		SB	8,550	0.34
200	VA 655	Nelson	0.60	6			9,400	0.97
202	VA 671	Nelson	0.17	1			9,900	0.54
204	VA 56	Nelson	0.68	7		SB	10,150	0.93
206	VA 653	Nelson	1.59	15			10,000	0.86
208	VA 651	Nelson	1.58	12			9,700	0.72
210	US 29 Bus S	Nelson	0.82	10			9,700	1.15
212	VA 1001	Nelson	0.41	10			9,350	2.38
214	US 29 Bus N	Nelson	0.46	1	1	NB	9,050	0.22
216	VA 718	Nelson	0.60	5		SB	9,300	0.82
218	VA 641	Nelson	0.87	2			9,700	0.22
220	VA 624	Nelson	0.76	7			9,950	0.85
222	VA 737	Nelson	0.29	0			9,950	0.00
224	VA 775	Nelson	0.53	3			10,000	0.52
226	VA 623	Nelson	1.58	10		SB	9,950	0.58
228	VA 776	Nelson	1.30	14			9,850	1.00
230	VA 786	Nelson	0.21	3			10,100	1.29
232	VA 6 S	Nelson	0.19	2			9,200	1.04
234	VA 6Y	Nelson	0.64	6			8,250	1.04
236	VA 619	Nelson	0.68	2			8,400	0.32
238	VA 617	Nelson	0.77	13			8,400	1.84
240	VA 790	Nelson	0.84	4		SB	8,350	0.52
242	VA 837	Nelson	0.48	4			8,350	0.91
244	VA 616	Nelson	0.35	0			8,600	0.00

Exhibit 11 -- Summary of Vehicle Crashes in the Study Corridor (9/94 through 8/97)

Point at Center of Segment [1]			Segment	Total		Horiz/Vert	1997 Daily	Crash
Node	Roadway	Jurisdiction	Length (mi)	Crashes [2]	Fatalities	Issues [3]	Traffic	Rate [4]
246	VA 6 N	Nelson	0.57	4			8,750	0.73
248	VA 615	Nelson	1.33	7		NB	8,850	0.54
250	VA 632	Albemarle	1.18	4		NB	9,150	0.34
252	VA 699	Albemarle	0.40	1			9,500	0.24
254	VA 837	Albemarle	0.36	0			9,850	0.00
256	VA 838	Albemarle	0.55	0			10,000	0.00
258	VA 805	Albemarle	0.37	0		NB	10,050	0.00
260	VA 633 S	Albemarle	0.21	2			10,150	0.86
262	VA 633 N	Albemarle	2.02	20		NB/SB	10,300	0.88
264	VA 775	Albemarle	2.11	23			10,550	0.94
266	VA 697	Albemarle	0.27	2			10,650	0.64
268	VA 692	Albemarle	0.63	12		NB/SB	10,550	1.65
270	VA 712	Albemarle	0.60	4			10,550	0.58
272	VA 801	Albemarle	0.27	4			10,600	1.28
274	VA 710	Albemarle	0.64	5		SB	10,600	0.67
276	VA 760	Albemarle	0.53	6			10,750	0.96
278	VA 708	Albemarle	1.00	22	1		11,450	1.75
280	VA 745 S	Albemarle	1.61	5		SB	12,300	0.23
282	VA 745 N	Albemarle	1.93	13			12,900	0.48
284	VA F-178/1106	Albemarle	1.39	15	1	NB	14,900	0.66
286	I-64	Albemarle	0.18	13			16,600	3.97

Notes:

[1] -- For analysis purposes, segments were defined with equal lengths on either side of intersections. Jurisdiction shown is for the center point of the segment; the segment may extend into an adjacent jurisdiction.

[2] -- The total number of vehicle crashes on the segment during the period from September 1994 through August 1997.

[3] -- Indicates whether horizontal and/or vertical geometric issues were identified through the windshield survey conducted for this study (NB=northbound lanes, SB=southbound lanes).

[4] -- Number of crashes per million vehicle miles traveled.

Exhibit 12 – High Crash Segments

Center of Analysis Segment		
Route	Jurisdiction	Crash Rate [1]
US 29 Bus at Blairs	Pittsylvania	1.68
VA 640	Pittsylvania	3.14
VA 703	Pittsylvania	1.80
VA 649 N	Pittsylvania	1.55
VA 683	Campbell	1.71
VA 679	Campbell	2.39
VA 1433	Campbell	1.38
Lynchburg Airport Entrance	Campbell	2.13
VA 678	Campbell	4.78
VA 758	Campbell	2.14
US 460 [2]	Campbell	4.88
VA 624 [3]	Amherst	6.52
US 29 Bus Sout at Amherst	Amherst	1.50
VA 151	Amherst	1.92
VA 748	Nelson	1.40
VA 1001 [4]	Nelson	2.38
VA 617	Nelson	1.84
VA 692	Albemarle	1.65
VA 708	Albemarle	1.75
I-64	Albemarle	3.97

Notes:
[1] – Number of crashes per million vehicle miles. Crash rate on all Virginia primary roads in 1996 was 1.35 per million vehicle miles.
[2] – Interchange has been reconstructed.
[3] – Northbound left turn lane has been extended recently and traffic patterns in this vicinity will change substantially once the Madison Heights Bypass is complete.
[4] – Intersection has been converted to 4-leg with Food Lion Shopping Center on west side of Route 29.

2.1.5 Travel Patterns

Origin-destination surveys were performed for this study to determine the extent of local versus through traffic in the corridor. These surveys were conducted at four locations in the corridor:

- Station 1: South of I-64, Albemarle County.
- Station 2: South of the US 29 Amherst Bypass, Amherst County.
- Station 3: South of US 460, Campbell County.
- Station 4: North of the US 29 Danville Bypass, Pittsylvania County.

The surveys were conducted on weekdays in September and October of 1997. Each survey was conducted for one day between the hours of 12:00 noon and 6 in the evening. At Stations 1, 2, and 3, license plates were recorded and motorists were sent postage-paid

reply cards asking about trip origins and destinations. At Station 4, survey information was gathered by stopping motorists and asking them about their trip. Additional detail on the origin-destination survey methodology is included in the *Route 29 Corridor Development Study (Combined Phases II/III) Technical Report*.

The origin-destination survey results (summarized in Exhibit 13) show that about 3 out of 4 vehicles on Route 29 are making a trip which begins and ends within the study corridor. About 7 percent of trips both start and end outside of the corridor, with 2 to 3 percent both starting and ending outside of Virginia. The remaining trips start or end in the corridor but end outside of the corridor either elsewhere in Virginia or out of state. The average number of people per vehicle in the corridor is 1.6 persons. About 9 out of 10 trips start and/or end at home and slightly less than half of the trips are going to or from work.

2.2 Rail System

Rail service in the Route 29 Corridor is provided on the Norfolk Southern Railroad's tracks that generally parallel Route 29 from Danville through Pittsylvania and Campbell counties to Lynchburg, then through Amherst, Nelson, and Albemarle counties to Charlottesville and beyond. The Route 29 Corridor is served by both passenger and freight rail service. Freight rail service is provided by Norfolk Southern, while passenger rail service is provided by AMTRAK.

2.2.1 Freight Rail

An active rail line owned by Norfolk Southern runs the entire length of the study area, running roughly parallel to Route 29. This rail line serves largely as a conduit from developed areas of the Northeast and eastern Midwest to larger cities in the southeastern United States. The Virginia Department of Rail and Public Transportation estimates that between 80 and 90 percent of freight traffic in the corridor has both a remote origin and destination.

In terms of freight rail service, the Route 29 Corridor provides a relatively fast route for freight service. This is largely due to the rural nature of the corridor, low train traffic volume, and generally level grades. The corridor is rated at 50 mph for freight trains with exceptions only in Danville near the rail yards at Dundee (35 mph), through Lynchburg (40 mph), at a series of reverse curves between Faber and Elma (45 mph) and in Charlottesville (20-25 mph). The only area with any notable grade issues is a short section just south of Charlottesville.

As shown in Exhibit 14, there are 43 at-grade crossings with public roads in the study area (numerous other crossing are either on private land or the crossing road is on a separate grade). Forty-two of these at-grade crossings are equipped with “railroad crossing” signs that have flashing lights and a gate to stop traffic. The remaining one, located in rural Albemarle County, has a sign with just flashing lights and a bell.

Exhibit 13 -- Summary of Travel Patterns in the Study Corridor

Total Trips [1] [2]

Station [3]	Cor-Cor	Cor-VA	Cor-OOS	VA-VA	VA-OOS	OOS-OOS	Total
1	3877	941	162	170	96	16	5262
2	6555	1179	159	223	150	0	8266
3	8035	849	169	59	205	10	9327
4	4756	247	858	13	265	170	6309
Total	**23223**	**3216**	**1348**	**465**	**716**	**196**	**29164**

Percentage of Trips by Origin-Destination Pairs [2]

Station [3]	Cor-Cor	Cor-VA	Cor-OOS	VA-VA	VA-OOS	OOS-OOS	Total
1	73.68%	17.88%	3.08%	3.23%	1.82%	0.30%	100.00%
2	79.30%	14.26%	1.92%	2.70%	1.81%	0.00%	100.00%
3	86.15%	9.10%	1.81%	0.63%	2.20%	0.11%	100.00%
4	75.38%	3.92%	13.60%	0.21%	4.20%	2.69%	100.00%
Total	**79.63%**	**11.03%**	**4.62%**	**1.59%**	**2.46%**	**0.67%**	**100.00%**

Vehicle Occupancy and Trip Purpose

Station [3]	Coded Surveys[4]	Occupancy [5]	Origin at Home	Destination at Home	Non-Home [6]	Work Trips [7]	Non-work Trips
1	446	1.75	185	181	61	183	250
2	783	1.81	248	419	89	333	426
3	783	1.56	303	342	97	367	396
4	1030	1.52	340	491	128	613	361

Trip Purpose Percentages

Station [3]	Coded Surveys	Occupancy	Origin Home	Destination Home	Non-Home	Work Trips	Non-work Trips
1			43.33%	42.39%	14.29%	42.26%	57.74%
2			32.80%	55.42%	11.77%	43.87%	56.13%
3			40.84%	46.09%	13.07%	48.10%	51.90%
4			35.45%	51.20%	13.35%	62.94%	37.06%

[1] -- Survey trips expanded by site and by direction based on traffic counts. Surveys were performed 12:00 noon to 6:00 p.m. on weekday in September/October 1997.

[2] -- Abbreviations for trip origin and destination are as folows:

Cor-Cor = Both trip ends in the study corridor

Cor-VA = One trip end in the study corridor, the other outside of the study corridor but in Virginina

Cor-OOS = One trip end in the study corridor, the other outside of Virginia

VA-VA = Both trip ends in Virginia but outside of the study corridor

VA-OOS = One trip end in Virginia but outside of the study corridor, the other outside of Virginia

OOS-OOS = Both trip ends outside of Virginia

[3] -- Survey station locations are as follows:

Station 1 -- South of I-64

Station 2 -- South of US 29 Amherst Bypass

Station 3 -- South of US 460

Station 4 -- North of US 29 Danville Bypass

[4] -- Number of completed, valid surveys received. Due to incomplete surveys, the sum of any group of responses may not match these numbers.

[5] -- Average of the number of persons in each vehicle.

[6] -- Both ends of the trip were not the respondent's home.

[7] -- Trip with at least one end at work (generally a commuting trip).

Exhibit 14 – Railroad Grade Crossings on Public Roads in the Route 29 Corridor

Jurisdiction	Crossing Road	Maximum Train Speed (based on geometry)	1996 Average Daily Vehicles on Cross-street
Danville	Clearview Drive	35 mph	800
Danville	Hunter Street	35 mph	500
Danville	Edgewood Drive	35 mph	600
Danville	Edgewood Drive	35 mph	1600
Danville	Stokesland Avenue	35 mph	1400
Danville	Wooding Avenue	35 mph	7600
Danville	Holbrook Street	35 mph	1600
Danville	Jefferson Street	35 mph	3000
Danville	Monument Street	35 mph	900
Danville	Lynn Street	35 mph	300
Danville	Halifax Road	35 mph	1400
Pittsylvania	Route 695	79 mph	200
Pittsylvania	Route 718	79 mph	900
Pittsylvania	Route 649	79 mph	400
Pittsylvania	Route 676	79 mph	700
Pittsylvania	Depot Street	79 mph	1400
Pittsylvania	Sycamore Road	79 mph	200
Pittsylvania	Route 643	79 mph	700
Pittsylvania	Spencer Road	79 mph	200
Campbell	Route 626 (#3)	79 mph	900
Campbell	Route 626 (#2)	79 mph	900
Campbell	Route 626 (#1)	79 mph	1400
Campbell	Route 24	79 mph	3700
Campbell	Route 691	79 mph	200
Campbell	Waterlick Road	79 mph	3800
Lynchburg	Carroll Avenue	79 mph	1500
Lynchburg	Washington Street	10 mph	1200
Amherst	River Road	79 mph	800
Amherst	Sweet Briar Station	79 mph	900
Amherst	Depot Street	79 mph	700
Amherst	Toytown Road	79 mph	200
Nelson	Route 56	79 mph	2600
Nelson	Buddy Woody Road	79 mph	100
Nelson	Gordon's Crossing	79 mph	1100
Nelson	Rockfish Road	79 mph	400
Nelson	Old Faber Road	79 mph	100
Nelson	Route 774	79 mph	100
Albemarle	Faber Road	79 mph	500
Albemarle	Red Hill Depot Road	79 mph	100
Albemarle	Overlook Drive	79 mph	400
Charlottesville	Shamrock Road	79 mph	4500
Charlottesville	Dale Avenue	79 mph	500
Charlottesville	Concord Street	79 mph	500

Through most of these crossings, the maximum posted speed for trains based on geometrics is 79 miles per hour, which is higher than trains can legally run through the area. (The federal maximum posted speed for trains is 60 m.p.h., except in the Northeast Corridor, where the limit is 90 m.p.h. because there are no at-grade crossings.)

Of the 132 miles of track between downtown Charlottesville and the Virginia/North Carolina border, 58.5 miles is double track, and 73.5 miles is single track. At one time, the entire line was double track, but rail companies have removed segments of track as traffic on the route has declined over the past 50 years.

In 1996, the rail line in the Route 29 Corridor from Danville to Lynchburg carried 15 million gross ton-miles (mgt) northbound, and 19 mgt southbound. From Lynchburg to Manassas, 12 mgt of freight was carried northbound, while 8 mgt was carried southbound. At Altavista, an average of two passenger trains and about 16 freight trains passed through per day in 1998; on peak days this reached 20 to 22 trains per day. The amount of freight carried on the line is projected to increase by about 5 percent annually over the next few years.

Improvements to two grade-separated crossings – a bridge in Charlottesville at 10th Street and a tunnel in Lynchburg at Kemper Street – have enabled Norfolk Southern to run "double stack" operations (two standard shipping containers stacked on top of one another) in the corridor since the mid 1990s. This container traffic is generally headed to and from the Norfolk area where it is carried in and taken away on ships.

The Military Traffic Management Command has identified the Norfolk Southern main line between Alexandria and Danville as a rail corridor strategically important to the defense of the United States, and it has been included in the U.S. Strategic Rail Corridor (STRACNET) defense network. This strategic rail corridor closely parallels the study corridor between Lynchburg and Charlottesville.

2.2.2 Passenger Rail

Under authority of its 1971 founding Congressional legislation, AMTRAK runs its trains in the corridor on tracks that are owned and maintained by Norfolk Southern and pays Norfolk Southern a fee to do this. There are currently two AMTRAK trains per day that run along through at least a portion of the study area. One of the trains, the Crescent, runs from New Orleans to New York with stops in Danville, Lynchburg and Charlottesville. The other, the Cardinal, runs from Chicago to Washington, D.C. with a stop in Charlottesville (coming from and going to the west via Staunton). The Crescent operates seven days a week; the Cardinal operates three days per week (Tuesday, Thursday, Saturday). A summary of service is included in Exhibit 15.

Exhibit 15 – Passenger Rail Service in the Route 29 Corridor

Station	Service Times (as of April 2001)
Danville	4:41 a.m. (northbound Crescent, to Washington DC) 11:59 p.m. (southbound Crescent, from Washington DC)
Lynchburg	5:51 a.m. (northbound Crescent, to Washington DC) 11:05 p.m. (southbound Crescent, from Washington DC)
Charlottesville	7:05 a.m. (northbound Crescent) 9:47 p.m. (southbound Crescent) 5:09 p.m. (northbound Cardinal, to Washington DC) 1:18 p.m. (southbound Cardinal, from Washington DC)

Each of the AMTRAK stations in the corridor have been recently or are planned to be renovated. Danville's station was renovated in 1995 using federal transportation enhancement funds. Lynchburg's Kemper Street Station is currently being renovated, also using transportation enhancement funds. Both of these stations are located within a mile of the central business districts of each municipality and are served by nearby stops on local bus transit routes. Danville's station is in an area that the city has designated a revitalization zone, and shares its building with a science museum. Around the station, there is a park, a riverwalk along the Dan River, and several historic buildings that have been renovated. It is within walking distance of the city's central business district. Lynchburg's station is located in an area outside of the central business district.

Charlottesville's train station was recently renovated, and a restaurant was added. This project was completed in fall 2000. More ambitious plans to add a parking garage and mixed-use development to the station site were abandoned. The City of Charlottesville transferred the federal transportation funds originally earmarked for this effort to building a transit hub and mixed-use development near the City Hall. This project is currently is the planning stage, with no completion date set.

At times, there appears to be insufficient passenger train capacity in the Route 29 Corridor. According to the National Association of Railroad Passengers (NARP), passengers in this corridor have difficulties purchasing a ticket in advance as AMTRAK often fills the trains with longer-distance passengers (i.e., Atlanta to New York). According to NARP, many passengers will purchase tickets at the train station just before the trip. In doing this, passengers run the risk of not getting a seat, although for the most part, the trains are not completely sold out. While AMTRAK will sometimes add additional rail cars, this is done inconsistently.

As shown in Exhibit 16, passenger levels at the three stations in the Route 29 Corridor generally dropped during the period from 1994 to 1997, with the highest drop occurring during fiscal year 1996 (coinciding with a substantial fare increase). Passenger levels increased again in fiscal year 1998 (and in fiscal year 1999 for both Lynchburg and Danville).

Exhibit 16 – AMTRAK Ridership in the Route 29 Corridor, 1994-1999 *

Station	FY94	FY95	FY96	FY97	FY98	FY99
Charlottesville	47,378	43,498	33,300	31,535	33,460	28,065
Lynchburg	12,998	14,105	9,692	8,757	11,170	11,957
Danville	4,105	4,628	3,123	3,284	3,608	3,776
** Ridership includes all boardings and alightings at the indicated station. The abbreviation FY is for fiscal year. Amtrak's fiscal year runs from October 1 to September 30.*						

AMTRAK has been required by the US Congress to cover its operating costs without federal subsidies by the year 2004. As a result, it has been adding service to its more profitable lines. The AMTRAK service is generally profitable, so service is not anticipated to decrease and, in fact, may increase. According to AMTRAK officials, the limitations on increasing passenger rail service in the corridor are twofold. The first is that there is limited excess capacity on the Norfolk Southern lines. The second reason is that AMTRAK has an overall shortage of serviceable equipment.

2.3 Air

Air service in the Route 29 Corridor is offered out of three major airports. Almost all of the air travel in the corridor is to and from locations outside of the study corridor (there is no commercial service connecting cities within the corridor). The three major airports in the corridor are the Danville Regional Airport, the Lynchburg Regional Airport, and the Charlottesville-Albemarle Airport. (Smaller public airports inside or near the study area include the Falwell Airport in Lynchburg, the New London Airport in Forest, the Brookneal-Campbell County Airport in Brookneal, and the Smith Mountain Lake Airport in Moneta.)

The Danville Regional Airport offers private charter service, hangar storage of private airplanes, and flight education. In 2000, the airport had approximately 16,000 operations. Of this total, about 25 percent were local flights (these are typically for training, with both take-off and landing in Danville), and 5 percent were jet airplanes. The airport completed a runway extension project in May 1998. Danville lost commercial airline service in 1995 and is seeking replacement service. No charter carriers are based out of the Danville Regional Airport; service is available on a contract basis. No major freight or package carriers use this airport and cargo volumes handled at the airport are minimal (no specific information was available).

In August 2001, the Lynchburg Regional Airport offered 22 daily flights on three commercial carriers to four destinations (Atlanta, Charlotte, Pittsburgh, and Washington Dulles). Daily passenger capacity on these flights is 487. Other activities supported at the airport include small aircraft for business and recreational flying. Cargo volume at the airport averages about 1000 pounds per month outbound, and 500 pounds inbound per month, with some additional volume carried on a daily Federal Express plane. This number fluctuates considerably, with cargo volumes occasionally as high as 20,000 to 30,000 pounds a month during peak shipping periods for the automobile parts manufacturers in the Lynchburg area.

As of August 2001, the Charlottesville-Albemarle Airport offered 30 daily flights on four commercial carriers to seven destinations (Charlotte, Cincinnati, Pittsburgh, Washington Dulles, Philadelphia, New York La Guardia, and Detroit). Daily passenger capacity on these flights is 986. Other activities supported at the airport include aerial inspection, aerial photography/surveying, pipeline patrol, law enforcement, emergency medical services, recreational flying and training, flight instruction, aircraft rental and charter services, hangar services, aircraft maintenance, onsite car rental, mail, and cargo. In 2000, the airport handled a total of 1,547,977 pounds of cargo (both outgoing and incoming).

All of the study area airports compete with larger airports that are outside of the study area but still well within driving distance. These airports provide more service, flights, and destination choices. As a result, many study area residents that choose to travel by air drive to Greensboro, North Carolina, Roanoke, Richmond, or even Washington, DC, area airports. A recent study in Lynchburg, for example, indicated that only 65 percent of air travel by local residents makes use of Lynchburg Regional Airport.

The Piedmont Triad International Airport, approximately 35 miles south of Danville, offers 100 daily flights on eight major commercial carriers and nine commuter airlines to 19 destinations (as of August 2001). In 2000, the airport had 1,396,766 enplanements, and 1,384,839 deplanements (daily seat capacity figures were not available). Total cargo volume in 2000 was 153,621,853 pounds.

The Roanoke Airport, 50 miles west of Lynchburg, offers 44 daily flights on five major carriers commercial carriers to 10 destinations (as of August 2001). Seat capacity on these flights is 2,091. The airport handled 30,723,446 pounds of cargo in 2000.

The Richmond International Airport is 71 miles east of Charlottesville. For the first seven months of 2001, air traffic in Richmond averaged 110 outbound daily flights, and daily seat capacity averaged 7,150. The airport is served by eight commercial carriers that fly to 22 destinations. The airport handled 2.7 million passengers in 2000, and handled 141.5 million pounds of cargo.

2.4 Transit

There are three types of transit service that are provided in the study area: fixed route bus service, demand-responsive or paratransit service, and social service transportation.

2.4.1 Fixed Route Transit

Fixed route bus service is provided in Danville, Lynchburg, and Charlottesville. In Danville, service is provided within the City itself. For both Lynchburg and Charlottesville, while some service extends into adjacent jurisdictions, the majority of the service is provided within the cities.

The Danville Transit System (DTS) reported 18,000-18,500 passenger trips per month for June 2001. Danville transit averages over 700 passenger trips a day, excluding weekends. Danville has one transit route that runs along Piney Forest Road (Route 29 Business). Five other routes use Piney Forest Road for part of their route length.

The Greater Lynchburg Transit Company (GLTC) reported 97,150 passenger trips on its fixed-route service in June 2001, and operates 24 full-size buses on 12 routes.

The largest fixed-route local bus services in the study corridor are in Charlottesville. Three transit services operate cooperatively in the Charlottesville region with free or reduced transfers between the services.

The University of Virginia operates the University Transit System (UTS) which is centered on the university. UTS carried 2,798,574 passengers for the fiscal year extending from July 1, 2000 to June 30, 2001. (This number includes 67,990 charter passengers.) With 19 routes during the school year (13 during the summer), UTS provides service to the University buildings and the hospital, as well as on- and off-grounds student housing, and the Barracks Road Shopping Center on Route 29.

The City of Charlottesville operates the Charlottesville Transit System (CTS) with 19 routes. In May 2001, riders took 96,217 trips on CTS, up from 60,216 trips in May 1999.

JAUNT, a regional transportation service covering Charlottesville, as well as Albemarle, Fluvanna, Louisa and Nelson counties, is a public service corporation founded by its member jurisdictions in 1975. As of early 2001, total ridership on the JAUNT service averages nearly 24,000 trips per month. The service provides fixed-route commuter service with one route (Big Blue Express) that runs along Route 29 North of Charlottesville. Within the Route 29 (Phases II/III) study area, JAUNT provides service to Nelson County. This route runs south out of the city along Route 29 to Lovingston. JAUNT also operates commuter service that runs to nearby counties. For the first seven months of 2001, the Big Blue Express route was handling about 350 trips per month, while the Lovingston service was handling about 400 trips per month.

2.4.2 Non-Fixed Route Transit

Increasingly, transit agencies are looking to non-traditional services to meet the needs of patrons and to address particular demands in cost-effective ways. Such services include paratransit service, which is typically provided to those who cannot, due to a disability, make use of traditional fixed-route bus services. This service is usually provided with smaller vehicles or vans on routes that are determined based on reservations that are made by patrons one day prior to their trip. Some agencies have extended this type of service to accommodate commuters. This type of non fixed-route service is provided in several areas of the study corridor.

In Danville, DTS has recently starting using one of its six buses to operate a “Reserve-A-Ride” service, which operates in the mornings from 4 a.m. to 6 a.m., and in the evenings

from 6 p.m. to 1 a.m. Fixed route service continues to operate from 6 a.m. to 6 p.m. The Reserve-A-Ride service requires scheduling a day in advance. This service is available to all riders, and is intended to complement, not replace, the agency's separate paratransit service. The cost of the service is $3 for the general public, and $2 for DTS paratransit customers.

Regular DTS paratransit service operates Monday through Saturday from 6 a.m. to 11 p.m., and on Sunday from 10 a.m. to 6 p.m. The system operates 4 vans for paratransit. The cost of the service is $2. As of August 2001, the service was averaging about 450 trips per month in August 2001. (This figure is down significantly from 1992, when the service averaged about 800 trips per month.)

The GLTC provides paratransit service in the Lynchburg region. The service provided 11,383 one-way trips in 2000.

In the Charlottesville region, JAUNT provides paratransit services to those who are certified as eligible based on a disability. Ridership through the first seven months of 2001 averaged about 1200 trips per day. (This number includes several hundred daily trips on JAUNT's fixed-route services. Actual demand-responsive paratransit ridership will be slightly lower.)

In addition to paratransit services, several social service agencies provide transportation services to elderly or disabled persons for particular trip purposes such as doctor visits. In the Danville region, service for senior citizens is provided by the City of Danville's Department of Parks and Recreation. The Central Virginia Area Agency on Aging provides this type of service in and near Lynchburg. In the Charlottesville region, three private companies provide transport services, but the majority of social service agencies contract their transportation services with JAUNT.

2.5 Intercity Bus

Intercity bus service in the Route 29 Corridor is provided by Greyhound, with stations in Danville, Lynchburg, and Charlottesville. Additional stop locations exist in Lovingston, Amherst, and Chatham.

Greyhound runs three buses per day in each direction traversing the entire length of the Route 29 Corridor between Danville and Charlottesville. Two buses in each direction per day run between Danville and Lynchburg. Five buses per day are available southbound from Charlottesville to Lynchburg, while four buses provide northbound service between Lynchburg and Charlottesville. Most of these routes begin and end beyond the study corridor, and connect cities in the northeast with cities in the south and southern Midwest. Total trips on Greyhound originating in the study area are listed in Exhibit 17.

Exhibit 17 – Greyhound Trips Originating in the Route 29 Corridor, Fiscal Year 2000 *

Station	Trips
Danville	12,500
Lynchburg	13,000
Charlottesville	18,000

* Greyhound's fiscal year runs from September of the previous year through August of the indicated year

Danville's bus station is located on Mount Cross Road near the regional Piedmont Mall shopping center and across the Dan River from the Danville downtown. Fixed-route transit service is provided to this bus station. From Danville, service is provided north to Lynchburg and south to Greensboro, NC, with 11 buses leaving per day. No service is provided east or west out of the city.

The Lynchburg region's bus station is co-located with the AMTRAK station at the Kemper Street Station. This station, located south of Lynchburg's central business district, is also served by local transit. From Lynchburg, service is provided south to Danville, north to Charlottesville, west to Roanoke, and east to Richmond, with 12 buses leaving per day.

The Charlottesville bus station, also transit-accessible, is located on West Main Street just west of Charlottesville's downtown mall. From Charlottesville, service is available west to Charleston, WV, east to Richmond, south to Lynchburg, and north to Washington, DC, with 15 buses leaving per day.

Several charter bus systems, including National Coach Works, James River Bus Lines, and Winn Bus lines, also operate in the corridor. Charter bus service is somewhat seasonal, with the busiest time of year extending from March to June, when 20 to 30 bus trips per week are estimated in the corridor. Based on discussions with several charter bus companies, this type of transportation is expected to remain relatively stable.

2.6 Bicycle and Pedestrian Travel

Bicycle and pedestrian trips are typically much shorter than automobile trips and are focussed within urbanized areas. Nationally, the upper limits for non-recreational trips are typically 2/3 of a mile for walking and 2 miles for bicycling. Facilities and amenities in the Route 29 Corridor that are directed to bicycle and pedestrian travel, therefore, are focussed in the Danville, Lynchburg, and Charlottesville urbanized parts of the corridor.

2.6.1 Bicycle Facilities

Bicycle travel in the Route 29 Corridor appears to be focussed primarily in the urbanized areas of Danville, Lynchburg, and Charlottesville. Each of these communities promote bicycle travel through a combination of on-street and off-street routes. The Danville urbanized area, through its long-range transportation plan, incorporates several recently completed projects as well as a proposed Ringgold to Sutherlin "rails to trails" project to

the east of Route 29. Through Danville and Pittsylvania County, Route 29 is not designated or currently planned as a bicycle route. The Region 2000 Regional Commission (the Lynchburg region's planning district commission) has developed and approved a regional bicycle plan that designates Route 29 and several connecting secondary roads as bicycle routes. The Thomas Jefferson Planning District Commission (Charlottesville region) has developed a draft bicycle plan that designates Route 29 through Albemarle and Nelson Counties as proposed bicycle routes.

While regional plans in the study corridor recognize that Route 29 has an important role to play as a bicycle facility, current provisions for safe bicycle and pedestrian travel are extremely limited. Most of Route 29 does not have sufficient pavement width to safely accommodate bicycles alongside high-speed automobile traffic and the gravel and grass shoulders are not conducive to easy biking. While some of the communities and subdivisions along the corridor can safely accommodate localized bicycle, there are no facilities for inter-community connections. For most of the study corridor, there are few parallel secondary roads (most of the secondary roads run perpendicular to and intersect Route 29). The result is that it is difficult to travel north-south in the corridor even if one chooses to stay off Route 29 and only on secondary roads.

2.6.2 Pedestrian Facilities

As with bicycle facilities, sidewalks and pedestrian trails in the Route 29 Corridor are concentrated in and around the three major cities. Outside of these urban areas, the narrow shoulders and lack of sidewalks on Route 29 are not conducive to safe pedestrian travel. The only area where pedestrian crossings on Route 29 were identified by local government staff and citizens as an issue is Lovingston in Nelson County (where Route 29 separates residential and retail areas). Another area where pedestrian activity was observed at times over the course of the study is in Covesville (Albemarle County).

2.7 Ride-Share and Park and Ride Facilities

Ride-share, or carpooling, provides opportunities for improving the efficiency of the existing roadway system by moving the same number of people with fewer vehicles. Ride-share programs can be developed through formal programs run at a regional level, or more informally by commuters at work or within neighborhoods. Park-and-ride lots are often effective in increasing ride-share by providing centralized locations where carpools can form. As with rideshare programs, park-and-ride lots can be constructed with public monies and officially designated or, as often happens, can be more informal on private property.

2.7.1 Ridesharing

The only region in the study corridor that operates a formal rideshare program is the Charlottesville region. The RideShare program, operated by the Thomas Jefferson Planning District Commission, works with local employers to reduce employee traffic in single occupancy vehicles and with the community to increase public awareness of

alternatives to driving alone. In August 2001, approximately 1000 individuals and 50 employers participated in the RideShare ride match program. The program also includes a guaranteed ride home that provides transportation back home to anyone traveling to work by bus or carpool. This program is also available for area residents who regularly walk or bicycle to work. This alleviates the concern that some rideshare participants have that they could be stranded at work if an emergency required that they leave earlier than expected.

2.7.2 Park-and-Ride Lots

On the south side of Charlottesville area, there are two park-and-ride lots designated by the Thomas Jefferson Planning District Commission: the Pantops Shopping Center and Azalea Park. The Pantops lot has nine spaces, and the Azalea Park lot has six spaces. In addition, there are three park-and-ride lots in Nelson County. Two of these are located on Route 29 north of Lovingston – one is at the junction of Route 29 and Route 6 East, and the other is at the junction of Route 29 and Route 6 West. The third lot is in the Town of Lovingston. The lot at Route 6 East has six spaces, the lot at Route 6 West has 15 spaces, and the lot in Lovingston has 20 spaces. The locations of these park-and-ride lots are shown in Exhibit 18.

No park and ride lots exist in the study corridor south of Lovingston.

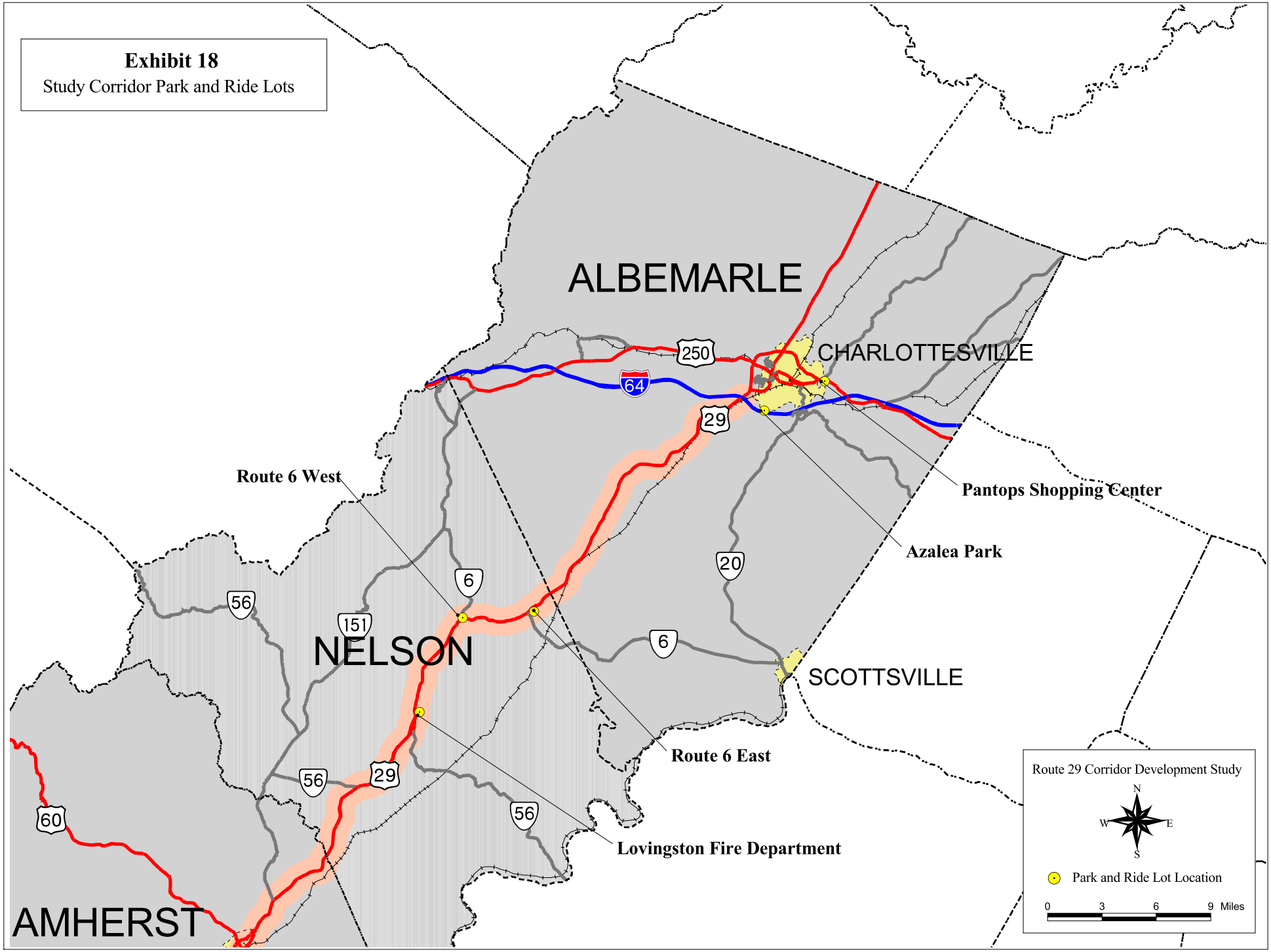


Exhibit 18
Study Corridor Park and Ride Lots
ALBEMARLE
CHARLOTTESVILLE
NELSON
SCOTTSVILLE
AMHERST
250
64
29
20
6
56
151
60
Route 6 West
Pantops Shopping Center
Azalea Park
Route 6 East
Lovingston Fire Department
Route 29 Corridor Development Study
N
W
E
S
Park and Ride Lot Location
0 3 6 9 Miles

Chapter 3 – Corridor Land Use and Demographics

As indicated in Section 1.1, the study area for this study consists of five counties (Pittsylvania, Campbell, Amherst, Nelson, and Albemarle) and three cities (Danville, Lynchburg, and Charlottesville). Land use data for this study were compiled based on available mapping, visual observation, and discussions with local government planning staffs. Demographic data were developed using information obtained from the US Census and the Virginia Employment Commission. The land use and demographic data was collected and analyzed at a general level for the study area, and in more detail for study corridor (a mile-wide band centered on existing Route 29).

3.1 Existing Land Use

The study area encompasses a mixture of urban and rural land uses, including residential, commercial, industrial, institutional, agricultural, historical, recreational, and forestal. Historically, settlement patterns in the study area have been strongly influenced by topography and transportation. Early settlement tended to follow the rivers and streams, such as the Dan, the Roanoke, and the James. These provided transportation, as well as the fertile floodplains needed for agriculture. Today, commercial, residential, and industrial uses are concentrated in the towns and cities along Route 29, which accommodates long distance travel and transport as well as commuter travel, shopping trips, and more. The principal concentrations of population and commercial and industrial activities are located in Danville, Lynchburg, and Charlottesville. Smaller concentrations, such as Chatham, Gretna, Hurt, Altavista, Amherst, and Lovingston are located between these three urban centers.

Rural land uses include farms, publicly and privately owned forest, and scattered residential developments. The Washington National Forest and the spine of the Blue Ridge Mountains border the western edge of the study area. Farms and forests cover large areas beyond the urban centers of Danville, Lynchburg, and Charlottesville.

Land use is an important consideration in this study because it is a principal determinant of traffic volumes. Traffic on highways results from the trip-making activities generated by the various land uses. In effect, more homes, businesses, and shopping areas create more travel on the roadway system. Existing land uses along the corridor were delineated for use in developing a computerized traffic forecasting model. County tax record listings for individual parcels provided information on parcel size, land use type, and the floor area of buildings located within the study corridor. This information was compiled by areas called Traffic Analysis Zones (TAZ), which served as a geographical framework for land use and traffic forecasts. The land use data was categorized using a subset of 52 standard land use types (6 residential and 46 non-residential) derived from categories developed by the Institute of Transportation Engineers. Residential categories include all types of housing (single family, apartment, etc.) and non-residential categories included a wide range of other land uses including office, retail, and industrial. The transportation model and the land use data collection and analysis process are described

fully in a separate document, *Route 29 Corridor Development Study (Combined Phases II/III) Technical Report*.

Within the mile-wide study corridor, 57 percent of the current land uses are residential (by acreage of parcels that are currently used for residential purposes). Another 29 percent (by acreage) of the parcels in the study corridor are currently vacant. The remaining parcels are used for non-residential purposes. The County with the highest percentage of non-residential uses in the study corridor is Campbell County (20 percent). Albemarle County has the highest percentage of parcels by acreage in residential land uses (71 percent). Amherst County has the highest percentage of open or vacant parcels (44 percent). Exhibit 19 summarizes this generalized land use distribution for the study corridor by county.

Exhibit 19 – Generalized Land Uses in the Route 29 Study Corridor *

County	Acres by Generalized Land Use Type/(Percentages of Jurisdiction Total)			
	Non-Residential	Residential	Open/Vacant	Total
Pittsylvania	2,774 (11%)	12,455 (52%)	8,934 (37%)	24,163
Campbell	2,893 (20%)	8,605 (58%)	3,219 (22%)	14,717
Amherst	694 (11%)	2,877 (45%)	2,786 (44%)	6,357
Nelson	1,789 (16%)	6,102 (53%)	3,516 (31%)	11,407
Albemarle	1,582 (11%)	10,138 (71%)	2,558 (18%)	14,278
Total	9,732 (14%)	40,177 (57%)	21,013 (29%)	70,922

* *These acreages represent only the lands within the mile-wide study corridor; the total acreage represents about 2.5% of the total land area in the counties and cities of the study area.*

3.2 Land Use Plans

All the localities in the study corridor have developed comprehensive land use plans. These plans are aimed at steering growth to designated areas consistent with available infrastructure (including sewer, water, and transportation) and preserving natural resources and amenities that enhance the quality of life. The comprehensive plan documents reviewed for this study include the following:

- County of Pittsylvania, Comprehensive Plan, November 1986, with Addendum No. 1, June 1987
- Campbell County, Virginia, Comprehensive Plan, November 3, 1997
- Amherst County Comprehensive Plan: An Update, September 1983
- Nelson County Comprehensive Plan, November 8, 1994
- County of Albemarle Land Use Plan, A Component of the Comprehensive Plan, June 5, 1996

A summary of the general development goals of the five counties is included below.

3.2.1 Agriculture/Forestry

All five counties have the preservation of agriculture and forestry as a major goal, citing the importance of this type of land use to the counties' economic base, as well as its importance to local heritage, and contribution to quality of life. In addition, all cite the benefits of agricultural and forested lands in terms of their low demand for services per acre, and the environmental benefits of preserving open space and watershed areas. All of the counties are actively trying to limit residential or commercial development in agricultural areas. Preservation of agricultural and wooded areas is also seen as an important component of scenic preservation. Several of the counties have designated scenic resources (roads, streams, or areas). Pittsylvania County proposes to maintain sufficient tree cover in all areas with steep slopes to prevent severe erosion. Campbell County proposes to utilize its forest lands both as open space and a natural resource. Amherst County has proposed reserving most of the western part of the county for conservation. Nelson County recognizes open space and woodlands as beneficial uses of land. Albemarle County has designated several areas as agricultural and forestal districts.

3.2.2 Water and Sewer Systems

To encourage and direct the growth in the counties into desired areas, each county's approach is to allow treatment facilities and service extensions, either for water or sewer, only in the designated growth areas. For example, the Pittsylvania Plan proposes to discourage the extension of water and sewer service into areas of the county where new development is deemed to be inappropriate. Nelson County's Plan states that the adequacy of the water, sewer, and transportation network should be factors in determining suitable growth areas.

3.2.3 Designated Development Growth Areas

All five counties have designated for growth those areas in which development has already been established or areas for public water and sewer service are planned.

Pittsylvania County. Future growth is proposed in areas of current growth. Major growth locations are along Routes 29 and 58 around Danville, in the central part of the county near the towns of Chatham and Gretna, in the northern part of the county near the Town of Hurt, and around Smith Mountain Lake and Leesville Lake. The Plan notes that the County policy is to develop only those areas where utilities already exist or are planned. Strip residential and commercial development along the county's roads is discouraged.

Campbell County. The Campbell County Plan seeks to discourage sprawl patterns of development, with new development guided into areas with sufficient existing and planned service capacity to accommodate urban and suburban development. Proposed growth areas are concentrated mostly in the northwestern part of the county, south and east of Lynchburg. Major employment centers are to be located near major arterial roadways and heavy industries are to be located near rail lines. Overall, the goal is to

promote balanced growth through land use planning that allows for a diversity of land use, while avoiding strip development.

Amherst County. Amherst County's Comprehensive Plan includes a Greenspace Plan, which encourages concentration of new development in designated growth centers and prevention of haphazard scattering of development. The growth centers include the Town of Amherst and the Madison Heights area north of Lynchburg. The Plan discourages commercial strip development.

Nelson County. The Nelson County Plan cites the goals of maintaining and strengthening the rural character of the county, as well as the importance of community life. The County seeks to keep its rural character by focussing growth in two defined locations for development, the Colleen area and the Lovingston/Shipman area. The Plan also specifies locations for industrial and commercial development at Colleen, at Lovingston in the industrial park, and at Piney River. In general, future development, whether residential, commercial, or industrial, is to be directed toward historical growth areas.

Albemarle County. Albemarle County's Land Use Plan, a component of the more encompassing Comprehensive Plan, provides direction of physical development in the county. The Land Use Plan divides the county into two general classifications: Development Areas and Rural Areas. Within Development Areas, the Plan designates three development types—Urban Areas, Communities, and Villages. These three development types vary from greater concentration of development (Urban Areas) to lesser (Villages). All designated Development Areas are located around the City of Charlottesville, along Route 29 north of Charlottesville, in Crozet west of Charlottesville, in Rivanna east of Charlottesville, or in Scottsville in southeastern Albemarle. The portion of the Route 29 study corridor in the county, south of Charlottesville, is designated as Rural Area and is proposed to have minimal development and be preserved with a rural character.

3.3 Demographics

The study area for the Route 29 Corridor Development Study (Combined Phases II/III) has been and continues to be a growth area. While the extent of growth varies by area within the study area, with the highest growth occurring in the northern portion of the corridor and the least growth in the south, the 2000 Census data does show overall growth. In addition, the rate of growth between 1990 and 2000 was twice as high as between 1980 and 1990 (2.6 percent vs. 6.7 percent). Exhibit 20 summarizes the overall population figures from the 1980, 1990, and 2000 Census.

Population estimates were developed for the mile-wide study corridor based dwelling unit information gathered from tax records and field observation. Information on household occupancy was a key factor in developing these population estimates. Exhibit 21 summarizes 1970, 1980, 1990, and 2000 Census data on population and household for each of the five counties in the study area. The historic data is shown to illustrate that the study area mirrors national trends towards decreased household size. Decreases in

household size is caused by a number of factors, including declining birthrates, increases in the number of single person households, and higher rates of independent household formation among the elderly. This trend toward smaller average household size can be seen in all five of the counties.

Exhibit 20 – Population in the Study Area (1980 to 2000)

County/City	1980	1990	Change 1980–1990	2000	Change 1990–2000
Pittsylvania/Danville	111,789	108,711	-3,078	110,156	1,445
Campbell/Lynchburg	112,167	113,621	1,454	116,347	2,726
Amherst County	29,122	28,578	-544	31,894	3,316
Nelson County	12,204	12,778	574	14,445	1,667
Albemarle/ Charlottesville	97,416	108,381	10,965	124,285	15,904
Total	**362,698**	**372,069**	**9,371**	**397,127**	**25,058**

Source: 1980,1990, 2000 US Census of Population

Exhibit 21 – Household Size in the Study Area (1970 to 2000)

County	Census Year			
	1970	1980	1990	2000
Population				
Pittsylvania	58,789	66,147	55,655	61745
Campbell	43,319	45,424	47,572	51078
Amherst	26,072	29,122	28,578	31894
Nelson	11,702	12,204	12,778	14445
Albemarle	37,780	55,783	68,040	79236
Total	177,662	208,680	212,623	238,398
Households				
Pittsylvania	16,582	22,147	20,649	24684
Campbell	12,763	15,130	17,857	20639
Amherst	6,468	8,962	9,829	11941
Nelson	3,494	4,267	4,788	5887
Albemarle	10,541	18,886	24,387	31876
Total	49,848	69,392	77,510	95,027
Household Size (persons per household)				
Pittsylvania	3.55	2.99	2.70	2.50
Campbell	3.39	3.00	2.66	2.47
Amherst	4.03	3.25	2.91	2.67
Nelson	3.35	2.86	2.67	2.45
Albemarle	3.58	2.95	2.79	2.49
Total	3.56	3.01	2.74	2.51

Source: U.S. Census. Data does not include the cities of Danville, Lynchburg, and Charlottesville.

The extent to which county-wide population and employment is concentrated in the mile-wide Route 29 study corridor varies considerably between the North Carolina line and Charlottesville. For example, Albemarle County's designation of Route 29 south of Charlottesville as rural combined with high concentrations of population and employment

elsewhere in the county is evident from the fact that only 1.3 percent of its total population is in the study corridor. [It is important to note that this is much less true on Route 29 north of Charlottesville, which is a heavily developed designated growth area for the county.] In Nelson County, on the other end of the extreme, 14 .4 percent of its population is located within the one-mile wide study corridor. This reflects the overall lower population and density in Nelson County and highlights the role of Route 29 as the focus of past development activity in the county. Estimates of population within the study corridor as developed by analysis performed for this study are shown in Exhibit 20. The data in Exhibit 22 reflects mid-Census information developed for 1997 to match the base analysis year for this study.

Exhibit 22 – Population and Households in the Study Corridor (1997)

	County Total		Study Corridor Estimates		
County	Population	Households	Population	Households	Percent of County
Pittsylvania	108,196	40,073	4,828	1,788	4.5%
Campbell	115,384	43,377	9,201	3,459	8.0%
Amherst	29,741	10,220	2,578	886	8.7%
Nelson	13,364	5,005	1,922	720	14.4%
Albemarle	116,488	41,752	1,473	528	1.3%
Total	**383,173**	**140,428**	**20,002**	**7,381**	**5.2%**

Source: US Census and Post, Buckley, Schuh, & Jernigan, Inc.

Chapter 4 – Existing Economic Conditions

The study area for the Route 29 Corridor Development Study (Combined Phases II/III) encompasses 3,255 square miles, is home to more than 380,000 persons, and generates more than 215,000 jobs and $5.25 billion annually in wages and salaries (1997 estimates). It is comprised of five counties – Pittsylvania, Campbell, Amherst, Nelson, and Albemarle – and three cities – Danville, Lynchburg, and Charlottesville. This study area has a diverse economy characterized by a variety of manufacturing, service, and agricultural sectors. This chapter provides details on the current economy of the study area. Because the economic effects of improvements to Route 29 would likely extend beyond the five county study area, an extended study area that includes Appomattox and Bedford Counties (and the City of Bedford) was used for some of the economic analysis. Where this area is used for analysis, the term "extended study area" will be used.

4.1 Extended Study Area Economy

The economy of the Route 29 extended study area encompasses strong manufacturing, tourism, and service elements. In 1997 (year 2000 employment data is not yet available), roughly 21 percent of the labor force in the extended study area was engaged in manufacturing. Products produced include construction aggregates, business forms, chemicals, dog food, furniture, glass containers, modular homes, nuclear fuels, pharmaceuticals, potato chips, shoes, textiles, and many others. Manufacturing is becoming a less prominent feature of the extended study area economy, as one-third of the labor force was engaged in manufacturing activities. This extended study area trend is consistent with national trends in which manufacturing facilities are increasingly being located overseas where labor rates are cheaper, gains in productivity by automation are reducing the need for labor, and a transition is occurring to a service-based economy.

Tourism is gaining in relative importance in the extended study area economy. In 1997, travelers spent more than $548 million in the study area, nearly 5 percent of total traveler spending in the state. Travel-related employment reached approximately 41,500 in 1997. Localities view tourism as a viable source of revenue and economic development without the associated costs of providing social infrastructure such as schools and other services. Efforts by the localities to retain forested areas and preserve rural areas, while also allowing reasonable development, are aimed at encouraging tourism. The region encompasses a number of recreational, historical, and cultural attractions, which are actively promoted by the localities and the region.

The relative importance of various employment sectors in the extended study area economy was determined for this study using a measure termed "location quotients". The location quotient provides a measure of the importance of particular employment sectors in the extended study area as compared to Virginia as a whole. The location quotient is the ratio of the proportion of employment in a given sector within the extended study area to proportion of employment in the same sector statewide. Quotients greater than 1.0 indicate greater relative strength or importance of that sector to the locality than to the state. Quotients less than 1.0 indicate less relative importance of that

sector to the locality. Those sectors showing strength may be said to be "exporting" services or products to surrounding areas and likely account for large portions of the employment within the locality. As such, they may represent strengths upon which the localities could capitalize for future growth.

While the overall extended study area has some economic characteristics in common, each locality also has its own distinctive character. The following sections describe some of the distinctions among the localities. Exhibit 23 shows some of the relative differences in employment and income characteristics among the localities.

Exhibit 23 – Population and Employment in the Extended Study Area (1997)

	Parameter (Percent in Locality as Compared to Extended Study Area Totals)			
County	Population	Employment	Wages & Salaries ($1,000s)	Manufacturing Employment
Pittsylvania (including City of Danville)	108,196 (24 %)	46,315 (20 %)	1,069,576 (19 %)	15,000 (30 %)
Campbell (including City of Lynchburg)	115,384 (25 %)	76,711 (33 %)	1,912,117 (34 %)	19,926 (40 %)
Bedford (including City of Bedford)	61,130 (13 %)	15,904 (7 %)	325,408 (6 %)	3,762 (8 %)
Appomattox	12,790 (3 %)	4,728 (2 %)	85,838 (2 %)	1,857 (4 %)
Amherst	29,741 (7 %)	10,498 (4 %)	219,829 (4 %)	1,573 (3 %)
Nelson	13,364 (3 %)	3,508 (1 %)	62,110 (1 %)	365 (1 %)
Albemarle (including City of Charlottesville)	116,488 (25 %)	78,212 (33 %)	1,989,446 (35 %)	7,035 (14 %)
TOTALS	**457,093**	**235,876**	**5,664,324**	**49,518**

Note: The population total shown in this table is larger than that shown in Exhibit 20 because this table encompasses the extended study area which includes Bedford and Appomattox Counties and the City of Bedford.

4.2 Pittsylvania County and City of Danville

The City of Danville and the portions of Pittsylvania County immediately surrounding the City have historically been strongly associated with manufacturing. This is due in part to the availability of the Dan River as a source of relatively inexpensive power, both mechanical and electrical, and as a transport route for finished products. In the early twentieth century, Danville was the largest textile manufacturing center in the world. Although it has declined over time, the manufacturing sector still demonstrates strength in several subsectors, including textiles, apparel, and wood products. The manufacturing sector, in which employment has declined at an average annual rate exceeding 1.5 percent since 1980, is now being overtaken by retail trade and services, sectors in which employment has increased at approximately 1.5 percent per year. Constituting 43 percent of total employment in 1980, manufacturing now constitutes 32 percent of total employment in Danville and Pittsylvania County. Employment in the government sector has remained relatively constant.

As shown in Exhibit 24, location quotients for Pittsylvania County and Danville illustrate the residual strength in manufacturing and retail trade, with growing relative strength in construction. The location quotients show quite strongly that this portion of the extended study area serves as a net supplier of manufactured goods for other areas.

Exhibit 24 – Location Quotients for Pittsylvania County and the City of Danville (1985 and 1995)

Economic Sectors	Year	Location Quotients	
		Pittsylvania County & Danville	Mile-Wide Study Corridor
Construction	1985	0.73	0.87
	1995	1.01	1.08
Manufacturing	1985	2.56	1.84
	1995	2.85	1.82
Transportation	1985	0.52	0.73
	1995	0.55	0.69
Wholesale Trade	1985	0.76	0.77
	1995	0.69	0.81
Finance	1985	0.63	0.78
	1995	0.61	0.86
Services	1985	0.81	0.92
	1995	0.74	0.87
Retail Trade	1985	1.08	0.99
	1995	1.04	1.03
Government	1985	0.49	0.77
	1995	0.56	0.83

Source: U.S. Bureau of Economic Analysis (BEA) - Wage and Salary Employment in Virginia

Separation of employment data for the city and the county indicate that Danville accounts for nearly 70 percent of the total employment in the combined jurisdictions and approximately 73 percent of the annual payroll. Annual wages per employee in 1997 amounted to approximately $23,094, which were 30 percent higher than the lowest annual wage in the extended study area, and 9 percent lower than the highest annual wage.

Though not reflected in the location quotient analysis, agriculture remains an important component of the Pittsylvania County economy. The largest county in Virginia by land area, Pittsylvania County contains more than 1,300 active farms. The principal crop is still tobacco (49 million pounds sold in 1994), as it has been historically. Other crops include corn, wheat, soybeans, and broccoli. Livestock and dairy products also contribute to overall agricultural production.

Tourist attractions in Pittsylvania/Danville include the historic districts of Danville, the Danville Science Center, the annual air and car show.

Danville's location astride the intersection of two U.S. highways (29 and 58) provides relatively good access to local markets in the nearby Greensboro, North Carolina metropolitan area (approximately 45 miles to the south) and several other smaller

urbanized areas (Martinsville, 30 miles to the west; Lynchburg, 70 miles to the north). However, Danville is somewhat isolated from major United States markets because it has no direct access to the Interstate highway system on which the major flows of commerce occur. Access to overseas is generally via U.S. Route 58 to the Port of Hampton Roads (approximately 200 miles to the east). Rail access is provided by Norfolk Southern. Air access is provided by the Danville Airport (no commercial service) and Greensboro Airport.

4.3 Campbell County and City of Lynchburg

The City of Lynchburg and the portions of Campbell County immediately surrounding it have also historically been strongly associated with manufacturing. The James River provided both economical power and, especially after construction of the James River-Kanawha Canal, convenient transportation to Richmond and beyond. Altavista (on Route 29 at the southern edge of Campbell County) is located on the Roanoke River and also became a manufacturing center. Once one of the richest cities in America due to the tobacco trade, Lynchburg remains a major industrial center. However, the manufacturing sector is being overtaken now by retail trade and services, as manufacturing employment has declined at an average annual rate exceeding 1.5 percent since 1980, while retail trade has increased at approximately the same rate. Constituting 42 percent of total employment in 1980, manufacturing now represents 26 percent of total employment. Exhibit 25 shows the location quotients for various sectors of the economy. Within manufacturing, the most important subsectors include chemicals and allied products, printing and publishing, industrial machinery, and electronic equipment. There is some apparel production as well as food and related products.

Exhibit 25 – Location Quotients for Campbell County and City of Lynchburg (1985 and 1995)

Economic Sectors	Year	Location Quotients	
		Campbell County & Lynchburg	Mile-Wide Study Corridor
Construction	1985	0.70	0.87
	1995	0.84	1.08
Manufacturing	1985	2.38	1.84
	1995	2.23	1.82
Transportation	1985	0.82	0.73
	1995	0.82	0.69
Wholesale Trade	1985	0.86	0.77
	1995	0.94	0.81
Finance	1985	0.77	0.78
	1995	0.91	0.86
Services	1985	0.95	0.92
	1995	0.90	0.87
Retail Trade	1985	0.96	0.99
	1995	1.10	1.03
Government	1985	0.37	0.77
	1995	0.43	0.83

Source: US Bureau of Economic Analysis (BEA) - Wage and Salary Employment in Virginia

Finance is also relatively strong in the area, as Lynchburg, the 10th largest city in Virginia, serves as the financial center for the county and the surrounding region. As a center for business in the region, Lynchburg's business-service sector is strong and growing, as is health services -- all of which are encompassed in the services sector. The wholesale trade sector also exhibits relative strength.

Employment in the City of Lynchburg accounts for over 80% of the total employment in the combined city and county jurisdictions. More than 70% of the total manufacturing employment is located in the city; nearly 80% of the total retail employment is located in the city; and more than 90% of the services employment is located in the city.

Campbell County's economy also retains agricultural elements, with the production of cattle, tobacco, dairy products, and small grains being the principal enterprises on a total of more than 600 farms.

Lynchburg and Campbell County are home to many historic and tourist attractions, including Monument Terrace (war memorial), Point of Honor (1815 home of Dr. George Cabell, Sr), and the Avoca Museum in Altavista (home of Revolutionary patriot Colonel Charles Lynch).

Lynchburg is located at the intersection of three U.S. highways (29, 460, and 501). These roads provides relatively good access to markets in Greensboro, North Carolina (approximately 115 miles to the south), Richmond (110 miles to the east), and several other smaller urbanized areas (Danville, 70 miles to the south; Roanoke, 50 miles to the west; and Charlottesville, 65 miles to the north). As with Danville, however, Lynchburg is hampered by its lack of direct access to the Interstate highway system on which the major flows of commerce occur. Access to overseas is generally via U.S. Route 460 to the Port of Hampton Roads (approximately 200 miles to the east). As a major rail hub, Lynchburg has excellent access to the national rail system. Air access is provided at the Lynchburg Regional Airport.

4.4 Bedford County and City of Bedford

Bedford County has the good fortune to be located midway between two urban centers—the cities of Roanoke and Lynchburg. A diversity of economic strengths results. Manufacturing employment has remained fairly steady, declining less than 2% since 1980, but as a percentage of total employment it has declined from 38% to 24%. This employment is concentrated in the production of food and related products, lumber and wood products, and printing. Retail trade is also strong, as is construction. The major growth industry, however, is services, particularly in the areas of business, health, and social services. The City of Bedford contains approximately 54% of the total combined city and county employment; 62% of the manufacturing employment; and 59% of the services employment. Exhibit 26 shows the location quotients for Bedford County. These quotients indicate that the strongest "export" sector is construction, providing general contracting and special trades services to neighboring urban areas. Quotients for

manufacturing indicate regional strength, as does services and, to some degree, both wholesale and retail trade.

Exhibit 26 – Location Quotients for Bedford County and City of Bedford (1985 and 1995)

Economic Sectors	Year	Location Quotients	
		Bedford County and City of Bedford	Mile-Wide Study Corridor
Construction	1985	1.59	0.87
	1995	2.57	1.08
Manufacturing	1985	1.96	1.84
	1995	1.94	1.82
Transportation	1985	0.70	0.73
	1995	0.64	0.69
Wholesale Trade	1985	0.88	0.77
	1995	1.00	0.81
Finance	1985	0.84	0.78
	1995	0.78	0.86
Services	1985	1.08	0.92
	1995	0.98	0.87
Retail Trade	1985	0.93	0.99
	1995	0.95	1.03
Government	1985	0.73	0.77
	1995	0.66	0.83

Source: U.S. Bureau of Economic Analysis (BEA) – Wage and Salary Employment in Virginia

Tourist attractions in Bedford County include Poplar Forest (second home of Thomas Jefferson), the National D-Day Memorial, Smith Mountain Lake, and the Blue Ridge Parkway.

The major highways in Bedford County are US Routes 460, 221, and 501. Major traffic and commodity flows are east-west to and between the major metropolitan areas of Lynchburg and Roanoke. Route 460 provides relatively convenient access to Interstate 81. The major rail line in Bedford County runs generally parallel to Route 221 east of the City of Bedford and parallel to Route 460 west of the City of Bedford. Air access is provided in both Lynchburg and Roanoke.

4.5 Amherst County

Amherst County's economy shows considerable strength in the government sector, although total employment in that sector has declined at an average annual rate of just over 1.5% during the period 1980 through 1997. At the same time, the services sector has grown at a rate of nearly 2.25% annually. On average, manufacturing has exhibited strength as well, although overall levels of employment in this sector have remained fairly level. Paper and related products represent a substantial portion of the employment in the manufacturing sector. The wholesale trade sector shows some relative strength within the region but with limited total employment. Amherst County also appears to be

a center for the construction trades, especially in the category of special trade contractors. Exhibit 27 shows the location quotients for Amherst County.

Exhibit 27 – Location Quotients for Amherst County (1985 and 1995)

Economic Sectors	Year	Location Quotients	
		Amherst County	Mile-Wide Study Corridor
Construction	1985	1.05	0.87
	1995	1.52	1.08
Manufacturing	1985	0.93	1.84
	1995	1.19	1.82
Transportation	1985	1.02	0.73
	1995	0.59	0.69
Wholesale Trade	1985	0.59	0.77
	1995	1.60	0.81
Finance	1985	0.39	0.78
	1995	0.71	0.86
Services	1985	0.83	0.92
	1995	0.76	0.87
Retail Trade	1985	0.93	0.99
	1995	0.96	1.03
Government	1985	1.54	0.77
	1995	1.40	0.83

Source: U.S. Bureau of Economic Analysis (BEA) – Wage and Salary Employment in Virginia

Employment in the Amherst County has grown at less than 1.0 percent since 1980. The location quotients shown in Exhibit 27 reinforce the indicated strengths in the county, with government as a major element within the local economy.

Major tourist attractions in Amherst County include the Blue Ridge Parkway, the Amherst County Historical Museum, and Rebec Vineyards. The major highways in Amherst County are U.S. Routes 29 and 60, which intersect in the Town of Amherst. The Norfolk Southern rail line runs generally parallel to Route 29. Air access is provided in both Lynchburg and Charlottesville.

4.6 Appomattox County

The economic strengths of Appomattox County are primarily concentrated in the manufacturing sector. Other significant sectors are government, services, and retail trade. Manufacturing employment is centered on apparel, textiles, and furniture. Manufacturing employment peaked in the late 1980s and has recently declined to early 1980 levels. Total employment peaked more recently near 4,700, with an average annual growth rate near 1.4 percent.

Location quotients for the county (Exhibit 28) reflect the localized strength in manufacturing, but also indicate a relative concentration in construction employment. Appomattox County is also a small trucking center, providing courier services.

Exhibit 28 – Location Quotients for Appomattox County (1985 and 1995)

Economic Sectors	Year	Location Quotients	
		Appomattox County	Mile-Wide Study Corridor
Construction	1985	1.20	0.87
	1995	1.53	1.08
Manufacturing	1985	2.79	1.84
	1995	2.93	1.82
Transportation	1985	0.91	0.73
	1995	1.00	0.69
Wholesale Trade	1985	0.46	0.77
	1995	0.42	0.81
Finance	1985	0.45	0.78
	1995	0.46	0.86
Services	1985	0.46	0.92
	1995	0.56	0.87
Retail Trade	1985	0.98	0.99
	1995	0.97	1.03
Government	1985	0.72	0.77
	1995	0.82	0.83

Source: U.S. Bureau of Economic Analysis (BEA) – Wage and Salary Employment in Virginia

Major tourist attractions in Appomattox County include the Appomattox Court House and National Historic Park and Holiday Lake State Park. The major highway in Appomattox County is US Route 460, which provides east-west travel between Lynchburg and Richmond. The rail line runs generally parallel to Route 460. Air access is provided in Lynchburg.

4.7 Nelson County

The services sector comprises more than 50% of the total employment in Nelson County, and that sector is growing at nearly 4% annually. No other sector has experienced a significant rate of growth during the past 15 years. The Wintergreen Resort located in the northwestern corner of the county represents a large portion of the service sector. Other economic sectors that demonstrate relative strength in terms of location quotient analysis (Exhibit 29) are those which support the construction industry (particularly the general contractor sub-sector) and transportation. Manufacturing, which represents a relatively small component of the economy of Nelson County (approximately 10%) is concentrated in two sub-sectors: apparel and other textiles, and lumber and wood products.

Major tourist attractions in Nelson County include the Wintergreen Resort, Blue Ridge Parkway, Crabtree Falls, Oak Ridge Historic Estate, and Walton's Mountain. Route 29 is

the major highway in Nelson County. The rail line runs generally parallel to Route 29, but between one and four miles to the east, passing through Arrington and Shipman. Air access is provided in Lynchburg and Charlottesville.

Exhibit 29 – Location Quotients for Nelson County (1985 and 1995)

Economic Sectors	Year	Location Quotients	
		Nelson County	Mile-Wide Study Corridor
Construction	1985	1.49	0.87
	1995	1.90	1.08
Manufacturing	1985	0.81	1.84
	1995	0.79	1.82
Transportation	1985	1.42	0.73
	1995	1.54	0.69
Wholesale Trade	1985	0.27	0.77
	1995	0.36	0.81
Finance	1985	0.63	0.78
	1995	0.77	0.86
Services	1985	1.66	0.92
	1995	1.53	0.87
Retail Trade	1985	0.74	0.99
	1995	0.62	1.03
Government	1985	0.82	0.77
	1995	0.82	0.83

Source: U.S. Bureau of Economic Analysis (BEA) – Wage and Salary Employment in Virginia

4.8 Albemarle County and City of Charlottesville

The combined jurisdictions of Albemarle County and the City of Charlottesville represent the fastest growing locations in the extended study area for both population and employment. Two sectors of the local economy provide the stimulus for that growth: the government sector and the services sector, both of which are directly linked to the University of Virginia. Together, the state government sector plus the services sector comprise more than 62 percent of the total employment. Adding retail trade increases that concentration to more than 81 percent of the total employment. More than 80 percent of the total employment is located in the City of Charlottesville. Wage levels per employee are the highest in the study area at $25,437.

In contrast to most other localities in the study area, manufacturing is relatively unimportant, constituting less than 10 percent of total employment. The manufacturing that exists is concentrated in food and related products and electronic equipment. In the city, major contributors include printing and publishing, electronic equipment, and, to a lesser degree, textile products. Location quotients for the county (Exhibit 30) show the strength of the government sector. This area is also a center for banking institutions and real estate – services that are supported by the university community.

Tourism also represents an important element of the economy, accounting for nearly half of all travel expenditures in the study area. This is due to the successful promotion of important historic sites such as Jefferson's Monticello and to athletic and other events associated with the University. Hotels in the area also host a number of conventions and exhibitions.

Exhibit 30 – Location Quotients for Albemarle County and City of Charlottesville (1985 and 1995)

Economic Sectors	Year	Location Quotients	
		Albemarle County & City of Charlottesville	Mile-Wide Study Corridor
Construction	1985	0.95	0.87
	1995	0.94	1.08
Manufacturing	1985	0.85	1.84
	1995	0.81	1.82
Transportation	1985	0.69	0.73
	1995	0.60	0.69
Wholesale Trade	1985	0.72	0.77
	1995	0.69	0.81
Finance	1985	0.98	0.78
	1995	1.05	0.86
Services	1985	0.94	0.92
	1995	0.92	0.87
Retail Trade	1985	0.98	0.99
	1995	1.01	1.03
Government	1985	1.28	0.77
	1995	1.35	0.83

Source: U.S. Bureau of Economic Analysis (BEA) – Wage and Salary Employment in Virginia

Albemarle County is the only county in the extended study area with direct access to an Interstate highway (I-64). Other major roads in Albemarle County include U.S. Routes 29 and 250. From the border with Nelson County to I-64 at Charlottesville, the rail line in Albemarle County runs generally parallel to Route 29, and almost immediately adjacent to Route 29 as it nears I-64. Air access is provided at the Charlottesville Airport.

Chapter 5 – Existing Environmental Constraints

The existing natural and man-made environment in the Route 29 study corridor provides both a context for transportation in the corridor as well as potential constraints to making transportation improvements. This chapter provides an overview of the environment through which Route 29 passes.

5.1 Topography, Geology, and Soils

The Route 29 corridor lies in the Piedmont region of Virginia, where the terrain ranges from rolling hills to knobs and ridges. Elevations generally range from 400 feet above sea level in lower-lying areas near Danville, to approximately 1,300 feet in some areas around Lynchburg, to more than 2,000 feet in Nelson County northeast of Lovingston. Elevations in the Blue Ridge Mountains that border the western edge of the study area rise to more than 4,000 feet. The general slope of the terrain is downward to the east.

Most of the study area is underlain by resistant metamorphic and igneous rocks. The Danville Triassic and Jurassic region is comprised of sedimentary rock that has experienced additional erosion. The soils are chiefly comprised of clay and silt produced from weathering of parent rocks and deposition of sediments. The most common soil series found along the corridor are Cecil-Appling-Pacolt, Cecil-Madison-Cullen, Pacolet-Madison, and Cullen-Wilkes. The soils generally are highly fertile, deep and well-drained, with low to moderate slopes. Cecil and Cullen soils are prone to severe erosion when disturbed.

5.2 Hazardous Materials Sites

A windshield survey and a database search were conducted to identify potential hazardous material sites in the vicinity of the Route 29 corridor. These sites include potential generators, handlers, transporters, disposers, CERCLIS (Superfund) sites, underground storage tanks, and spills. Identification of potential hazardous materials sites is an important consideration due to the cost and time associated with remediation of sites that would be displaced by transportation improvements. Hazardous materials include materials that are flammable (including petroleum products), toxic, corrosive, or reactive.

Through field reconnaissance, 175 sites were identified within ½ mile of either side of Route 29. A list of these sites, their locations, and the nature of the potential hazard or concern are provided in Exhibit 31. Many of the potential sites are fuel stations, where petroleum products are stored in underground storage tanks (USTs). Removal of such tanks for roadway construction could reveal leaks and resulting contamination of soil and groundwater. For purposes of this study, all active and inactive fuel stations and sites that have or could have had USTs at some time were assumed to contain potentially leaking underground storage tanks (LUSTs). No EPA-listed sites containing polychlorinated biphenyls (PCBs) were reported. However, several electrical substations and transformers (transformers sometimes contain PCBs) are located along the corridor

and are listed as potential hazards in Exhibit 31. There are no known CERCLIS (Superfund) sites within ½ mile of the Route 29 corridor.

Exhibit 31 – Potential Hazardous Materials Sites for Mile-Wide Study Corridor

Site No.	Site Description and Location	Nature of Potential Hazard
	Pittsylvania	
1	Intersection of US Route 29 and Route 863	Three Transformers
2	Intersection of US Route 29 and Route 863	Two Transformers
3	Auto sales-US Route 29	Abandoned Autos, Petroleum Products, USTs
4	Gas station-US Route 29	Petroleum Products, USTs
5	Auto sales-US Route 29 and Route 825	Petroleum Products, USTs
6	US Route 29 and Tower Lane	Transformers
7	Service center-US Route 29	Petroleum Products, ASTs*
8	Truck sales	Truck Service Wastes
9	Truck services & parts-US Route 29	Truck Service Wastes, ASTs
10	Car dealership-US Route 29	Automobile Service Wastes, USTs
11	Vocational education center	Pesticide Storage, ASTs
12	Car dealership-US Route 29	Automobile Service Wastes, ASTs
13	Car services-421 Fairview Road	Automobile Service Wastes, USTs, ASTs
14	Gas station -US Route 29 & Tight Squeeze Road	USTs
15	Garage-13776-US Route 29	Automobile Service Wastes, ASTs
16	Gas station-US Route 29	USTs
17	Garage-14017 US Route 29	Automobile Service Wastes, ASTs
18	Truck and auto service	Automobile and Truck Service Wastes
19	Auto service-US Route 29	Automobile Service Wastes, Batteries
20	Farm supply store-968 Halifax Road	Pesticide Storage, Fertilizer
21	Gas station-1321 Chalk Level Road	USTs
22	Farm-1760 N. Fairview Road	Pesticide Storage
23	Cast products-Route 1448	Chemical Storage
24	Middle school	UST
25	Automobile junkyard-Clarktown Church Road	Abandoned Automobiles (200+)
26	Substation-Neighborhood Road	Substation
27	VDOT-Chatham Residency, 19281 US Route 29	Truck Service Wastes, USTs
28	Welding and fabricating shop	Solvent Storage
29	Garage-US Route 29	Automobile Service Wastes
30	Construction business-440 Hawkins Road	UST
31	Bottled gas sales-US Route 29	ASTs (Propane)
32	Gas station-US Route 29	UST
33	Residence-22481 US Route 29	UST
34	Construction business-903 Galveston Road	UST, Automobile Service Wastes
35	Auto body shop-Galveston Road	Auto Body Shop (Abandoned)
36	Greenhouse-23048 US Route 29	UST
37	Manufacturer-224 Industrial Road	Manufacturing, Chemical Storage
38	Business –281 Industrial Road	ASTs (Oxygen), Chemical Storage
39	Business –237 Industrial Road	ASTs
40	Oil company-Coffey Street	ASTs, USTs
41	Elementary school-School Street	UST
42	Car dealer-Vaden Drive	USTs, ASTs

Exhibit 31 – Potential Hazardous Materials Sites for Mile-Wide Study Corridor

Site No.	Site Description and Location	Nature of Potential Hazard
43	Electrical cooperative-Vaden Drive	USTs, Transformers (100+)
44	Tire & auto service-Vaden Drive	ASTs, Automobile Service Wastes
45	VDOT Gretna Headquarters-Leftwich Street	USTs
46	Convenience store-Gretna Road	USTs
47	Gas station-Farmers Mt. Road	USTs
48	Truck service-Lotus Drive	ASTs, Truck Service Wastes
49	Truck service-Rockford School Road	USTs, ASTs, Truck Service Wastes
50	Residence-Blue Ridge Drive	Abandoned Automobiles (100+)
51	Auto sales-Blue Ridge Drive	UST, Abandoned Automobiles
52	Residence-Keesee Road	UST
53	Gun store-30173 US Route 29	Ammunition
54	Grocery-US Route 29	UST
55	Gas station-Derby Road & US Route 29	UST
56	Residence-Route 748 & Route 643	UST
57	Gas station-Keatts Road & US Route 29	UST
58	Service center-286 Highway View Road	UST, Automobile Service Wastes
59	Auto repair-Jasper Wood Road	Chemical Storage (Auto Body Repair)
60	Grocery-Highway View Road	UST
61	Store-858 Highway View Road	UST
62	Abandoned service station-Highway View Road	UST
63	Gas station-US Route 29 Business	UST
64	Welding supplier.-Pocket Road	Welding Supplies
	Campbell	
65	Gas station-Lynch Mill Road	UST
66	Business-Ogden Road	UST
67	Gas station-Main Street	UST
68	Farm supply-Main Street	Paint, Farm Chemicals
69	Welding & machine shop-Riverbend Road	Welding Supplies
70	Church-Riverbend Road	UST
71	Auto service-US Route 29	Automobile Service Wastes
72	Gas station-US Route 29	UST
73	Trucking services-US Route 29	Truck Service Wastes, ASTs
74	Auto repair-Marysville Road	Automobile Service Wastes
75	Auto parts-Castle Craig Drive	Abandoned Automobiles
76	Food shop-US Route 29	UST
77	Welding shop-US Route 29	Welding Supplies
78	Garage-US Route 29	Automobile Service Wastes
79	Gas station-US Route 29	UST
80	Service station-US Route 29	UST
81	Paint & body shop-Central Drive	Auto Body Paint & Supplies
82	Business-US Route 29	Truck Service Wastes
83	Garage & truck sales-US Route 29	Truck Service Wastes
84	Auto/truck plaza-US Route 29	UST
85	Auto sales-US Route 29	UST
86	Unnamed Site-US Route 29	AST
87	Gas station-US Route 29	UST
88	Abandoned business-Anstey Road	UST
89	Abandoned service station-US Route 29	UST

Exhibit 31 – Potential Hazardous Materials Sites for Mile-Wide Study Corridor

Site No.	Site Description and Location	Nature of Potential Hazard
90	Industrial supply –US Route 29	Forklift Service Wastes, ASTs
91	Farm equipment-US Route 29	Farm Equipment Service Wastes, UST
92	Sportsman club-Patterson Road	Shooting Range
93	Fuel sales-US Route 29	UST
94	Business.-Rt. 4 Box 4, Rustburg	UST, ASTs
95	Tire & recapping service-US Route 29	Auto Service Wastes, Tires
96	Fuel sales-US Route 29 & Route 685	UST, ASTs (Propane)
97	Nursery-Greenhouse Road	Pesticide Storage
98	VDOT-Yellow Branch Headquarters-Greenhouse Road	UST
99	Paint sales-Greenhouse Road	Paint Storage
100	Landfill-Livestock Road	Landfill
101	Auto repair shop-Livestock Road	Auto body Paint & Repair Chemicals
102	Auto parts sales-US Route 29	Auto Service Wastes, Abandoned Automobiles
103	Auto auction-US Route 29	Auto Service Wastes, Abandoned Automobiles
104	Construction company-Leland Road	Truck Service Wastes, ASTs
105	Residence-283 English Tavern Road	UST
106	Automotive services-English Tavern Road	Auto Service Wastes
107	Body shop-English Tavern Road	Auto body Paint & Repair Chemicals
108	Body shop-English Tavern Road	Auto body Paint & Repair Chemicals, Automobile Batteries
109	Construction equipment -US Route 29	Construction Equipment Service Wastes
110	Truck services-US Route 29	Truck Service Wastes
111	Construction equipment sales-US Route 29	Construction Equipment Service Wastes, ASTs
112	Auto repair - Hyland Drive	Auto Service Wastes
113	Gutter business-US Route 29	UST, Abandoned Automobiles
114	Garage-US Route 29	Auto Service Wastes
115	Farm vehicles services-US Route 29	Farm Vehicle Service Wastes
116	Furniture business-245 Winebarger Circle	Furniture Manufacturing Chemicals
117	Market-US Route 29	UST
118	Used car sales-US Route 29	UST
119	Body shop-US Route 29	Auto body Paint & Repair Chemicals
120	Towing company-US Route 29	Auto Service Wastes
121	Propane sales -Rangoon Street	ASTs (Propane)
122	Steel fabrication business-Rangoon Street	Steel Fabrication Chemicals
123	Gas station –US Route 29	UST
124	Auto services-US Route 29	Auto Service Wastes
125	Lynchburg Regional Airport-Airport Road	USTs, Jet Service Wastes
126	Electrical business-Airport Road	UST
127	Gas station -US Route 29	UST
128	Raceway-Wright Shop Lane & US Route 29	UST
	Amherst	
129	Dry cleaning business-102 S. Main Street	Dry Cleaning Solvents
130	Engine service machine shop-231 Second Street	Auto Service Wastes
131	Construction equipment service -Union Hill Road	ASTs, Construction Equipment Service Wastes
132	Substation-Industrial Drive	Substation
133	Town of Amherst-Industrial Drive	Auto Service Wastes

Exhibit 31 – Potential Hazardous Materials Sites for Mile-Wide Study Corridor

Site No.	Site Description and Location	Nature of Potential Hazard
134	Town of Amherst-Industrial Drive	Water Purification Chemicals-Sewage Treatment Plant
135	Manufacturing business.-317 Zane Snead Drive	Manufacturing Chemical Storage
136	Air handling business-Zane Snead Drive	ASTs (Toluene)
137	Service station-Main Street	UST
138	Auto services-Campbell's Mill Road	ASTs, Auto Service Wastes
139	Concrete plant-N. Amherst Highway	UST
140	Gas station-N. Amherst Highway	UST
141	Gas station-Amherst Highway	UST
142	Adjacent to church -US Route 29N	ASTs, Abandoned Automobiles
143	Auto sales/service-US Route 29N	UST, Auto Service Wastes
	Nelson	
144	Truck repair-US Route 29N	UST, Truck Service Wastes
145	Truck stop & restaurant	UST
146	Business-US Route 29N	UST
147	Construction business-US Route 29S	ASTs, Truck Service Wastes
148	Farm supply and services	UST, Farm Equipment Service Wastes
149	Gas station-US Route 29S	UST
150	Car dealer -US Route 29S	UST
151	Gas station-US Route 29S	UST
152	Residence/Farm-US Route 29S	UST, AST
153	Residence-295 Oak Ridge Road	UST
154	Residence-Oak Ridge Road	UST, ASTs
155	Business-Drumheller Orchard Road	UST
156	Electric power service-8101 US Route 29S	Transformers
157	Business-US Route 29S	ASTs, Vehicle Service Wastes
158	Gas station-Route 56 & US Route 29N	UST
159	Auto repair services-119 Tanbark Plaza	UST, Auto Service Wastes
160	Dry cleaner-Front Street	Dry Cleaning Solvents
161	Gas station-Front Street	UST
162	Gas station-US Route 29S	UST
163	Gas station-US Route 29S	UST
164	Gas station-Woods Mill Lane	UST
165	Grocery	UST
	Albemarle	
166	Gas station-4530 US Route 29S	UST
167	Gas station-4018 US Route 29S	UST
168	Gas station-US Route 29N	UST
169	Business-US Route 29N	UST
170	Gas station-Taylor Gap Road & US Route 29N	UST
171	Business-US Route 29S	UST
172	Substation-US Route 29N	Substation
173	Business-Gleco Mill Lane	ASTs
174	Business-US Route 29N	UST
175	Business-Gold Eagle Drive	UST

Key to Abbreviations: AST = aboveground storage tank; UST = underground storage tank; LUST = leaking underground storage tank.

5.3 Community Facilities

Community facilities are public and semi-public sites such as schools, public buildings, churches, cemeteries, parks, playgrounds, and emergency services. These facilities, within the one-mile wide study corridor, are listed by county in Exhibits 32-38. There are no wildlife or waterfowl refuges within the study corridor.

Exhibit 32 – Community Facilities: Schools

Jurisdiction	Schools Within Mile-Wide Study Corridor
Pittsylvania	Pittsylvania County Vocational Technical Education Center, Chatham High School, Woodlawn Academy, Chatham Hall School, Pittsylvania Central Middle School, Gretna High School, Gretna Elementary School
Campbell	Altavista Elementary School (includes recreational facilities), Yellow Branch Elementary (includes playing fields), Campbell County Vocational Education Center
Amherst	Sweet Briar College, Amherst County High School
Nelson	Nelson County Middle School (includes fields and basketball courts), Tye River Elementary School (includes playing fields), Nelson County High School (includes playing fields and tennis courts)
Albemarle	Red Hill Elementary School

Note: These facilities were identified through windshield surveys in the Fall of 1997.

Exhibit 33 – Community Facilities: Churches

Jurisdiction	Churches Within Mile-Wide Study Corridor
Pittsylvania	Faith Home*, Mount Pleasant, Oakland United Methodist, Bellgrove Primitive Baptist, Banister Springs Primitive Baptist, Samuel Harris Memorial Baptist, Greater Triumph Missionary Baptist, First United Holiness, Wilson Memorial Baptist, St. Lukes Church, Mt. Zion Pentecostal, Clarktown Presbyterian, New True Vine Pentecostal, St. Paul Outreach Center, Cherrystone Baptist Church, Oak Grove Christian Church, Open Bible Baptist, Antioch Baptist, Church of Jesus Christ of Latter Day Saints, West End Church of Christ, Sycamore Baptist Church, Mt. Olive Baptist, Motley United Methodist, Mt. Moriah Baptist, Motley Baptist, and one unnamed church * -- Faith Home contains a school as part of its facilities.
Campbell	Christian Memorial, New Life Church of Faith, Kingdom Hall of Jehovah's Witnesses, Calvary Baptist, Home Mission Outreach, Penuel Baptist, Castle Craig Church of God, Liberty Baptist, Gospel Light Baptist*, Yellow Branch Baptist, Cross Road Baptist, Central Assembly of God, Friendship Baptist, Foundation Baptist, Yellow Branch Wesleyan, Hyland Heights Baptist, Whites United Methodist, Flat Creek Baptist, Mountain View Church of God, Mead Memorial United Methodist, Flat Creek Baptist, Lynchburg S.D.A. * -- Gospel Light Baptist includes a recreation area and Lynchburg S.D.A. includes a school as part of its facilities.
Amherst	Bethel Baptist, Clifford Baptist
Nelson	Pine Hill Baptist, White Oak Baptist, Woodland Baptist, Nelson United Methodist, Trinity Episcopal, Calvary Baptist, Kingdom Hall of Jehovah's Witnesses, Oak Hill Baptist, Ridgecrest Baptist, Cedar Grove Baptist, unnamed church
Albemarle	Cove Presbyterian, First Baptist, Covesville Baptist, Zion Baptist, Trinity United Methodist, Mooreland Baptist, Grace Episcopal, Bethany Baptist, Good Shepherd Episcopal, Faith, Hope & Love International

Note: These facilities were identified through windshield surveys in the Fall of 1997.

Exhibit 34 – Community Facilities: Cemeteries

Jurisdiction	Cemeteries Within Mile-Wide Corridor
Pittsylvania	Oakland United Methodist, Bellgrove Primitive Baptist, Greater Triumph Missionary Baptist, Hillcrest Memorial, Clarktown Presbyterian, St. Paul Outreach Center, Cherrystone Baptist Church, Oak Grove Christian Church, Motley United Methodist, Mt. Moriah Baptist
Campbell	Altavista Memorial Park, Penuel Baptist, Liberty Baptist, Cross Road Baptist, Whites United Methodist
Amherst	Amherst Cemetery
Nelson	Woodland Baptist, Trinity Episcopal, Ridgecrest Baptist, unnamed cemetery
Albemarle	Cove Presbyterian, First Baptist, Zion Baptist, Mooreland Baptist, Grace Episcopal, Bethany Baptist, Good Shepherd Episcopal, Faith, Hope & Love International

Note: These facilities were identified through windshield surveys in the Fall of 1997.

Exhibit 35 – Community Facilities: Emergency Services

Jurisdiction	Emergency Services Within Mile-Wide Corridor
Pittsylvania	None
Campbell	None
Amherst	None
Nelson	Lovingston Volunteer Fire Department
Albemarle	North Garden Fire Company

Note: These facilities were identified through windshield surveys in the Fall of 1997.

Exhibit 36 – Community Facilities: Public Buildings and Community Centers

Jurisdiction	Public Buildings and Community Centers Within Mile-Wide Study Corridor
Pittsylvania	Dry Fork Post Office, Chatham Sewage Disposal, Pittsylvania Community Action Facility Head Start, Chatham-Pittsylvania Medical Building, Gretna Library (future site), Gretna Health Care Center, Gretna Library (existing), Central Health Care at Gretna Medical Center, American Legion-Gretna Post 232
Campbell	Lynchburg Regional Airport, H-Y Sportsman Club, Lyn-Dan Eights Ruritan Club
Amherst	Town of Amherst filtration plant
Nelson	U.S. Post Office (Lovingston), Nelson Memorial Library, Lions Field, VFW 7701, Lovingston Community Center
Albemarle	U.S. Post Office (North Garden)

Note: These facilities were identified through windshield surveys in the Fall of 1997.

Exhibit 37 – Community Facilities: Other Community Facilities

Jurisdiction	Other Community Facilities Within Mile-Wide Study Corridor
Pittsylvania	None
Campbell	J.H. Philips Wayside, Randolph Macon Women's College nature preserve
Amherst	None
Nelson	Nelson County Wayside/Hurricane Memorial
Albemarle	Cove Creek Park (baseball fields, privately owned)

Note: These facilities were identified through windshield surveys in the Fall of 1997.

Exhibit 38 – Community Facilities: Public Parks and Recreation Facilities

Jurisdiction	Public Parks and Recreation Facilities Within Mile-Wide Corridor
Pittsylvania	Hurt-Motley Community Center (softball field, target range), Pittsylvania Wayside Park
Campbell	None
Amherst	None
Nelson	None
Albemarle	Red Hill Elementary School recreation facilities (playing fields, playground, basketball court)

Note: These facilities were identified through windshield surveys in the Fall of 1997.

5.4 Historic and Archaeological Resources

Historic and archaeological resources include sites, buildings, districts, structures, or objects that are associated with noteworthy persons or events, or that represent important themes in history. These resources are said to be "significant" if they meet certain criteria for eligibility for listing in the National Register of Historic Places.

No archaeological sites of significance have been previously recorded in the Route 29 study corridor. An archaeological survey, which is beyond the scope of this study, would have to be conducted to determine whether any previously unknown sites are present along the corridor.

Five buildings along the corridor are currently listed in the National Register of Historic Places:

- Yates Tavern is a mid-eighteenth-century two-story house located near Gretna in Pittsylvania County.
- Spencer Plantation/Mountain View (Amherst County)
- Cove Presbyterian Church is located on U.S. Route 29 in Albemarle County at Covesville.
- Arrowhead House is a circa 1850-1870 house with early twentieth-century side additions located in Albemarle County.
- Crossroads Tavern is an early nineteenth-century brick Federal-style building located on Route 29 in Albemarle County.

Seven additional buildings in the corridor appear to be potentially eligible for National Register listing. They include:

- The Glebe/Minor Hall (Amherst County)
- Tusculum (Amherst County
- Boxley Farm (Amherst County)
- Red Hill (Nelson County)
- Rock Springs (Nelson County)
- An 1870 house (Albemarle County)
- Faris/Bowden House (Albemarle County).

There may be other buildings along the corridor that meet the National Register eligibility criteria. However, a detailed survey, which is beyond the scope of this study, would be required to evaluate them. In addition, the presence of archaeological remains of Native American activity sites or other settlement sites are likely in some portions of the corridor. For example, local residents have reported burial mounds in portions of Amherst County. Detailed surveys and archaeological investigations will be conducted in conjunction with more detailed location and design studies in the future.

5.5 Agricultural and Forestal Districts

Agricultural and forestal districts are designated areas of at least 200 acres in one or more contiguous parcels that are limited to agricultural and forestal use of the land. The intent in establishing these districts is to protect a locality's rural areas, including its agricultural and forestal lands, water supplies, and other natural and scenic resources. The proposed actions of public utilities and government entities that would affect such districts, as well as development by owners of properties within the districts, are restricted by state law.

Pittsylvania, Campbell, Amherst, and Nelson counties do not have any designated agricultural and forestal districts. The tax maps for Albemarle County indicate that the Hardware Agricultural and Forestal District, a non-contiguous district, straddles Route 29 in several locations north and south of the North Garden community.

5.6 Water Resources and Wetlands

Water resources are key features of the natural environment. Protection of these resources wherever possible preserves the natural environment, preserves active and passive recreation and tourist areas, and safeguards human water supplies. This section provides an overview of various water resources in the study corridor.

5.6.1 Rivers and Streams

The corridor is dissected by many rivers and streams that follow entrenched and meandering channels. The major rivers that cross the study corridor include the Dan in Danville, the Roanoke at the border between Pittsylvania and Campbell counties, and the James between the city of Lynchburg and Amherst County. Other rivers in the corridor include:

- Bannister River, crossing Route 29 just south of the Town of Chatham;
- Big Otter River, crossing Route 29 just north of the town of Altavista and merging with the Roanoke River south of the Route 29 and 29 Business interchange;
- Buffalo River, crossing Route 29 just north of the town of Amherst;
- Tye River, crossing Route 29 and forming the border between Nelson and Amherst Counties;
- Rockfish River, crossing Route 29 near the intersection of Route 6W; and
- South Fork, South Branch, and the North Fork of the Hardware River, all crossing Route 29 in Albemarle County.

Numerous smaller waterways also cross the study corridor.

5.6.2 Lakes

There are no large lakes within the study corridor, but there are several within the larger study area. They include Smith Mountain Lake and Leesville Lake in the northwest corner of Pittsylvania County and southern Bedford County.

5.6.3 Wetlands

A variety of wetlands are associated with waterways in the Route 29 corridor. Most are generally small and confined to the margins of the stream channels. The types of wetlands found in the corridor include forested, scrub-shrub, emergent, and combinations of these three types. Their functions primarily consist of floodflow alteration, sediment/toxicant retention, nutrient removal/ retention/transformation, and, to a lesser degree, wildlife habitat, sediment/shoreline stabilization, and production export.

5.6.4 Floodplains

The Federal Emergency Management Agency (FEMA) delineates 100-year floodplains on flood boundary maps as part of the Flood Insurance Program. The 100-year floodplain is the area with a one percent chance of being flooded in any given year. Designated floodplains within the study corridor include those associated with the Dan, Roanoke, and James Rivers.

5.7 Sensitive Wildlife Habitat

Broad features of both terrestrial and aquatic wildlife habitat were identified for this study. Specific features and resources would be identified as part of any specific improvements to transportation resources in the Route 29 corridor.

5.7.1 Terrestrial Habitat

Except for the urban centers of Danville and Lynchburg, terrestrial habitats in the study area reflect mostly a rural land use setting. Much of the study corridor is characterized by forested or agricultural uses dissected by linear features such as highways, railways, utility lines, and waterways. Agricultural land uses include cultivation of tobacco, corn, wheat, and soybeans and pastures for cattle. Forest stands are predominantly deciduous with some areas mixed with conifers. The dominant forest type is mid- to late-successional, upland hardwood forest.

In open and agricultural areas of the Route 29 corridor, the terrestrial habitat provides food sources such as grasses, grains, and seed crops. Species such as quail, woodchuck, meadowlark, field sparrow, snakes, mice, voles, opossum, rabbit, raccoon, and red fox are supported. The mature forested areas of the study corridor harbor wild turkey, ruffed

grouse, woodcock, thrush, woodpeckers, squirrel, fox, raccoon, whitetail deer, and, in a few areas, bear. Wetlands in the study corridor provide habitat for ducks, geese, herons, muskrat, mink, and beaver.

The U.S. Fish and Wildlife Service (FWS) and the U.S. Forest Service did not identify any wildlife refuges or Forest Service properties within the study corridor. No particularly unique or extremely sensitive habitats have been identified along the corridor. There are no publicly owned wildlife refuges or wildlife management areas near the corridor. White Oak Mountain Wildlife Management Area is located approximately four miles east of the corridor in Pittsylvania County.

5.7.2 Aquatic Habitat

The relatively low-gradient streams meandering through the study corridor support a variety of fish, amphibians, reptiles, and insects. According to the Virginia Department of Game and Inland Fisheries, no streams in the study corridor provide suitable habitat for maintaining naturally reproducing trout populations or put and take trout populations.

5.8 Threatened and Endangered Species

The potential presence of threatened and endangered species in the study area was reviewed in consultation with:

- U.S. Fish and Wildlife Service
- Virginia Department of Game and Inland Fisheries
- Virginia Department of Conservation and Recreation - Division of Natural Heritage
- Virginia Department of Agriculture and Consumer Services

Two federally listed endangered species, the James spinymussel and the smooth coneflower, are known to occur in counties traversed by Route 29, but not necessarily within the study corridor. The state agencies noted that a number of state-listed threatened, endangered, or special concern species could be found within the study area if appropriate habitats are available. Specific identification of such habitats was beyond the scope of this project. At such time as more detailed location and design studies are undertaken for specific projects, appropriate surveys for rare, threatened, and endangered species will be conducted.

5.9 Scenic Features

Much of the study corridor still exhibits the landscape particular to south central Virginia, characterized by rolling fields and farms, interspersed with wooded, undeveloped, and developed areas, with scattered barns, farm houses, roadside produce stands, and small communities. As a whole, the corridor presents a pleasing visual experience for the traveler, with constantly changing views of rural, semi-rural, and urban landscapes. Along some sections, dense vegetation closes in the highway, presenting almost a canopy effect. Along other sections, the topography and large open areas afford views of distant

mountains. Several citizens and county officials have noted how the scenic qualities along the road contribute positively to the travel experience of residents and tourists alike. A short section of Route 29 between Route 6 west and Route 6 east is a designated Virginia Byway. Several highways intersecting Route 29 also have been officially designated as Virginia Byways. They include Route 43 in Campbell and Bedford counties, Route 130 in Amherst County, Route 6 in Nelson County, and Route 712 in Albemarle County. Virginia Byways are roads that meet certain standards of high aesthetic or cultural value, or that lead to areas with historical, natural, or recreational importance. The designations are made in cooperation with local governments.

Despite the overall scenic quality of the corridor, exceptional vistas are few and striking architecture is rare. In addition, increasing development in some parts of the corridor is transforming the landscape to a scattered collection of modern unexceptional buildings, including homes, mobile homes, gas stations, convenience marts, strip shopping centers, and industrial sites.

5.10 Air Quality

Owing to the rural nature of most of the study corridor and the relative scarcity of polluting industries, all counties along the study corridor are in attainment with the National Ambient Air Quality Standards. The Virginia Department of Environmental Quality monitors only particulates at two stations in the study corridor, at Lynchburg and Charlottesville. Measured particulate concentrations at these stations are well within the standards.

Chapter 6 – Existing Engineering Constraints

Engineering constraints that will need to be taken into consideration if transportation improvements are made in the Route 29 corridor include major utilities, river crossings, railroad tracks, and areas with steep topography. Any specific transportation improvement project will face constraints at a localized level. While all of these potential localized constraints could not be identified for this 135-mile corridor study, this section describes some of the larger issues that should be considered prior to taking any improvement to more detailed planning and engineering stages. Many of these constraints are depicted on the aerial mapping of the study recommendation included in the document, *Route 29 Corridor Development Study (Combined Phases II/III) Recommended Transportation Concept*. Specific information on some of these engineering constraints as they apply to individual segments in the study corridor are included on the segment data sheets in the appendix to this report.

6.1 Utility Constraints

Major utilities are a constraint to transportation improvements because the high costs associated with moving them can make a project significantly more expensive. Wherever possible, transportation improvements should seek to avoid major utility lines. For this study, information on existing utilities' transmission lines in the study corridor was obtained by contacting municipalities and utilities in the study area. This information is included in this section by county**.**

6.1.1 Pittsylvania County

Telephone lines by MCI and Peoples Mutual Telephone Company, Inc. are located in the study corridor. Electric transmission lines include VEPCO (Altavista District), the Meklenburg Electric Cooperative, and the Southside Electric Cooperative. A VEPCO 138kV transmission line traverses a small portion of the study corridor near its beginning, but it does not cross Route 29. The Colonial Gas Company has both a 32-inch pipeline and a 36-inch pipeline that intersect the study corridor near its beginning at Blairs. Just south of the town of Chatham, Transco maintains three high-pressure natural gas transmission mains (two 30-inch and one 36-inch) that cross the study corridor. The Commonwealth Gas Company provides local gas service in this area. Water and sewer service is provided by Pittsylvania County Service Authority and the Towns of Chatham, Gretna, and Altavista. Areas without water and sewer services are assumed to be served by wells and septic systems.

6.1.2 Campbell County

In Campbell County, MCI and Sprint (Central Telephone Company of Virginia) have telephone lines along Route 29. The Altavista District of VEPCO has electrical transmission lines. Several power transmission lines (138 kV and 765 kV), owned by American Electric Transmission Company, cross Route 29 just south of Lynchburg. North of the town of Altavista, VEPCO has two 138 kV lines that cross Route 29. The

Commonwealth Gas Company provides gas service in this portion of the study corridor. Water and sewer service is provided by the Town of Altavista and the Campbell County Utilities and Service Authority. Areas without water and sewer services are assumed to be served by wells and septic systems.

6.1.3 Amherst County

MCI furnishes telephone service in Amherst County along the study corridor. Two electric transmission lines cross Route 29—a 138 kV line north of the town of Amherst, and a 69 kV line near the Amherst County/Nelson County line. Both are owned by the American Electric Transmission Company. No gas lines are located along this portion of Route 29 in this part of the study corridor. Water and sewer service is provided by the Town of Amherst. Areas without water and sewer services are assumed to be served by wells and septic systems.

6.1.4 Nelson County

In Nelson County, MCI phone lines are located along Route 29. A 138 kV electric transmission line belonging to the American Electric Transmission Company intersects the study corridor near Lovingston. No gas transmission lines are located along Route 29 in this part of the study corridor. Water and sewer service is provided by the Nelson County Service Authority. Areas without water and sewer services are assumed to be served by wells and septic systems.

6.1.5 Albemarle County

Telephone service is supplied by MCI throughout this portion of the study corridor and also by the Clifton Forge-Waynesboro Telephone Company north of Crossroads. The Central Virginia Electric Cooperative and the VEPCO Charlotte District have electric transmission lines along Route 29. No gas transmission lines are located along Route 29 in this part of the study corridor. Water and sewer service is assumed to be furnished by wells and septic systems.

6.2 River Crossings

Route 29 crosses the following major rivers in the study corridor:

- Dan River, crossing Route 29 in Danville;
- Bannister River, crossing Route 29 just south of the Town of Chatham;
- Roanoke River, crossing Route 29 and forming the border between Pittsylvania and Campbell Counties;
- Big Otter River, crossing Route 29 just north of the town of Altavista and merging with the Roanoke River south of the Route 29 and 29 Business interchange;
- James River, crossing Route 29 in Lynchburg;
- Buffalo River, crossing Route 29 just north of the town of Amherst;
- Tye River, crossing Route 29 and forming the border between Nelson and Amherst Counties;

- Rockfish River, crossing Route 29 near the intersection of Route 6W; and
- Hardware River, crossing Route 29 at three locations (South Fork, South Branch, and North Fork) in Albemarle County.

Three of these river crossings (Dan, Roanoke, and James) cross Route 29 on sections where Route 29 is already limited access. While some upgrades may be needed at these locations, new bridges at to cross these rivers are not likely to be needed with any potential transportation improvement. Note that a new crossing of the James River is currently being constructed as part of the Madison Heights Bypass.

A listing of other major structures is included in Exhibit 39. There are multiple other structures that cross smaller streams in the corridor; additional information on all structures is included by segment on the segment data sheets in the appendix.

Exhibit 39 – Major Structures on Route 29 in the Study Corridor

Jurisdiction	Crossing Location/ Description	Approximate Length of Structure (feet) [1]	Existing Non-Standard Features [2]
Pittsylvania	Bannister River	350	Deck on northbound lanes is narrow
Pittsylvania	Cherrystone Creek	200	Deck on southbound is narrow
Pittsylvania	Railroad at Route 29 milepost 28	250	Decks for both directions are narrow
Pittsylvania/Campbell	Roanoke (Staunton) River	600	None
Campbell	Railroad at Route 29 milepost 49	350	None
Campbell	Big Otter River	550	Deck on northbound lanes is narrow
Amherst	Depot Street (Town of Amherst)	200	None
Amherst	Buffalo River	250	Deck on northbound lanes is narrow
Amherst/Nelson	Tye River	650	Deck on northbound lanes is narrow
Nelson	Rockfish River	400	None
Albemarle	Hardware River (Middle Branch just south of Route 708)	150	None

Notes:
[1] – In all cases, there are separate structures for the northbound and southbound lanes of Route 29. The length shown here is approximate (plus or minus 50 feet).
[2] – Based on windshield surveys performed as part of the field investigation for this study.

6.3 Railroad Line

In addition to the constraints posed by the existing railroad crossings, the railroad runs immediately adjacent to Route 29 in a number of locations in the study corridor. These locations are listed in Exhibit 40.

Exhibit 40 – Potential Roadway Constraints from Rail Line

Jurisdiction	Location Description	Route 29 Mile Post
Pittsylvania	Route 29 (Chatham Bypass) goes over the railroad	28
Pittsylvania	Railroad is in close proximity of interchange with Route 29 Business south of Gretna (railroad then runs parallel to Route 29 Business through Gretna)	33
Pittsylvania	Railroad runs adjacent to Route 29 (east side) for approximately 7 miles (then runs parallel to Route 29 Business through Hurt and Altavista)	37 to 44
Albemarle	Railroad runs adjacent to Route 29 (east side) for approximately 2 miles (Covesville area)	118 to 120
Albemarle	Railroad runs adjacent to Route 29 (east side) for approximately 3 miles (diverts at I-64)	130 to 133

6.4 Topographic Constraints

While most of the corridor consists of either level or rolling terrain, there are several areas where topography would pose constraints to roadway improvements. The primary area where slopes would be a major engineering consideration extends from Lovingston to Woods Mill in Nelson County (approximately 6 miles extending from mileposts 106 to 112). Another area that could present potential topographic constraints is White Oak Mountain, which is on the west side of Route 29 in Pittsylvania County at milepost 18.

6.5 Miscellaneous Engineering Constraints

Over the course of this study, a number of miscellaneous engineering constraints were identified either through field work or through the coordination process with study committees, VDOT personnel, or the general public. These constraints are documented in the segment data sheets in the appendix.

6.6 Constraints to Other Modes Improvements

As indicated in Chapter 2, the rail line through the Route 29 corridor is generally in good condition. Constraints to possible improvements include densities of land use and roadways in the urban areas of Danville, Lynchburg, and Charlottesville (these require that train speeds be lower). For the two areas where train speeds could be improved through straightening the track (in the vicinity of Elma and Faber in Nelson County), the topography would be a constraining factor. In both of these areas, the train tracks are located in a major cut section, with steep slopes on either side of the tracks. Straightening the track in these cut sections would entail substantial earthwork and costs.

While most primary roads in the Route 29 corridor either cross over or under the train tracks, two locations (Route 24 in Campbell County and Route 56 in Nelson County) are at-grade crossings. There would be substantial topographic and community impacts to constructing a grade-separated crossing of the railroad track on Route 56. There do not appear to be any such constraints on Route 24.

Appendix A -- Segment Data Sheets

The following segment data sheets provide an inventory of the Route 29 corridor from the North Carolina line to I-64 in Charlottesville, excluding the section between Route 460 at the southern limits of the City of Lynchburg and Route 624 in Amherst County. Traffic flow on this excluded section is being addressed by the Madison Heights Bypass (currently under construction). The information on the segment data sheets is derived from VDOT inventory data, traffic counts and travel time runs performed for this study, and windshield surveys to identify (at a planning level) geometric, improvement, land use/economic, social/environmental, and intermodal issues. The segment data sheets are ordered from south to north by jurisdiction:

- Pittsylvania County (pages A-2 to A-46)
- Campbell County (pages A-47 to A-78)
- Amherst County (pages A-79 to A-87)
- Nelson County (pages A-88 to A-118)
- Albemarle County (pages A-119 to A-136)

The following provides additional background on the information included on the segment data sheets:

Endpoint control: indicates whether the termini of the segment is an unsignalized or signalized intersection, or whether it is a grade-separated interchange.

Access control: full access control indicates that there are no access points (other than the segment endpoints) on this segment of Route 29. Such access control is usually apparent by the presence of limited access fencing adjacent to the roadway. Partial access control indicates that there are, or could be access points within the segment.

Node #: study-defined segment endpoint numbering system (see report text for further description)

Level of Service: operations at the segment endpoint -- ACC indicates the operations are acceptable (level of service C or better), UNA indicates that the operations are unacceptable (level of service D or worse), N/A indicates that traffic counts and analysis were not performed at this location (generally, for locations in the study area but not in the detailed study corridor)

Field travel speed (mph): travel speed based on actual travel time runs in the corridor

Calc travel speed (mph): travel speed calculated based on the ratio of p.m. peak hour traffic to capacity

Access points: the number of secondary roads and driveways directly accessing Route 29. A road intersecting Route 29 at a four-leg intersection would be counted twice (once for accessing the southbound lanes and once for accessing the northbound lanes). Each driveway to a single property was also counted.

Potential improvement issues: If improvements to widen the travel lanes, shoulders, improve sight distance, or provide for intersection improvements (signalize or grade separate) were needed, these were noted. The judgement that these improvements are needed is based on field observation and planning judgement; final decisions that actual improvements are needed would be based on further analysis.

Land use/economic issues: Major land uses and employers that may afffect the need for, or ultimate design of, transportation improvements were noted.

Principal social and environmental issues: Major social and environmental issues (including stream crossings, hazardous materials sites, minority or low income communities, community resources, etc.) were noted.

Intermodal issues: Evidence of substantial pedestrian or bicycle demand (worn paths, observation of such travel) were noted, as was the presence of nearby train stations, airports, freight transfer points, etc.

Traffic count data is for 1997. Field inventory for all other information was performed in 1998.

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	NC Line	Node #:	2
Endpoint Control:	N/A	Level of Service	N/A
To:	US 29 Bus	Node #:	4
Endpoint Control:	Interchange	Level of Service:	N/A
Length of Segment (miles):	.23		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Percent Trucks	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Segment Level of Service	Northbound:	N/A	Southbound:	N/A		
Field Travel Speed (mph)	Northbound:	58.1	Southbound:	57.4		
Calc Travel Speed (mph)	Northbound:	N/A	Southbound:	N/A		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Not inventoried.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	US 29 Bus	Node #:	4
Endpoint Control:	Interchange	Level of Service	N/A
To:	Elizabeth Street	Node #:	6
Endpoint Control:	Right-in/right-out intersection	Level of Service:	N/A
Length of Segment (miles):	1.1		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Percent Trucks	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Segment Level of Service	Northbound:	N/A	Southbound:	N/A		
Field Travel Speed (mph)	Northbound:	58.1	Southbound:	57.4		
Calc Travel Speed (mph)	Northbound:	N/A	Southbound:	N/A		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Not inventoried.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	Elizabeth Street	Node #:	6
Endpoint Control:	Right-in/right-out intersection	Level of Service	N/A
To:	VA 86	Node #:	8
Endpoint Control:	Interchange	Level of Service:	N/A
Length of Segment (miles):	2.25		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Percent Trucks	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Segment Level of Service	Northbound:	N/A	Southbound:	N/A		
Field Travel Speed (mph)	Northbound:	58.1	Southbound:	57.4		
Calc Travel Speed (mph)	Northbound:	N/A	Southbound:	N/A		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Not inventoried.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 86	Node #:	8
Endpoint Control:	Interchange	Level of Service	N/A
To:	VA 737/Goodyear Blvd.	Node #:	10
Endpoint Control:	Interchange	Level of Service:	N/A
Length of Segment (miles):	1.84		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Percent Trucks	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Segment Level of Service	Northbound:	N/A	Southbound:	N/A		
Field Travel Speed (mph)	Northbound:	58.5	Southbound:	58.9		
Calc Travel Speed (mph)	Northbound:	N/A	Southbound:	N/A		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Not inventoried.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 737/Goodyear Blvd.	Node #:	10
Endpoint Control:	Interchange	Level of Service	N/A
To:	Riverpoint Drive	Node #:	12
Endpoint Control:	Under Design	Level of Service:	N/A
Length of Segment (miles):	.58		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Percent Trucks	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Segment Level of Service	Northbound:	N/A	Southbound:	N/A		
Field Travel Speed (mph)	Northbound:	58.5	Southbound:	58.9		
Calc Travel Speed (mph)	Northbound:	N/A	Southbound:	N/A		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Not inventoried.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	Riverpoint Drive	Node #:	12
Endpoint Control:	Under Design	Level of Service	N/A
To:	US 58	Node #:	14
Endpoint Control:	Interchange	Level of Service:	N/A
Length of Segment (miles):	1.08		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Percent Trucks	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Segment Level of Service	Northbound:	N/A	Southbound:	N/A		
Field Travel Speed (mph)	Northbound:	58.5	Southbound:	58.9		
Calc Travel Speed (mph)	Northbound:	N/A	Southbound:	N/A		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Not inventoried.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	US 58	Node #:	14
Endpoint Control:	Interchange	Level of Service	N/A
To:	VA 360	Node #:	16
Endpoint Control:	Interchange	Level of Service:	N/A
Length of Segment (miles):	2.24		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Percent Trucks	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Segment Level of Service	Northbound:	N/A	Southbound:	N/A		
Field Travel Speed (mph)	Northbound:	57.8	Southbound:	60.0		
Calc Travel Speed (mph)	Northbound:	N/A	Southbound:	N/A		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Not inventoried.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 360	Node #:	16
Endpoint Control:	Interchange	Level of Service	N/A
To:	US 29 Bus	Node #:	22
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	6.48		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Traffic	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Daily Percent Trucks	Northbound:	N/A	Southbound:	N/A	Total:	N/A
Segment Level of Service	Northbound:	N/A	Southbound:	N/A		
Field Travel Speed (mph)	Northbound:	57.0	Southbound:	58.7		
Calc Travel Speed (mph)	Northbound:	N/A	Southbound:	N/A		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Not inventoried.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	US 29 Bus	Node #:	22
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 946	Node #:	24
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.57		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	660	Southbound:	611	Total:	1271
Daily Traffic	Northbound:	7500	Southbound:	7500	Total:	15000
Daily Percent Trucks	Northbound:	22	Southbound:	20	Total:	21
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	51.01	Southbound:	51.45		

GEOMETRY

# of Side Access Points	Northbound:	5	Southbound:	4	Total:	9
Side Access per Mile	Northbound:	8.8	Southbound:	7.0	Total:	15.8
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Faith Home church and school east side of Route 29.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 946	Node #:	24
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 640	Node #:	26
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.19		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	649	Southbound:	614	Total:	1263
Daily Traffic	Northbound:	7450	Southbound:	7450	Total:	14900
Daily Percent Trucks	Northbound:	22	Southbound:	20	Total:	21
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	50.57	Southbound:	47.94		

GEOMETRY

# of Side Access Points	Northbound:	2	Southbound:	4	Total:	6
Side Access per Mile	Northbound:	10.5	Southbound:	21.1	Total:	31.6
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 640	Node #:	26
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 1701	Node #:	28
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.16		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	587	Southbound:	593	Total:	1180
Daily Traffic	Northbound:	6950	Southbound:	6950	Total:	13900
Daily Percent Trucks	Northbound:	22	Southbound:	20	Total:	21
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	50.08	Southbound:	48.51		

GEOMETRY

# of Side Access Points	Northbound:	2	Southbound:	3	Total:	5
Side Access per Mile	Northbound:	12.5	Southbound:	18.8	Total:	31.3
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 1701	Node #:	28
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 863	Node #:	30
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.57		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	587	Southbound:	595	Total:	1182
Daily Traffic	Northbound:	6950	Southbound:	6950	Total:	13900
Daily Percent Trucks	Northbound:	22	Southbound:	20	Total:	21
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	47.50	Southbound:	52.32		

GEOMETRY

# of Side Access Points	Northbound:	13	Southbound:	2	Total:	15
Side Access per Mile	Northbound:	22.8	Southbound:	3.5	Total:	26.3
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Mount Pleasant Church east side of Route 29. Potential hazardous materials (transformers) on SW corner Routes 863 & 29.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 863	Node #:	30
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 825	Node #:	32
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.65		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	568	Southbound:	657	Total:	1225
Daily Traffic	Northbound:	7000	Southbound:	7000	Total:	14000
Daily Percent Trucks	Northbound:	22	Southbound:	20	Total:	21
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	49.56	Southbound:	50.47		

GEOMETRY

# of Side Access Points	Northbound:	24	Southbound:	18	Total:	42
Side Access per Mile	Northbound:	14.5	Southbound:	10.9	Total:	25.5
# of Median Breaks					Total:	5

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

White Oak Mountain at Route 1032 west side of Route 29 is approx. 280 feet higher than adjacent Route 29.
Potential hazardous materials (abandoned autos, old gas station/underground tanks, and active gas station west side of Route 29; transformers, former gas station/potential underground tanks east side of Route 29).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 825	Node #:	32
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 894	Node #:	34
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.06		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	575	Southbound:	672	Total:	1247
Daily Traffic	Northbound:	7350	Southbound:	7350	Total:	14700
Daily Percent Trucks	Northbound:	22	Southbound:	20	Total:	21
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	51.78	Southbound:	52.26		

GEOMETRY

# of Side Access Points	Northbound:	6	Southbound:	4	Total:	10
Side Access per Mile	Northbound:	5.7	Southbound:	3.8	Total:	9.4
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Steep uphill grades in the southbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Oakland United Methodist Church and cemetery east side of Route 29 at Route 894.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 894	Node #:	34
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 718	Node #:	36
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.05		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	575	Southbound:	657	Total:	1232
Daily Traffic	Northbound:	7250	Southbound:	7250	Total:	14500
Daily Percent Trucks	Northbound:	22	Southbound:	20	Total:	21
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	43.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	2	Total:	2
Side Access per Mile	Northbound:	0.0	Southbound:	40.0	Total:	40.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

- ☐ Lane Widening
- ☐ Shoulder Widening/Paving
- ☐ Sight Distance (Vertical/Horizontal Improvements)
- ☐ Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

- ☐ Sidewalk/Bikeway Potential
- ☐ Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 718	Node #:	36
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 1434	Node #:	38
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.91		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	583	Southbound:	667	Total:	1250
Daily Traffic	Northbound:	7350	Southbound:	7350	Total:	14700
Daily Percent Trucks	Northbound:	22	Southbound:	20	Total:	21
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	50.71	Southbound:	49.67		

GEOMETRY

# of Side Access Points	Northbound:	19	Southbound:	27	Total:	46
Side Access per Mile	Northbound:	9.9	Southbound:	14.1	Total:	24.1
# of Median Breaks					Total:	7

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Narrow bridge structure in the northbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Pittsylvania Vo-Tech Education Center east side of Route 29. Potential hazardous materials and underground tank sites (gas and service stations west and east sides of Route 29). Banister River crossing. Bellgrove Primitive Baptist Church and cemetery on Route 1437 east of Route 29; Banister Springs Primitive Baptist Church east side of Route 29 at Route 1434.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 1434	Node #:	38
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 703	Node #:	40
Endpoint Control:	Signalized	Level of Service:	ACC
Length of Segment (miles):	.27		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	558	Southbound:	623	Total:	1181
Daily Traffic	Northbound:	6950	Southbound:	6950	Total:	13900
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	43.94	Southbound:	43.94		

GEOMETRY

# of Side Access Points	Northbound:	10	Southbound:	10	Total:	20
Side Access per Mile	Northbound:	37.0	Southbound:	37.0	Total:	74.1
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes both sides of Route 29. Gas station/underground tanks southwest corner of Routes 703 and 29.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 703	Node #:	40
Endpoint Control:	Signalized	Level of Service	ACC
To:	VA 1433	Node #:	42
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.92		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	650	Southbound:	645	Total:	1295
Daily Traffic	Northbound:	7600	Southbound:	7600	Total:	15200
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	48.58	Southbound:	49.40		

GEOMETRY

# of Side Access Points	Northbound:	17	Southbound:	14	Total:	31
Side Access per Mile	Northbound:	18.5	Southbound:	15.2	Total:	33.7
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Tight Squeeze Plaza shopping center northwest corner of Routes 703 and 29. Potential hazardous materials/underground tank sites (service station northeast corner of Route 703 and 29; 4 gas/service stations west side of Route 29).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 1433	Node #:	42
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	US 29 Bus	Node #:	44
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	.22		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	614	Southbound:	689	Total:	1303
Daily Traffic	Northbound:	7650	Southbound:	7650	Total:	15300
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	52.7		
Calc Travel Speed (mph)	Northbound:	52.06	Southbound:	50.93		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	2	Total:	3
Side Access per Mile	Northbound:	4.5	Southbound:	9.1	Total:	13.6
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Narrow bridge structures in both directions.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Cherrystone Creek crossing.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	US 29 Bus	Node #:	44
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 832	Node #:	46
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	1.16		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	471	Southbound:	508	Total:	979
Daily Traffic	Northbound:	5750	Southbound:	5750	Total:	11500
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.9		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials site (farm supply southeast quadrant of Route 831 interchange).

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 832	Node #:	46
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 685	Node #:	48
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	1.13		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	436	Southbound:	464	Total:	900
Daily Traffic	Northbound:	5300	Southbound:	5300	Total:	10600
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.9		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 685	Node #:	48
Endpoint Control:	Interchange	Level of Service	ACC
To:	US 29 Bus	Node #:	50
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	1.29		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	459	Southbound:	427	Total:	886
Daily Traffic	Northbound:	5200	Southbound:	5200	Total:	10400
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.9		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

- ☐ Lane Widening
- ☐ Shoulder Widening/Paving
- ☐ Sight Distance (Vertical/Horizontal Improvements)
- ☐ Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

- ☐ Sidewalk/Bikeway Potential
- ☐ Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	US 29 Bus	Node #:	50
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 1400	Node #:	52
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.47		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	581	Southbound:	503	Total:	1084
Daily Traffic	Northbound:	6400	Southbound:	6400	Total:	12800
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	50.48	Southbound:	49.97		

GEOMETRY

# of Side Access Points	Northbound:	16	Southbound:	19	Total:	35
Side Access per Mile	Northbound:	10.9	Southbound:	12.9	Total:	23.8
# of Median Breaks					Total:	10

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Narrow bridge structures in both directions.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 1400	Node #:	52
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 1400	Node #:	54
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.21		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	517	Southbound:	439	Total:	956
Daily Traffic	Northbound:	5600	Southbound:	5600	Total:	11200
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	52.01	Southbound:	52.01		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	4.8	Southbound:	4.8	Total:	9.5
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 1400	Node #:	54
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 797	Node #:	56
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.88		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	517	Southbound:	437	Total:	954
Daily Traffic	Northbound:	5600	Southbound:	5600	Total:	11200
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	48.94	Southbound:	51.50		

GEOMETRY

# of Side Access Points	Northbound:	15	Southbound:	6	Total:	21
Side Access per Mile	Northbound:	17.0	Southbound:	6.8	Total:	23.9
# of Median Breaks					Total:	5

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Open Bible Baptist Church west side of Route 29. Potential hazardous materials site (propane gas tanks) west side of Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 797	Node #:	56
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 794	Node #:	58
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.21		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	521	Southbound:	434	Total:	955
Daily Traffic	Northbound:	5600	Southbound:	5600	Total:	11200
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	52.01	Southbound:	48.44		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	4	Total:	5
Side Access per Mile	Northbound:	4.8	Southbound:	19.0	Total:	23.8
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 794	Node #:	58
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 649	Node #:	60
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.24		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	513	Southbound:	426	Total:	939
Daily Traffic	Northbound:	5500	Southbound:	5500	Total:	11000
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	50.08	Southbound:	52.16		

GEOMETRY

# of Side Access Points	Northbound:	3	Southbound:	1	Total:	4
Side Access per Mile	Northbound:	12.5	Southbound:	4.2	Total:	16.7
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 649	Node #:	60
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 649	Node #:	62
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.1		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	512	Southbound:	427	Total:	939
Daily Traffic	Northbound:	5500	Southbound:	5500	Total:	11000
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	50.70	Southbound:	45.70		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	3	Total:	4
Side Access per Mile	Northbound:	10.0	Southbound:	30.0	Total:	40.0
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 649	Node #:	62
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 903	Node #:	64
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.07		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	498	Southbound:	422	Total:	920
Daily Traffic	Northbound:	5400	Southbound:	5400	Total:	10800
Daily Percent Trucks	Northbound:	11	Southbound:	18	Total:	15
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	50.63	Southbound:	50.40		

GEOMETRY

# of Side Access Points	Northbound:	11	Southbound:	12	Total:	23
Side Access per Mile	Northbound:	10.3	Southbound:	11.2	Total:	21.5
# of Median Breaks					Total:	6

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials/underground tank sites (gas station east side of Route 29 and old gas pump at residence west side of Route 29 and fuel/service bays at southeast corner intersection of Routes 903 and 29). Cemetery west side of Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 903	Node #:	64
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 922	Node #:	66
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.6		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	506	Southbound:	423	Total:	929
Daily Traffic	Northbound:	5450	Southbound:	5450	Total:	10900
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	50.70	Southbound:	51.53		

GEOMETRY

# of Side Access Points	Northbound:	6	Southbound:	4	Total:	10
Side Access per Mile	Northbound:	10.0	Southbound:	6.7	Total:	16.7
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream crossing (tributary of Whitethorn Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 922	Node #:	66
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 1080	Node #:	68
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.07		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	507	Southbound:	423	Total:	930
Daily Traffic	Northbound:	5450	Southbound:	5450	Total:	10900
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	49.63		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	1	Total:	1
Side Access per Mile	Northbound:	0.0	Southbound:	14.3	Total:	14.3
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

VA 1080 closed due to bridge closure.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream crossing (Whitethorn Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 1080	Node #:	68
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 672/F638	Node #:	70
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.57		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	513	Southbound:	424	Total:	937
Daily Traffic	Northbound:	5500	Southbound:	5500	Total:	11000
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	44.43	Southbound:	52.32		

GEOMETRY

# of Side Access Points	Northbound:	20	Southbound:	2	Total:	22
Side Access per Mile	Northbound:	35.1	Southbound:	3.5	Total:	38.6
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

☐ Lane Widening

☐ Shoulder Widening/Paving

☐ Sight Distance (Vertical/Horizontal Improvements)

☐ Signalization/Grade Separation

VA 1080 closed due to bridge closure.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

19 homes along east side of Route 29.

INTERMODAL ISSUES

☐ Sidewalk/Bikeway Potential

☐ Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 672/F638	Node #:	70
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	US 29 Bus	Node #:	72
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	.52		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	605	Southbound:	532	Total:	1137
Daily Traffic	Northbound:	6700	Southbound:	6700	Total:	13400
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	56.8	Southbound:	58.2		
Calc Travel Speed (mph)	Northbound:	52.72	Southbound:	52.72		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	1.9	Southbound:	1.9	Total:	3.8
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

Pavement in poor condition in northbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	US 29 Bus	Node #:	72
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 40	Node #:	74
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	2.01		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	405	Southbound:	462	Total:	867
Daily Traffic	Northbound:	5100	Southbound:	5100	Total:	10200
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	60.0	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

- ☐ Lane Widening
- ☐ Shoulder Widening/Paving
- ☐ Sight Distance (Vertical/Horizontal Improvements)
- ☐ Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Yates Tavern historic site east of Route 29 Gretna Bypass and west of Business Route 29. Two stream crossings (tributaries of Whitethorn Creek)

INTERMODAL ISSUES

- ☐ Sidewalk/Bikeway Potential
- ☐ Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 40	Node #:	74
Endpoint Control:	Interchange	Level of Service	ACC
To:	US 29 Bus	Node #:	76
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	2.3		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	433	Southbound:	501	Total:	934
Daily Traffic	Northbound:	5500	Southbound:	5500	Total:	11000
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.9	Southbound:	58.1		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Five stream crossings (tributaries of Georges Creek). Outpatient medical facility northwest quadrant of Route 40/29 interchange.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	US 29 Bus	Node #:	76
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 665	Node #:	78
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.34		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	608	Southbound:	638	Total:	1246
Daily Traffic	Northbound:	7350	Southbound:	7350	Total:	14700
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.3	Southbound:	56.7		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Cemetery and homes west side of Route 29.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 665	Node #:	78
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 665	Node #:	80
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.12		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	511	Southbound:	566	Total:	1077
Daily Traffic	Northbound:	6350	Southbound:	6350	Total:	12700
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.3	Southbound:	56.7		
Calc Travel Speed (mph)	Northbound:	51.12	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	0	Total:	1
Side Access per Mile	Northbound:	8.3	Southbound:	0.0	Total:	8.3
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 665	Node #:	80
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 770	Node #:	82
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.57		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	517	Southbound:	565	Total:	1082
Daily Traffic	Northbound:	6350	Southbound:	6350	Total:	12700
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.3	Southbound:	56.7		
Calc Travel Speed (mph)	Northbound:	52.32	Southbound:	51.88		

GEOMETRY

# of Side Access Points	Northbound:	2	Southbound:	3	Total:	5
Side Access per Mile	Northbound:	3.5	Southbound:	5.3	Total:	8.8
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Sycamore Creek crosses Route 29 and parallels east side of Route 29 (between Route 29 and Norfolk Southern Railroad).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 770	Node #:	82
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 931	Node #:	84
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.41		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	517	Southbound:	556	Total:	1073
Daily Traffic	Northbound:	6300	Southbound:	6300	Total:	12600
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.3	Southbound:	56.7		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	49.54		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	6	Total:	6
Side Access per Mile	Northbound:	0.0	Southbound:	14.6	Total:	14.6
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes west side of Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 931	Node #:	84
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 643	Node #:	86
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.64		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	504	Southbound:	555	Total:	1059
Daily Traffic	Northbound:	6250	Southbound:	6250	Total:	12500
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.3	Southbound:	56.7		
Calc Travel Speed (mph)	Northbound:	52.44	Southbound:	50.91		

GEOMETRY

# of Side Access Points	Northbound:	5	Southbound:	15	Total:	20
Side Access per Mile	Northbound:	3.0	Southbound:	9.1	Total:	12.2
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous material/underground tank sites (gas station west side of Route 29 and gas station southwest corner of Routes 643 and 29).

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 643	Node #:	86
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 756	Node #:	88
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.08		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	508	Southbound:	586	Total:	1094
Daily Traffic	Northbound:	6450	Southbound:	6450	Total:	12900
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.3	Southbound:	56.7		
Calc Travel Speed (mph)	Northbound:	51.35	Southbound:	51.58		

GEOMETRY

# of Side Access Points	Northbound:	8	Southbound:	7	Total:	15
Side Access per Mile	Northbound:	7.4	Southbound:	6.5	Total:	13.9
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
X	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Sycamore Baptist Church northwest corner of Routes 643 and 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 756	Node #:	88
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 642	Node #:	90
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.98		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	507	Southbound:	602	Total:	1109
Daily Traffic	Northbound:	6500	Southbound:	6500	Total:	13000
Daily Percent Trucks	Northbound:	20	Southbound:	18	Total:	19
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.3	Southbound:	56.7		
Calc Travel Speed (mph)	Northbound:	52.82	Southbound:	50.93		

GEOMETRY

# of Side Access Points	Northbound:	3	Southbound:	18	Total:	21
Side Access per Mile	Northbound:	1.5	Southbound:	9.1	Total:	10.6
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	VA 642	Node #:	90
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	US 29 Bus	Node #:	92
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	1.15		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	485	Southbound:	612	Total:	1097
Daily Traffic	Northbound:	6450	Southbound:	6450	Total:	12900
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.3	Southbound:	56.7		
Calc Travel Speed (mph)	Northbound:	52.98	Southbound:	52.98		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	0.9	Southbound:	0.9	Total:	1.7
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
X	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Community of Motley west side of Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania		
From:	US 29 Bus	Node #:	92
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 924	Node #:	94
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	2.27		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	423	Southbound:	409	Total:	832
Daily Traffic	Northbound:	4900	Southbound:	3700	Total:	9800
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	57.9	Southbound:	56.9		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Pittsylvania/Campbell		
From:	VA 924	Node #:	94
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 43	Node #:	96
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	1.66		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	465	Southbound:	427	Total:	892
Daily Traffic	Northbound:	5250	Southbound:	5250	Total:	10500
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	57.9	Southbound:	56.9		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
X	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Roanoke River crossing. Subdivision east of Route 29. Potential hazardous materials site (Virtex, Inc. welding/warehouse) northeast quadrant Route 924 interchange.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 43	Node #:	96
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 714	Node #:	98
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	1.02		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	461	Southbound:	484	Total:	945
Daily Traffic	Northbound:	5550	Southbound:	5550	Total:	11100
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.7	Southbound:	57.4		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
X	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

Route 29 overpasses Norfolk Southern Railroad.

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Christian Memorial Church north of Route 29 Altavista Bypass and east of Route 43. Residential along Oak Ridge Dr. (Route 1318) north of Route 29 and Avondale Road south of Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 714	Node #:	98
Endpoint Control:	Interchange	Level of Service	ACC
To:	US 29 Bus	Node #:	100
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	2.43		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	484	Southbound:	433	Total:	917
Daily Traffic	Northbound:	5400	Southbound:	5400	Total:	10800
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.7	Southbound:	57.4		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
X	Shoulder Widening/Paving		Signalization/Grade Separation

Rough pavement (VDOT pothole test area) in northbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

New Life Church of Faith south of Route 29 Altavista Bypass and east of Route 714. 6 stream crossings (tributaries of Roanoke River. Forest land. Potential hazardous materials site (Exxon gas station) south of Route 29 Bypass and west of Route 29 Business.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	US 29 Bus	Node #:	100
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 699	Node #:	102
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.15		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	752	Southbound:	741	Total:	1493
Daily Traffic	Northbound:	8800	Southbound:	8800	Total:	17600
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	52.33	Southbound:	52.33		

GEOMETRY

# of Side Access Points	Northbound:	4	Southbound:	4	Total:	8
Side Access per Mile	Northbound:	3.5	Southbound:	3.5	Total:	7.0
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Narrow bridge structure and steep upgrade in northbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Big Otter River crossing. Altavista Memorial Park Cemetery north side of Route 29. Calvary Baptist Church south side of Route 29 between Route 29 and Route 712.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 699	Node #:	102
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 734	Node #:	104
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.41		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	649	Southbound:	729	Total:	1378
Daily Traffic	Northbound:	8100	Southbound:	8100	Total:	16200
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	50.01	Southbound:	45.22		

GEOMETRY

# of Side Access Points	Northbound:	18	Southbound:	45	Total:	63
Side Access per Mile	Northbound:	12.8	Southbound:	31.9	Total:	44.7
# of Median Breaks					Total:	4

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Cemetery east side of Route 29. Potential hazardous materials sites (Altavista motors - auto service and CITGO gas station) east side of Route 29. Home Mission Outreach west side of Route 29. Homes both sides of Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 734	Node #:	104
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 814	Node #:	106
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.5		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	635	Southbound:	733	Total:	1368
Daily Traffic	Northbound:	8050	Southbound:	8050	Total:	16100
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	47.70	Southbound:	45.70		

GEOMETRY

# of Side Access Points	Northbound:	11	Southbound:	15	Total:	26
Side Access per Mile	Northbound:	22.0	Southbound:	30.0	Total:	52.0
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

- ☐ Lane Widening
- ☐ Shoulder Widening/Paving
- ☐ Sight Distance (Vertical/Horizontal Improvements)
- ☐ Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes both sides of Route 29.

INTERMODAL ISSUES

- ☐ Sidewalk/Bikeway Potential
- ☐ Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 814	Node #:	106
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 906	Node #:	108
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.98		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	650	Southbound:	732	Total:	1382
Daily Traffic	Northbound:	8150	Southbound:	8150	Total:	16300
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	47.84	Southbound:	47.59		

GEOMETRY

# of Side Access Points	Northbound:	21	Southbound:	22	Total:	43
Side Access per Mile	Northbound:	21.4	Southbound:	22.4	Total:	43.9
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

☐ Lane Widening	☐ Sight Distance (Vertical/Horizontal Improvements)
☐ Shoulder Widening/Paving	☐ Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Cemetery west side and east side Route 29. Homes both sides Route 29. Potential hazardous materials site (LC Trucking east side Route 29. Penuel Baptist Church west side Route 29.

INTERMODAL ISSUES

☐ Sidewalk/Bikeway Potential	☐ Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 906	Node #:	108
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 696	Node #:	110
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.2		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	647	Southbound:	733	Total:	1380
Daily Traffic	Northbound:	8100	Southbound:	8100	Total:	16200
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	46.95	Southbound:	44.45		

GEOMETRY

# of Side Access Points	Northbound:	5	Southbound:	7	Total:	12
Side Access per Mile	Northbound:	25.0	Southbound:	35.0	Total:	60.0
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes mostly east side Route 29. Castle Craig community along Route 696 east of Route 29. Castle Craig Church of God east side Route 29.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 696	Node #:	110
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 750	Node #:	112
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.25		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	662	Southbound:	759	Total:	1421
Daily Traffic	Northbound:	8350	Southbound:	8350	Total:	16700
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	51.20	Southbound:	48.20		

GEOMETRY

# of Side Access Points	Northbound:	2	Southbound:	5	Total:	7
Side Access per Mile	Northbound:	8.0	Southbound:	20.0	Total:	28.0
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Farmland

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 750	Node #:	112
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 696	Node #:	114
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.08		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	652	Southbound:	759	Total:	1411
Daily Traffic	Northbound:	8300	Southbound:	8300	Total:	16600
Daily Percent Trucks	Northbound:	14	Southbound:	11	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	50.08	Southbound:	46.95		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	2	Total:	3
Side Access per Mile	Northbound:	12.5	Southbound:	25.0	Total:	37.5
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials site (Ray=s welding shop - welding supplies/compressed gases) west side Route 29. Liberty Baptist Church and cemetery east side Route 29 off of Route 750.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 696	Node #:	114
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 912	Node #:	116
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.68		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	640	Southbound:	773	Total:	1413
Daily Traffic	Northbound:	8300	Southbound:	8300	Total:	16600
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	46.58	Southbound:	50.63		

GEOMETRY

# of Side Access Points	Northbound:	18	Southbound:	7	Total:	25
Side Access per Mile	Northbound:	26.5	Southbound:	10.3	Total:	36.8
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes mostly east side Route 29, particularly just south of Route 912.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 912	Node #:	116
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 692	Node #:	118
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.63		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	650	Southbound:	795	Total:	1445
Daily Traffic	Northbound:	8500	Southbound:	8500	Total:	17000
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	48.44	Southbound:	49.23		

GEOMETRY

# of Side Access Points	Northbound:	12	Southbound:	10	Total:	22
Side Access per Mile	Northbound:	19.0	Southbound:	15.9	Total:	34.9
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 692	Node #:	118
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 686	Node #:	120
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.59		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	642	Southbound:	813	Total:	1455
Daily Traffic	Northbound:	8550	Southbound:	8550	Total:	17100
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	45.57	Southbound:	48.54		

GEOMETRY

# of Side Access Points	Northbound:	18	Southbound:	11	Total:	29
Side Access per Mile	Northbound:	30.5	Southbound:	18.6	Total:	49.2
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Gospel Light Baptist Church east side Route 29. Potential hazardous materials site (Exxon gas station) west side Route 29. Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 686	Node #:	120
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 939	Node #:	122
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.36		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	639	Southbound:	844	Total:	1483
Daily Traffic	Northbound:	8700	Southbound:	8700	Total:	17400
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	49.03	Southbound:	49.03		

GEOMETRY

# of Side Access Points	Northbound:	6	Southbound:	6	Total:	12
Side Access per Mile	Northbound:	16.7	Southbound:	16.7	Total:	33.3
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials site (service station) west side Route 29. Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 939	Node #:	122
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 888	Node #:	124
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.02		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	647	Southbound:	844	Total:	1491
Daily Traffic	Northbound:	8750	Southbound:	8750	Total:	17500
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	40.70	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	0	Total:	1
Side Access per Mile	Northbound:	50.0	Southbound:	0.0	Total:	50.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

House east side Route 29. Potential hazardous materials site (Marks Paint and Body Shop east side of Route 29).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 888	Node #:	124
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 923	Node #:	126
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.7		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	640	Southbound:	847	Total:	1487
Daily Traffic	Northbound:	8750	Southbound:	8750	Total:	17500
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	46.77	Southbound:	49.27		

GEOMETRY

# of Side Access Points	Northbound:	18	Southbound:	11	Total:	29
Side Access per Mile	Northbound:	25.7	Southbound:	15.7	Total:	41.4
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes both sides Route 29. Potential hazardous materials sites (FWC, Inc. - truck service; Bryant=s Garage & Truck Sales) west side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 923	Node #:	126
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 24	Node #:	128
Endpoint Control:	Signalized	Level of Service:	ACC
Length of Segment (miles):	1.68		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	631	Southbound:	850	Total:	1481
Daily Traffic	Northbound:	8700	Southbound:	8700	Total:	17400
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.6	Southbound:	57.2		
Calc Travel Speed (mph)	Northbound:	47.69	Southbound:	48.44		

GEOMETRY

# of Side Access Points	Northbound:	37	Southbound:	32	Total:	69
Side Access per Mile	Northbound:	22.0	Southbound:	19.0	Total:	41.1
# of Median Breaks					Total:	7

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Three potential hazardous materials sites east side Route 29 (South Lynchburg Auto Truck Plaza, Jeff Bryant Auto, above-ground storage tanks). Cemetery east side Route 29. Yellow Branch Baptist Church east side Route 29. Yellow Branch Elementary School and Campbell County Vo-Tech Center east side of Route 29 just south of Route 24. Homes both sides of Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 24	Node #:	128
Endpoint Control:	Signalized	Level of Service	ACC
To:	VA 754	Node #:	130
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.25		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	636	Southbound:	905	Total:	1541
Daily Traffic	Northbound:	9050	Southbound:	9050	Total:	18100
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	49.20	Southbound:	43.20		

GEOMETRY

# of Side Access Points	Northbound:	4	Southbound:	10	Total:	14
Side Access per Mile	Northbound:	16.0	Southbound:	40.0	Total:	56.0
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials sites east side Route 29 (Amoco gas station at Route 24 intersection) and west side Route 29 (abandoned service station and River Ridge Supply Co.).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 754	Node #:	130
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 689	Node #:	132
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.3		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	636	Southbound:	903	Total:	1539
Daily Traffic	Northbound:	9050	Southbound:	9050	Total:	18100
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	46.53	Southbound:	45.70		

GEOMETRY

# of Side Access Points	Northbound:	8	Southbound:	9	Total:	17
Side Access per Mile	Northbound:	26.7	Southbound:	30.0	Total:	56.7
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 689	Node #:	132
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 688	Node #:	134
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.98		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	641	Southbound:	915	Total:	1556
Daily Traffic	Northbound:	9150	Southbound:	9150	Total:	18300
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	49.12	Southbound:	48.61		

GEOMETRY

# of Side Access Points	Northbound:	16	Southbound:	18	Total:	34
Side Access per Mile	Northbound:	16.3	Southbound:	18.4	Total:	34.7
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Friendship Baptist Church east side Route 29. Stream crossing (Yellow Branch). Homes both sides Route 29. Potential hazardous materials site (Philips Equip. Corp. - UST) west side Route 29.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 688	Node #:	134
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 685	Node #:	136
Endpoint Control:	Signalized	Level of Service:	ACC
Length of Segment (miles):	.59		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	665	Southbound:	946	Total:	1611
Daily Traffic	Northbound:	9500	Southbound:	9500	Total:	19000
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	49.39	Southbound:	47.27		

GEOMETRY

# of Side Access Points	Northbound:	9	Southbound:	14	Total:	23
Side Access per Mile	Northbound:	15.3	Southbound:	23.7	Total:	39.0
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials sites west side Route 29(Turpin Fuel Co. and Cunningham Bros. Auto parts) and east side Route 29 (Steve Lloyd & Co., Bobby Layne=s Tire & Recapping, and Foster Fuels). Foundation Baptist Church east side Route 29.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 685	Node #:	136
Endpoint Control:	Signalized	Level of Service	ACC
To:	VA 738	Node #:	138
Endpoint Control:	Unsignalized	Level of Service:	BOR
Length of Segment (miles):	.29		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	899	Southbound:	1299	Total:	2198
Daily Traffic	Northbound:	12950	Southbound:	12950	Total:	25900
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	50.61	Southbound:	48.03		

GEOMETRY

# of Side Access Points	Northbound:	3	Southbound:	6	Total:	9
Side Access per Mile	Northbound:	10.3	Southbound:	20.7	Total:	31.0
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

- ☐ Lane Widening
- ☐ Shoulder Widening/Paving
- ☐ Sight Distance (Vertical/Horizontal Improvements)
- ☐ Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials site (Lynchburg Auto Auction) west side Route 29. Homes both sides Route 29.

INTERMODAL ISSUES

- ☐ Sidewalk/Bikeway Potential
- ☐ Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 738	Node #:	138
Endpoint Control:	Unsignalized	Level of Service	BOR
To:	VA 622	Node #:	140
Endpoint Control:	Unsignalized	Level of Service:	BOR
Length of Segment (miles):	.29		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	868	Southbound:	1296	Total:	2164
Daily Traffic	Northbound:	12750	Southbound:	12750	Total:	25500
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	47.17	Southbound:	48.89		

GEOMETRY

# of Side Access Points	Northbound:	7	Southbound:	5	Total:	12
Side Access per Mile	Northbound:	24.1	Southbound:	17.2	Total:	41.4
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving	X	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials site east side Route 29 (Wade & Son Garage). Hyland Heights Baptist Church east side Route 29. Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 622	Node #:	140
Endpoint Control:	Unsignalized	Level of Service	BOR
To:	VA 622	Node #:	142
Endpoint Control:	Unsignalized	Level of Service:	UNA
Length of Segment (miles):	.07		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	878	Southbound:	1332	Total:	2210
Daily Traffic	Northbound:	13000	Southbound:	13000	Total:	26000
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	46.06	Southbound:	42.49		

GEOMETRY

# of Side Access Points	Northbound:	2	Southbound:	3	Total:	5
Side Access per Mile	Northbound:	28.6	Southbound:	42.9	Total:	71.4
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving	X	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials site west side Route 29 (Lynchburg Seamless Guttering).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 622	Node #:	142
Endpoint Control:	Unsignalized	Level of Service	UNA
To:	VA 1602	Node #:	144
Endpoint Control:	Unsignalized	Level of Service:	BOR
Length of Segment (miles):	.57		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	796	Southbound:	1282	Total:	2078
Daily Traffic	Northbound:	12200	Southbound:	12200	Total:	24400
Daily Percent Trucks	Northbound:	11	Southbound:	11	Total:	11
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	48.38	Southbound:	51.01		

GEOMETRY

# of Side Access Points	Northbound:	11	Southbound:	5	Total:	16
Side Access per Mile	Northbound:	19.3	Southbound:	8.8	Total:	28.1
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving	X	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream crossing (Smith Branch). Trailer park east side Route 29 and subdivision west side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 1602	Node #:	144
Endpoint Control:	Unsignalized	Level of Service	BOR
To:	VA 738	Node #:	146
Endpoint Control:	Unsignalized	Level of Service:	UNA
Length of Segment (miles):	1.24		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	772	Southbound:	1297	Total:	2069
Daily Traffic	Northbound:	12150	Southbound:	12150	Total:	24300
Daily Percent Trucks	Northbound:	9	Southbound:	8	Total:	9
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	51.59	Southbound:	50.78		

GEOMETRY

# of Side Access Points	Northbound:	8	Southbound:	12	Total:	20
Side Access per Mile	Northbound:	6.5	Southbound:	9.7	Total:	16.1
# of Median Breaks					Total:	5

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving	X	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

4 potential hazardous materials sites west side Route 29 (Carter-Cat Dealer, Car Repair Services, Powell=s Truck & Equipment, and Virginia Truck & Equipment). Philips wayside, Randolph Macon Women=s College Nature Preserve, Mead Memorial United Methodist Church east side Route 29. Spring Hill Industrial Park site east side Route 29. Large hills both sides Route 29. Stream crossing (Flat Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 738	Node #:	146
Endpoint Control:	Unsignalized	Level of Service	UNA
To:	VA 683	Node #:	148
Endpoint Control:	Signalized	Level of Service:	ACC
Length of Segment (miles):	.51		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	864	Southbound:	1455	Total:	2319
Daily Traffic	Northbound:	13650	Southbound:	13650	Total:	27300
Daily Percent Trucks	Northbound:	9	Southbound:	8	Total:	9
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	46.34	Southbound:	46.34		

GEOMETRY

# of Side Access Points	Northbound:	14	Southbound:	14	Total:	28
Side Access per Mile	Northbound:	27.5	Southbound:	27.5	Total:	54.9
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving	X	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials site (Farm Service Co., Inc.) east side Route 29. Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 683	Node #:	148
Endpoint Control:	Signalized	Level of Service	ACC
To:	VA 679	Node #:	150
Endpoint Control:	Signalized	Level of Service:	ACC
Length of Segment (miles):	.5		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	878	Southbound:	1470	Total:	2348
Daily Traffic	Northbound:	13800	Southbound:	13800	Total:	27600
Daily Percent Trucks	Northbound:	9	Southbound:	8	Total:	9
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	40.20	Southbound:	44.70		

GEOMETRY

# of Side Access Points	Northbound:	26	Southbound:	17	Total:	43
Side Access per Mile	Northbound:	52.0	Southbound:	34.0	Total:	86.0
# of Median Breaks					Total:	5

POTENTIAL IMPROVEMENT ISSUES

- ☐ Lane Widening
- ☐ Shoulder Widening/Paving
- ☐ Sight Distance (Vertical/Horizontal Improvements)
- ☐ Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials sites west side Route 29 (Burley=s Market - gas station, Avis Used Cars) and east side Route 29 (Flip=s Auto Body, Jesse=s Towing). Flat Creek Baptist Church west side Route 29. Homes both sides Route 29.

INTERMODAL ISSUES

- ☐ Sidewalk/Bikeway Potential
- ☐ Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 679	Node #:	150
Endpoint Control:	Signalized	Level of Service	ACC
To:	VA 1433	Node #:	152
Endpoint Control:	Unsignalized	Level of Service:	UNA
Length of Segment (miles):	.33		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	884	Southbound:	1472	Total:	2356
Daily Traffic	Northbound:	13850	Southbound:	13850	Total:	27700
Daily Percent Trucks	Northbound:	9	Southbound:	8	Total:	9
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	47.90	Southbound:	51.68		

GEOMETRY

# of Side Access Points	Northbound:	7	Southbound:	2	Total:	9
Side Access per Mile	Northbound:	21.2	Southbound:	6.1	Total:	27.3
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving	X	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes and businesses both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 1433	Node #:	152
Endpoint Control:	Unsignalized	Level of Service	UNA
To:	Airport Entrance	Node #:	154
Endpoint Control:	Signalized	Level of Service:	ACC
Length of Segment (miles):	.18		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	881	Southbound:	1488	Total:	2369
Daily Traffic	Northbound:	13950	Southbound:	13950	Total:	27900
Daily Percent Trucks	Northbound:	9	Southbound:	8	Total:	9
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	39.31	Southbound:	51.81		

GEOMETRY

# of Side Access Points	Northbound:	10	Southbound:	1	Total:	11
Side Access per Mile	Northbound:	55.6	Southbound:	5.6	Total:	61.1
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving	X	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes and businesses both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	Airport Entrance	Node #:	154
Endpoint Control:	Signalized	Level of Service	ACC
To:	VA 678	Node #:	156
Endpoint Control:	Signalized	Level of Service:	ACC
Length of Segment (miles):	.21		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	881	Southbound:	1507	Total:	2388
Daily Traffic	Northbound:	14050	Southbound:	14050	Total:	28100
Daily Percent Trucks	Northbound:	9	Southbound:	8	Total:	9
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	47.25	Southbound:	50.82		

GEOMETRY

# of Side Access Points	Northbound:	5	Southbound:	2	Total:	7
Side Access per Mile	Northbound:	23.8	Southbound:	9.5	Total:	33.3
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes and businesses both sides Route 29.

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 678	Node #:	156
Endpoint Control:	Signalized	Level of Service	ACC
To:	VA 758/F905	Node #:	158
Endpoint Control:	Unsignalized	Level of Service:	UNA
Length of Segment (miles):	.09		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	829	Southbound:	1378	Total:	2207
Daily Traffic	Northbound:	13000	Southbound:	13000	Total:	26000
Daily Percent Trucks	Northbound:	9	Southbound:	8	Total:	9
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	42.09	Southbound:	39.31		

GEOMETRY

# of Side Access Points	Northbound:	4	Southbound:	5	Total:	9
Side Access per Mile	Northbound:	44.4	Southbound:	55.6	Total:	100.0
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving	X	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes and businesses both sides Route 29. Potential hazardous materials sites (Chevron gas station) east side of Route 29 and (Raceway gas station) west side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Campbell		
From:	VA 758/F905	Node #:	158
Endpoint Control:	Unsignalized	Level of Service	UNA
To:	US 460	Node #:	160
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	.2		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	840	Southbound:	1375	Total:	2215
Daily Traffic	Northbound:	13050	Southbound:	13050	Total:	26100
Daily Percent Trucks	Northbound:	9	Southbound:	8	Total:	9
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	45.6	Southbound:	43.5		
Calc Travel Speed (mph)	Northbound:	51.95	Southbound:	45.70		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	6	Total:	7
Side Access per Mile	Northbound:	5.0	Southbound:	30.0	Total:	35.0
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving	X	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes and businesses both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Amherst		
From:	Sweetbriar/VA 624	Node #:	170
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	US 29 Bus	Node #:	172
Endpoint Control:	Unsignalized	Level of Service:	UNA
Length of Segment (miles):	.55		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	938	Southbound:	819	Total:	1757
Daily Traffic	Northbound:	10350	Southbound:	10350	Total:	20700
Daily Percent Trucks	Northbound:	13	Southbound:	13	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	52.4	Southbound:	56.3		
Calc Travel Speed (mph)	Northbound:	52.29	Southbound:	52.75		

GEOMETRY

# of Side Access Points	Northbound:	2	Southbound:	1	Total:	3
Side Access per Mile	Northbound:	3.6	Southbound:	1.8	Total:	5.5
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Sweet Briar College west side Route 29. Two crossings of stream (Rutledge Creek). Farmland.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Amherst		
From:	US 29 Bus	Node #:	172
Endpoint Control:	Unsignalized	Level of Service	UNA
To:	US 60	Node #:	174
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	1.91		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	764	Southbound:	673	Total:	1437
Daily Traffic	Northbound:	8450	Southbound:	8450	Total:	16900
Daily Percent Trucks	Northbound:	13	Southbound:	13	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	52.4	Southbound:	56.3		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.07		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	1	Total:	1
Side Access per Mile	Northbound:	0.0	Southbound:	0.5	Total:	0.5
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

Railroad parallels east side of Route 29 Bypass.

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Amherst County High School west side Route 29 Bypass. Three crossings of stream (Rutledge Creek). Residential area in Town of Amherst west of Route 29 Bypass and south of Route 60. Potential hazardous materials sites east side Route 29 Bypass (Mays Farmer=s Service) and west of Route 60 interchange with Route 29 Bypass (Engine Service Machine Shop).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Amherst		
From:	US 60	Node #:	174
Endpoint Control:	Interchange	Level of Service	ACC
To:	US 29 Bus/VA 739	Node #:	176
Endpoint Control:	Interchange	Level of Service:	ACC
Length of Segment (miles):	1.16		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	599	Southbound:	553	Total:	1152
Daily Traffic	Northbound:	6800	Southbound:	6800	Total:	13600
Daily Percent Trucks	Northbound:	13	Southbound:	13	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	50.2	Southbound:	54.0		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	0	Total:	0
Side Access per Mile	Northbound:	0.0	Southbound:	0.0	Total:	0.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials sites east side Route 29 Bypass (Buffalo Air Handling, Appalachian Power substation, Town of Amherst maintenance shop, First Brands factory) and west of Business 29/Route 739 interchange (Hilltop service station). Two stream crossings (tributaries of Rutledge Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Amherst		
From:	US 29 Bus/VA 739	Node #:	176
Endpoint Control:	Interchange	Level of Service	ACC
To:	VA 608 W	Node #:	178
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.83		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	662	Southbound:	505	Total:	1167
Daily Traffic	Northbound:	6850	Southbound:	6850	Total:	13700
Daily Percent Trucks	Northbound:	13	Southbound:	13	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	60.0	Southbound:	60.0		
Calc Travel Speed (mph)	Northbound:	52.90	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	0	Total:	1
Side Access per Mile	Northbound:	1.2	Southbound:	0.0	Total:	1.2
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Narrow bridge structure and steep upgrade in northbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Three stream crossings (Buffalo River and two tributaries).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Amherst		
From:	VA 608 W	Node #:	178
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 608 E	Node #:	180
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.76		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	662	Southbound:	506	Total:	1168
Daily Traffic	Northbound:	6850	Southbound:	6850	Total:	13700
Daily Percent Trucks	Northbound:	13	Southbound:	13	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	60.0	Southbound:	60.0		
Calc Travel Speed (mph)	Northbound:	49.91	Southbound:	51.23		

GEOMETRY

# of Side Access Points	Northbound:	10	Southbound:	6	Total:	16
Side Access per Mile	Northbound:	13.2	Southbound:	7.9	Total:	21.1
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Steep upgrade in northbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Amherst		
From:	VA 608 E	Node #:	180
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 151	Node #:	182
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.51		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	665	Southbound:	502	Total:	1167
Daily Traffic	Northbound:	6850	Southbound:	6850	Total:	13700
Daily Percent Trucks	Northbound:	18	Southbound:	18	Total:	18
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	60.0	Southbound:	60.0		
Calc Travel Speed (mph)	Northbound:	49.77	Southbound:	50.75		

GEOMETRY

# of Side Access Points	Northbound:	7	Southbound:	5	Total:	12
Side Access per Mile	Northbound:	13.7	Southbound:	9.8	Total:	23.5
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

One stream crossing (tributary of Buffalo River). Farmland. Two potential hazardous materials sites (Amoco gas station west side of Route 29 and Exxon gas station east side of Route 29) at intersection with Route 151.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Amherst		
From:	VA 151	Node #:	182
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 610	Node #:	184
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.86		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	505	Southbound:	437	Total:	942
Daily Traffic	Northbound:	5550	Southbound:	5550	Total:	11100
Daily Percent Trucks	Northbound:	18	Southbound:	18	Total:	18
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	49.97	Southbound:	52.12		

GEOMETRY

# of Side Access Points	Northbound:	24	Southbound:	8	Total:	32
Side Access per Mile	Northbound:	12.9	Southbound:	4.3	Total:	17.2
# of Median Breaks					Total:	6

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Three stream crossings (tributary of Turner Creek, Turner Creek, and Crawford Creek). Bethel Baptist Church east side Route 29. Potential hazardous materials site east side Route 29 (Melvin=s Auto Sales/Service). Homes east side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Amherst		
From:	VA 610	Node #:	184
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 662	Node #:	186
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	2.08		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	486	Southbound:	491	Total:	977
Daily Traffic	Northbound:	5750	Southbound:	5750	Total:	11500
Daily Percent Trucks	Northbound:	18	Southbound:	18	Total:	18
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	52.48	Southbound:	51.88		

GEOMETRY

# of Side Access Points	Northbound:	6	Southbound:	11	Total:	17
Side Access per Mile	Northbound:	2.9	Southbound:	5.3	Total:	8.2
# of Median Breaks					Total:	5

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

Rebec Vineyards west side of Route 29. Farmland and forestland.

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Three stream crossings (tributary of Turner Creek and two tributaries of Camp Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Amherst/Nelson		
From:	VA 662	Node #:	186
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 739 S	Node #:	188
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.64		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	482	Southbound:	490	Total:	972
Daily Traffic	Northbound:	5700	Southbound:	5700	Total:	11400
Daily Percent Trucks	Northbound:	18	Southbound:	18	Total:	18
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	52.42	Southbound:	52.81		

GEOMETRY

# of Side Access Points	Northbound:	2	Southbound:	1	Total:	3
Side Access per Mile	Northbound:	3.1	Southbound:	1.6	Total:	4.7
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Narrow bridge structure in northbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Tye River crossing. Farmland and forestland.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 739 S	Node #:	188
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 739 N	Node #:	190
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.33		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	482	Southbound:	496	Total:	978
Daily Traffic	Northbound:	5750	Southbound:	5750	Total:	11500
Daily Percent Trucks	Northbound:	18	Southbound:	18	Total:	18
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	50.93	Southbound:	52.44		

GEOMETRY

# of Side Access Points	Northbound:	3	Southbound:	1	Total:	4
Side Access per Mile	Northbound:	9.1	Southbound:	3.0	Total:	12.1
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes west side Route 29. Farmland east side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 739 N	Node #:	190
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 748	Node #:	192
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.9		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	487	Southbound:	508	Total:	995
Daily Traffic	Northbound:	5850	Southbound:	5850	Total:	11700
Daily Percent Trucks	Northbound:	18	Southbound:	18	Total:	18
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	50.14	Southbound:	50.42		

GEOMETRY

# of Side Access Points	Northbound:	11	Southbound:	10	Total:	21
Side Access per Mile	Northbound:	12.2	Southbound:	11.1	Total:	23.3
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes both sides Route 29. Potential hazardous materials sites east side Route 29 (Layne Truck Repair, Tye River Truck Stop and Restaurant, old gas station). Nelson County Middle School west side Route 29. Pine Hill Baptist Church east side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 748	Node #:	192
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 665 W	Node #:	194
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.09		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	484	Southbound:	508	Total:	992
Daily Traffic	Northbound:	5850	Southbound:	5850	Total:	11700
Daily Percent Trucks	Northbound:	18	Southbound:	18	Total:	18
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	50.42	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	0	Total:	1
Side Access per Mile	Northbound:	11.1	Southbound:	0.0	Total:	11.1
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Farmland and forestland.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 665 W	Node #:	194
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 665 E	Node #:	196
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.48		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	486	Southbound:	509	Total:	995
Daily Traffic	Northbound:	5850	Southbound:	5850	Total:	11700
Daily Percent Trucks	Northbound:	18	Southbound:	18	Total:	18
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	50.60	Southbound:	49.55		

GEOMETRY

# of Side Access Points	Northbound:	5	Southbound:	7	Total:	12
Side Access per Mile	Northbound:	10.4	Southbound:	14.6	Total:	25.0
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

White Oak Baptist Church and cemetery east side Route 29. Farmland and forestland.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 665 E	Node #:	196
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 669	Node #:	198
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.77		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	477	Southbound:	499	Total:	976
Daily Traffic	Northbound:	5750	Southbound:	5750	Total:	11500
Daily Percent Trucks	Northbound:	18	Southbound:	18	Total:	18
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	50.93	Southbound:	52.23		

GEOMETRY

# of Side Access Points	Northbound:	7	Southbound:	3	Total:	10
Side Access per Mile	Northbound:	9.1	Southbound:	3.9	Total:	13.0
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

One stream crossing (tributary of Tye River).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 669	Node #:	198
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 655	Node #:	200
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.09		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	477	Southbound:	504	Total:	981
Daily Traffic	Northbound:	5750	Southbound:	5750	Total:	11500
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	51.59	Southbound:	50.22		

GEOMETRY

# of Side Access Points	Northbound:	7	Southbound:	13	Total:	20
Side Access per Mile	Northbound:	6.4	Southbound:	11.9	Total:	18.3
# of Median Breaks					Total:	4

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials sites west side of Route 29 (Saunders Construction, Southern States/Mays Farmers Service, Exxon gas station). Two stream crossings (tributaries of Black Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 655	Node #:	200
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 671	Node #:	202
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	0.1		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	495	Southbound:	547	Total:	1042
Daily Traffic	Northbound:	6150	Southbound:	6150	Total:	12300
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	48.20	Southbound:7	45.70		

GEOMETRY

# of Side Access Points	Northbound:	2	Southbound:	3	Total:	5
Side Access per Mile	Northbound:	20.0	Southbound:	30.0	Total:	50.0
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes both sides of Route 29 in Colleen community.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 671	Node #:	202
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 56	Node #:	204
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.23		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	495	Southbound:	549	Total:	1044
Daily Traffic	Northbound:	6150	Southbound:	6150	Total:	12300
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.4	Southbound:	57.1		
Calc Travel Speed (mph)	Northbound:	52.11	Southbound:	51.03		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	2	Total:	3
Side Access per Mile	Northbound:	4.3	Southbound:	8.7	Total:	13.0
# of Median Breaks					Total:	0

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Woodland Baptist Church east side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 56	Node #:	204
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 653	Node #:	206
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.13		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	511	Southbound:	562	Total:	1073
Daily Traffic	Northbound:	6300	Southbound:	6300	Total:	12600
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	60.0	Southbound:	57.4		
Calc Travel Speed (mph)	Northbound:	50.99	Southbound:	50.55		

GEOMETRY

# of Side Access Points	Northbound:	10	Southbound:	12	Total:	22
Side Access per Mile	Northbound:	8.8	Southbound:	10.6	Total:	19.5
# of Median Breaks					Total:	4

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials site west side Route 29 (underground storage tank). Nelson United Methodist Church west side Route 29, Tye River Elementary School east side Route 29. One stream crossing (tributary of Brown Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 653	Node #:	206
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 651	Node #:	208
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	2.05		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	503	Southbound:	572	Total:	1075
Daily Traffic	Northbound:	6300	Southbound:	6300	Total:	12600
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	60.0	Southbound:	57.4		
Calc Travel Speed (mph)	Northbound:	52.22	Southbound:	52.35		

GEOMETRY

# of Side Access Points	Northbound:	8	Southbound:	7	Total:	15
Side Access per Mile	Northbound:	3.9	Southbound:	3.4	Total:	7.3
# of Median Breaks					Total:	4

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Narrow bridge structure in southbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Nelson County High School at intersection Route 811 west side Route 29. Lions Field east side Route 29. Three stream crossings (Rucker Run, tributary of Rucker Run, and Dillard Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 651	Node #:	208
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	US 29 Bus/VA 56	Node #:	210
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.1		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	501	Southbound:	575	Total:	1076
Daily Traffic	Northbound:	6350	Southbound:	6350	Total:	12700
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	60.0	Southbound:	57.4		
Calc Travel Speed (mph)	Northbound:	49.56	Southbound:	50.93		

GEOMETRY

# of Side Access Points	Northbound:	16	Southbound:	10	Total:	26
Side Access per Mile	Northbound:	14.5	Southbound:	9.1	Total:	23.6
# of Median Breaks					Total:	4

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials sites west side Route 29 (American Electric Power transformers, Nelson County vehicle maintenance garage) and east side Route 29 at Business Route 29 (Exxon gas station). Lovingston Community Center and Nelson Memorial Library west side Route 29. Calvary Baptist Church east side Route 29. One stream crossing (tributary of Dillard Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	US 29 Bus/VA 56	Node #:	210
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 1001	Node #:	212
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.53		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	438	Southbound:	547	Total:	985
Daily Traffic	Northbound:	5800	Southbound:	5800	Total:	11600
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	53.1		
Calc Travel Speed (mph)	Northbound:	52.73	Southbound:	52.73		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	1.9	Southbound:	1.9	Total:	3.8
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Church and cemetery west side Route 29. Lovingston community east side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 1001	Node #:	212
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	US 29 Bus	Node #:	214
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.29		
Access Control (Full, Partial):	Full		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	440	Southbound:	561	Total:	1001
Daily Traffic	Northbound:	5900	Southbound:	5900	Total:	11800
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	55.4	Southbound:	53.1		
Calc Travel Speed (mph)	Northbound:	52.34	Southbound:	52.34		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	3.4	Southbound:	3.4	Total:	6.9
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Lovingston community east side Route 29. Lovingston volunteer fire department west side Route 29. Potential hazardous materials site east side Route 29 (Joe=s Auto Repair). One stream crossing (tributary of Town Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	US 29 Bus	Node #:	214
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 718	Node #:	216
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.63		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	464	Southbound:	572	Total:	1036
Daily Traffic	Northbound:	6100	Southbound:	6100	Total:	12200
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.2	Southbound:	55.0		
Calc Travel Speed (mph)	Northbound:	52.01	Southbound:	52.01		

GEOMETRY

# of Side Access Points	Northbound:	3	Southbound:	3	Total:	6
Side Access per Mile	Northbound:	4.8	Southbound:	4.8	Total:	9.5
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Steep upgrade in northbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials sites east of Route 29 (Texaco gas station and dry cleaners). Lovingston community east of Route 29. Orchard west side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 718	Node #:	216
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 641	Node #:	218
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.57		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	455	Southbound:	568	Total:	1023
Daily Traffic	Northbound:	6000	Southbound:	6000	Total:	12000
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.2	Southbound:	55.0		
Calc Travel Speed (mph)	Northbound:	50.13	Southbound:	46.62		

GEOMETRY

# of Side Access Points	Northbound:	7	Southbound:	15	Total:	22
Side Access per Mile	Northbound:	12.3	Southbound:	26.3	Total:	38.6
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes both sides Route 29. Stream (Muddy Creek) parallels Route 29 behind homes on west side. Steep terrain behind homes on east side.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 641	Node #:	218
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 766/VA 624	Node #:	220
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.16		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	449	Southbound:	569	Total:	1018
Daily Traffic	Northbound:	6000	Southbound:	6000	Total:	12000
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.2	Southbound:	55.0		
Calc Travel Speed (mph)	Northbound:	51.04	Southbound:	50.83		

GEOMETRY

# of Side Access Points	Northbound:	10	Southbound:	11	Total:	21
Side Access per Mile	Northbound:	8.6	Southbound:	9.5	Total:	18.1
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials sites west side Route 29 (Amoco gas station at Route 641 intersection and BP gas station at Route 624 intersection). Stream (Muddy Creek) parallels west side of Route 29. Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 766/VA 624	Node #:	220
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 737	Node #:	222
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.36		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	438	Southbound:	566	Total:	1004
Daily Traffic	Northbound:	5900	Southbound:	5900	Total:	11800
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.2	Southbound:	55.0		
Calc Travel Speed (mph)	Northbound:	50.42	Southbound:	51.12		

GEOMETRY

# of Side Access Points	Northbound:	4	Southbound:	3	Total:	7
Side Access per Mile	Northbound:	11.1	Southbound:	8.3	Total:	19.4
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream (Muddy Creek) parallels west side of Route 29. Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 737	Node #:	222
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 775	Node #:	224
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.21		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	436	Southbound:	567	Total:	1003
Daily Traffic	Northbound:	5900	Southbound:	5900	Total:	11800
Daily Percent Trucks	Northbound:	17	Southbound:	16	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.2	Southbound:	55.0		
Calc Travel Speed (mph)	Northbound:	52.01	Southbound:	52.01		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	4.8	Southbound:	4.8	Total:	9.5
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Narrow bridge structure in southbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream (Muddy Creek) parallels west side of Route 29. Muddy Creek crosses Route 29 at intersection of Route 775. Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 775	Node #:	224
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 623	Node #:	226
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.84		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	430	Southbound:	568	Total:	998
Daily Traffic	Northbound:	5850	Southbound:	5850	Total:	11700
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.2	Southbound:	55.0		
Calc Travel Speed (mph)	Northbound:	52.31	Southbound:	52.60		

GEOMETRY

# of Side Access Points	Northbound:	3	Southbound:	2	Total:	5
Side Access per Mile	Northbound:	3.6	Southbound:	2.4	Total:	6.0
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Steep grade on cross-over.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream (Muddy Creek) parallels east side of Route 29. Three stream crossings (tributaries of Muddy Creek). Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 623	Node #:	226
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 776	Node #:	228
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	2.32		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	434	Southbound:	558	Total:	992
Daily Traffic	Northbound:	5850	Southbound:	5850	Total:	11700
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.2	Southbound:	55.0		
Calc Travel Speed (mph)	Northbound:	51.80	Southbound:	52.23		

GEOMETRY

# of Side Access Points	Northbound:	13	Southbound:	9	Total:	22
Side Access per Mile	Northbound:	5.6	Southbound:	3.9	Total:	9.5
# of Median Breaks					Total:	4

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream (Muddy Creek) parallels east side of Route 29. Four stream crossings (Davis Creek at Route 776 intersection and 3 tributaries of Muddy Creek). Ridgecrest Baptist Church and cemetery east side Route 29. Homes east side Route 29 north of church.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 776	Node #:	228
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 786	Node #:	230
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.27		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	433	Southbound:	559	Total:	992
Daily Traffic	Northbound:	5850	Southbound:	5850	Total:	11700
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.2	Southbound:	55.0		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	47.64		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	6	Total:	6
Side Access per Mile	Northbound:	0.0	Southbound:	22.2	Total:	22.2
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream (Muddy Creek) parallels east side of Route 29. One stream crossing (tributary of Muddy Creek). Potential hazardous materials site west side Route 29 (Amoco gas station).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 786	Node #:	230
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 6 W	Node #:	232
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.15		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	427	Southbound:	560	Total:	987
Daily Traffic	Northbound:	5800	Southbound:	5800	Total:	11600
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	59.2	Southbound:	55.0		
Calc Travel Speed (mph)	Northbound:	51.53	Southbound:	51.53		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	6.7	Southbound:	6.7	Total:	13.3
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream (Muddy Creek) parallels east side of Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 6 W	Node #:	232
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 6 Y	Node #:	234
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.22		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	353	Southbound:	453	Total:	806
Daily Traffic	Northbound:	4750	Southbound:	4750	Total:	9500
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.6	Southbound:	58.7		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	52.06		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	1	Total:	1
Side Access per Mile	Northbound:	0.0	Southbound:	4.5	Total:	4.5
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream (Muddy Creek) parallels east side of Route 29. Rockfish River crossing.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 6 Y	Node #:	234
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 619	Node #:	236
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.05		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	353	Southbound:	495	Total:	848
Daily Traffic	Northbound:	5000	Southbound:	5000	Total:	10000
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.6	Southbound:	58.7		
Calc Travel Speed (mph)	Northbound:	50.34	Southbound:	51.77		

GEOMETRY

# of Side Access Points	Northbound:	12	Southbound:	6	Total:	18
Side Access per Mile	Northbound:	11.4	Southbound:	5.7	Total:	17.1
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

Steep upgrade in northbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Rockfish River parallels south side Route 29. Nelson County Wayside south side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 619	Node #:	236
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 617	Node #:	238
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.3		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	338	Southbound:	486	Total:	824
Daily Traffic	Northbound:	4850	Southbound:	4850	Total:	9700
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.6	Southbound:	58.7		
Calc Travel Speed (mph)	Northbound:	51.53	Southbound:	50.70		

GEOMETRY

# of Side Access Points	Northbound:	2	Southbound:	3	Total:	5
Side Access per Mile	Northbound:	6.7	Southbound:	10.0	Total:	16.7
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Tributary of Buck Creek crosses southbound lanes Route 29, flows along wide median, joins Buck Creek, then Buck Creek crosses northbound lanes.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 617	Node #:	238
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 790/VA 762	Node #:	240
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.24		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	338	Southbound:	507	Total:	845
Daily Traffic	Northbound:	4950	Southbound:	4950	Total:	9900
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.6	Southbound:	58.7		
Calc Travel Speed (mph)	Northbound:	52.19	Southbound:	51.39		

GEOMETRY

# of Side Access Points	Northbound:	5	Southbound:	9	Total:	14
Side Access per Mile	Northbound:	4.0	Southbound:	7.3	Total:	11.3
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes south side Route 29. Two stream crossings (tributaries of Rockfish River). Forestland. Cedar Grove Baptist Church south of Route 29 along Route 762.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 790/VA 762	Node #:	240
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 837	Node #:	242
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.43		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	335	Southbound:	519	Total:	854
Daily Traffic	Northbound:	5000	Southbound:	5000	Total:	10000
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.6	Southbound:	58.7		
Calc Travel Speed (mph)	Northbound:	50.87	Southbound:	52.04		

GEOMETRY

# of Side Access Points	Northbound:	4	Southbound:	2	Total:	6
Side Access per Mile	Northbound:	9.3	Southbound:	4.7	Total:	14.0
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

One stream crossing (tributary of Rockfish River).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 837	Node #:	242
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 616	Node #:	244
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.53		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	336	Southbound:	519	Total:	855
Daily Traffic	Northbound:	5050	Southbound:	5050	Total:	10100
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.6	Southbound:	58.7		
Calc Travel Speed (mph)	Northbound:	51.78	Southbound:	52.26		

GEOMETRY

# of Side Access Points	Northbound:	3	Southbound:	2	Total:	5
Side Access per Mile	Northbound:	5.7	Southbound:	3.8	Total:	9.4
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 616	Node #:	244
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 6 E	Node #:	246
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.17		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	331	Southbound:	518	Total:	849
Daily Traffic	Northbound:	5000	Southbound:	5000	Total:	10000
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.6	Southbound:	58.7		
Calc Travel Speed (mph)	Northbound:	51.73	Southbound:	51.73		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	5.9	Southbound:	5.9	Total:	11.8
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

One stream crossing (Hickory Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson		
From:	VA 6 E	Node #:	246
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 615	Node #:	248
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.96		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	318	Southbound:	592	Total:	910
Daily Traffic	Northbound:	5350	Southbound:	5350	Total:	10700
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	50.86	Southbound:	53.20		

GEOMETRY

# of Side Access Points	Northbound:	9	Southbound:	0	Total:	9
Side Access per Mile	Northbound:	9.4	Southbound:	0.0	Total:	9.4
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials site (Goff=s grocery - old gas station/underground tanks). Stream (Cub Creek) parallels west side Route 29. Steep hill east side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Nelson/Albemarle		
From:	VA 615	Node #:	248
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 632	Node #:	250
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.69		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	321	Southbound:	599	Total:	920
Daily Traffic	Northbound:	5400	Southbound:	5400	Total:	10800
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	52.02	Southbound:	51.87		

GEOMETRY

# of Side Access Points	Northbound:	8	Southbound:	9	Total:	17
Side Access per Mile	Northbound:	4.7	Southbound:	5.3	Total:	10.1
# of Median Breaks					Total:	4

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

One stream crossing (Cove Creek). Steep hill and forestland to west. Cove Creek Park (private) east of Route 29 off of Route 632.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 632	Node #:	250
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 699	Node #:	252
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.66		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	320	Southbound:	601	Total:	921
Daily Traffic	Northbound:	5400	Southbound:	5400	Total:	10800
Daily Percent Trucks	Northbound:	16	Southbound:	17	Total:	16
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	52.06	Southbound:	51.68		

GEOMETRY

# of Side Access Points	Northbound:	3	Southbound:	4	Total:	7
Side Access per Mile	Northbound:	4.5	Southbound:	6.1	Total:	10.6
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

Norfolk Southern Railroad parallels east side of Route 29.

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Farmland.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 699	Node #:	252
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 837	Node #:	254
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.14		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	320	Southbound:	612	Total:	932
Daily Traffic	Northbound:	5500	Southbound:	5500	Total:	11000
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	53.20	Southbound:	51.41		

GEOMETRY

# of Side Access Points	Northbound:	0	Southbound:	1	Total:	1
Side Access per Mile	Northbound:	0.0	Southbound:	7.1	Total:	7.1
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Farmland.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 837	Node #:	254
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 838	Node #:	256
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.58		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	322	Southbound:	616	Total:	938
Daily Traffic	Northbound:	5500	Southbound:	5500	Total:	11000
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	52.77	Southbound:	50.18		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	7	Total:	8
Side Access per Mile	Northbound:	1.7	Southbound:	12.1	Total:	13.8
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

Norfolk Southern Railroad parallels east side of Route 29.

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Covesville community. Cove Presbyterian Church east side of Route 29 off Covesville Lane.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 838	Node #:	256
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 805	Node #:	258
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.52		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	322	Southbound:	619	Total:	941
Daily Traffic	Northbound:	5550	Southbound:	5550	Total:	11100
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	48.39	Southbound:	52.24		

GEOMETRY

# of Side Access Points	Northbound:	10	Southbound:	2	Total:	12
Side Access per Mile	Northbound:	19.2	Southbound:	3.8	Total:	23.1
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

Norfolk Southern Railroad parallels east side of Route 29. Covesville Post Office west side Route 29.

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Covesville community.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 805	Node #:	258
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 633 S	Node #:	260
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.21		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	324	Southbound:	630	Total:	954
Daily Traffic	Northbound:	5600	Southbound:	5600	Total:	11200
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	52.01	Southbound:	52.01		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	4.8	Southbound:	4.8	Total:	9.5
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Farmland. One stream crossing (tributary of South Fork Hardware River).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 633 S	Node #:	260
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 633 N	Node #:	262
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.2		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	325	Southbound:	633	Total:	958
Daily Traffic	Northbound:	5650	Southbound:	5650	Total:	11300
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	48.20	Southbound:	51.95		

GEOMETRY

# of Side Access Points	Northbound:	4	Southbound:	1	Total:	5
Side Access per Mile	Northbound:	20.0	Southbound:	5.0	Total:	25.0
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Farmland. One stream crossing (tributary of South Fork Hardware River).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 633 N	Node #:	262
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 775	Node #:	264
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	3.83		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	323	Southbound:	663	Total:	986
Daily Traffic	Northbound:	5800	Southbound:	5800	Total:	11600
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	52.16	Southbound:	50.65		

GEOMETRY

# of Side Access Points	Northbound:	16	Southbound:	39	Total:	55
Side Access per Mile	Northbound:	4.2	Southbound:	10.2	Total:	14.4
# of Median Breaks					Total:	8

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Two stream crossings (South Fork Hardware River and a tributary of it). Potential haz mat sites west side Route 29 (CITGO gas station, abandoned service station). Tributary of South Fork Hardware River parallels east side of Route 29 for over a mile. Homes mostly west side Route 29. Chalk Mountain to the west, Cook Mountain to the east.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 775	Node #:	264
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 697/VA 767	Node #:	266
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.38		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	329	Southbound:	665	Total:	994
Daily Traffic	Northbound:	5850	Southbound:	5850	Total:	11700
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	52.54	Southbound:	51.88		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	2	Total:	3
Side Access per Mile	Northbound:	2.6	Southbound:	5.3	Total:	7.9
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream (tributary of South Branch) parallels east side Route 29. Homes on west side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 697/VA 767	Node #:	266
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 692	Node #:	268
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.16		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	339	Southbound:	667	Total:	1006
Daily Traffic	Northbound:	5900	Southbound:	5900	Total:	11800
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	51.64	Southbound:	51.64		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	6.3	Southbound:	6.3	Total:	12.5
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

North Garden Post Office and North Garden Fire Co. east side Route 29 along Route 692. One stream crossing (South Branch). Farmland.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 692	Node #:	268
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 712	Node #:	270
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.1		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	353	Southbound:	691	Total:	1044
Daily Traffic	Northbound:	6150	Southbound:	6150	Total:	12300
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	50.93	Southbound:	50.25		

GEOMETRY

# of Side Access Points	Northbound:	10	Southbound:	13	Total:	23
Side Access per Mile	Northbound:	9.1	Southbound:	11.8	Total:	20.9
# of Median Breaks					Total:	4

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
X	Shoulder Widening/Paving		Signalization/Grade Separation

Steep upgrade in northbound direction.

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential haz mat site east side Route 29 (CC Woodson - underground storage tanks). Stream (tributary of South Branch) parallels portion of west side Route 29 near intersection with Route 712. Homes both sides Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 712	Node #:	270
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 801	Node #:	272
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.09		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	358	Southbound:	704	Total:	1062
Daily Traffic	Northbound:	6250	Southbound:	6250	Total:	12500
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	50.42	Southbound:	50.42		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	11.1	Southbound:	11.1	Total:	22.2
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Stream (tributary of South Branch) parallels west side Route 29.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 801	Node #:	272
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 710	Node #:	274
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.44		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	358	Southbound:	711	Total:	1069
Daily Traffic	Northbound:	6300	Southbound:	6300	Total:	12600
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	50.36	Southbound:	51.50		

GEOMETRY

# of Side Access Points	Northbound:	5	Southbound:	3	Total:	8
Side Access per Mile	Northbound:	11.4	Southbound:	6.8	Total:	18.2
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

One stream crossing (tributary of South Branch). Homes both sides Route 29. Farmland. Potential haz mat site east side Route 29 (Amoco gas station) at intersection with Route 710.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 710	Node #:	274
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 760	Node #:	276
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.83		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	371	Southbound:	752	Total:	1123
Daily Traffic	Northbound:	6600	Southbound:	6600	Total:	13200
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	50.49	Southbound:	51.39		

GEOMETRY

# of Side Access Points	Northbound:	9	Southbound:	6	Total:	15
Side Access per Mile	Northbound:	10.8	Southbound:	7.2	Total:	18.1
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening	X	Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential haz mat site west side Route 29 (Sprouses - underground storage tanks). Two crossings of tributary of Middle Branch. Farmland.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 760	Node #:	276
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 708	Node #:	278
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	.23		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	363	Southbound:	769	Total:	1132
Daily Traffic	Northbound:	6650	Southbound:	6650	Total:	13300
Daily Percent Trucks	Northbound:	13	Southbound:	14	Total:	13
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	51.03	Southbound:	52.11		

GEOMETRY

# of Side Access Points	Northbound:	2	Southbound:	1	Total:	3
Side Access per Mile	Northbound:	8.7	Southbound:	4.3	Total:	13.0
# of Median Breaks					Total:	1

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

One stream crossing (Middle Branch). Farmland.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 708	Node #:	278
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 745 S	Node #:	280
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.77		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	372	Southbound:	844	Total:	1216
Daily Traffic	Northbound:	7150	Southbound:	7150	Total:	14300
Daily Percent Trucks	Northbound:	11	Southbound:	12	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	52.07	Southbound:	52.35		

GEOMETRY

# of Side Access Points	Northbound:	8	Southbound:	6	Total:	14
Side Access per Mile	Northbound:	4.5	Southbound:	3.4	Total:	7.9
# of Median Breaks					Total:	5

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Three stream crossings (tributaries of North Fork Hardware River). Farmland and forestland. Tributary of North Fork Hardware River parallels east side Route 29 for over a mile.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 745 S	Node #:	280
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	VA 745 N	Node #:	282
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	1.44		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	373	Southbound:	859	Total:	1232
Daily Traffic	Northbound:	7250	Southbound:	7250	Total:	14500
Daily Percent Trucks	Northbound:	11	Southbound:	12	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	51.81	Southbound:	51.64		

GEOMETRY

# of Side Access Points	Northbound:	8	Southbound:	9	Total:	17
Side Access per Mile	Northbound:	5.6	Southbound:	6.3	Total:	11.8
# of Median Breaks					Total:	3

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential haz mat sites east side Route 29 (Puff Inc. - industrial site). Bethany Baptist Church and cemetery east side Route 29 beyond railroad along Route 745. Farmland and forestland. One stream crossing (tributary of Moores Creek).

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	VA 745 N	Node #:	282
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	F178/VA 1106	Node #:	284
Endpoint Control:	Unsignalized	Level of Service:	ACC
Length of Segment (miles):	2.42		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	376	Southbound:	867	Total:	1243
Daily Traffic	Northbound:	7300	Southbound:	7300	Total:	14600
Daily Percent Trucks	Northbound:	11	Southbound:	12	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	51.44	Southbound:	51.44		

GEOMETRY

# of Side Access Points	Northbound:	17	Southbound:	17	Total:	34
Side Access per Mile	Northbound:	7.0	Southbound:	7.0	Total:	14.0
# of Median Breaks					Total:	7

POTENTIAL IMPROVEMENT ISSUES

X	Lane Widening		Sight Distance (Vertical/Horizontal Improvements)
	Shoulder Widening/Paving		Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

Norfolk Southern Railroad parallels east side Route 29.

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Moores Creek parallels west side Route 29, then crosses over and parallels east side. Ragged Mountains to west and Britts Mountain to east. Good Shepherd Episcopal Church and cemetery west side Route 29. Faith, Hope and Love International church and cemetery east side Route 29. Forestland.

INTERMODAL ISSUES

	Sidewalk/Bikeway Potential		Connectivity to Other Modes

SEGMENT DESCRIPTION

Jurisdiction:	Albemarle		
From:	F178/VA 1106	Node #:	284
Endpoint Control:	Unsignalized	Level of Service	ACC
To:	I-64	Node #:	286
Endpoint Control:	Interchange	Level of Service:	UNA
Length of Segment (miles):	.36		
Access Control (Full, Partial):	Partial		

TRAFFIC DATA

PM Peak Hour Traffic	Northbound:	401	Southbound:	945	Total:	1346
Daily Traffic	Northbound:	7900	Southbound:	7900	Total:	15800
Daily Percent Trucks	Northbound:	11	Southbound:	12	Total:	12
Segment Level of Service	Northbound:	ACC	Southbound:	ACC		
Field Travel Speed (mph)	Northbound:	58.8	Southbound:	55.8		
Calc Travel Speed (mph)	Northbound:	52.51	Southbound:	52.51		

GEOMETRY

# of Side Access Points	Northbound:	1	Southbound:	1	Total:	2
Side Access per Mile	Northbound:	2.8	Southbound:	2.8	Total:	5.6
# of Median Breaks					Total:	2

POTENTIAL IMPROVEMENT ISSUES

☐	Lane Widening	☐	Sight Distance (Vertical/Horizontal Improvements)
☐	Shoulder Widening/Paving	☐	Signalization/Grade Separation

LAND USE/ECONOMIC ISSUES

PRINCIPAL SOCIAL AND ENVIRONMENTAL ISSUES

Potential hazardous materials site west side Route 29 (J.W. Sieg & Co. - warehouse/distribution site).

INTERMODAL ISSUES

☐	Sidewalk/Bikeway Potential	☐	Connectivity to Other Modes