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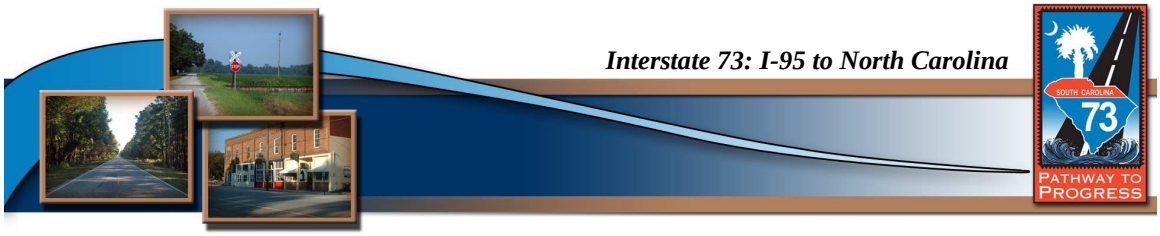


CHAPTER 1 - INTRODUCTION

I-73 is a national highway project that will provide a transportation corridor from Michigan to South Carolina. The national I-73 project starts at Sault Ste. Marie, Michigan, and proceeds through portions of Ohio, West Virginia, Virginia, and North Carolina, before terminating near the Myrtle Beach, South Carolina area (refer to Figure 1-1).

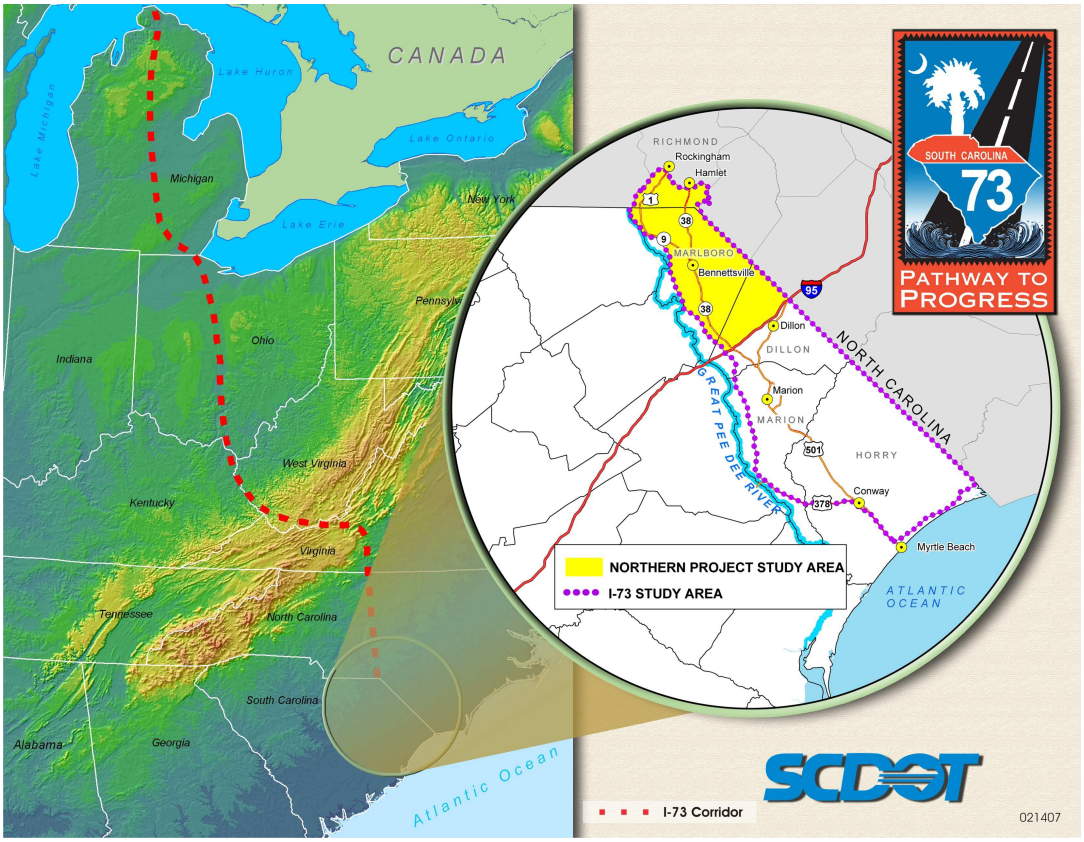


Figure 1-1
Interstate Corridor

Currently, Michigan has upgraded existing roads to interstate standards and has one 50-mile segment remaining to construct. Twenty miles of this segment has received funding to complete design and begin purchasing right-of-way. Since the route would follow existing roadways along the I-73 corridor, Ohio has decided not to construct a new facility for I-73. Instead, Ohio is addressing individual congestion issues along the existing roadways. West Virginia has completed a small portion of I-73, also known as the King Coal Highway and Tolsia Highway.

West Virginia is waiting on additional funding prior to completing the I-73 corridor project. Virginia has completed a Final Environmental Impact Statement (EIS) for its portion of I-73 that was approved by the Federal Highway Administration (FHWA) on December 1, 2006. FHWA issued a Record of Decision (ROD) for the I-73 Final EIS in Virginia on March 30, 2007, allowing the final design process to begin for the project.[1] The Virginia Department of Transportation is currently re-signing the portion of I-73 along the existing roadway and will proceed with construction of I-73 on new alignment as funding becomes available.[2] North Carolina has also completed portions of I-73 by the re-signing of existing roads to interstate facility. The North Carolina Department of Transportation (NCDOT) is currently completing environmental analyses, planning phases, and right-of-way acquisitions for its portion of I-73 on new alignment. In South Carolina, a Draft EIS was completed in May 2006 for the portion of I-73 that would extend from I-95 to the Myrtle Beach Region, referred to as the I-73 South project.

The Draft EIS for the Northern project has been prepared to evaluate and document the potential benefits and impacts that would result from the construction of I-73 from I-95 north to Future I-73/I-74 (I-74) in North Carolina. The project study area encompasses 399,792 acres and extends northwest from I-95, is bounded to the east by the North Carolina/South Carolina state line, extends northeast into southern Richmond County (North Carolina) and eastern Scotland County (North Carolina), is bounded to the north by I-74, and to the west by the eastern edge of the Great Pee Dee River floodplain (refer to Figure 1-2). Based on a resolution, the NCDOT and South Carolina Department of Transportation (SCDOT) have agreed to work together to extend I-73 from the South Carolina state border to Rockingham, North Carolina, where it would

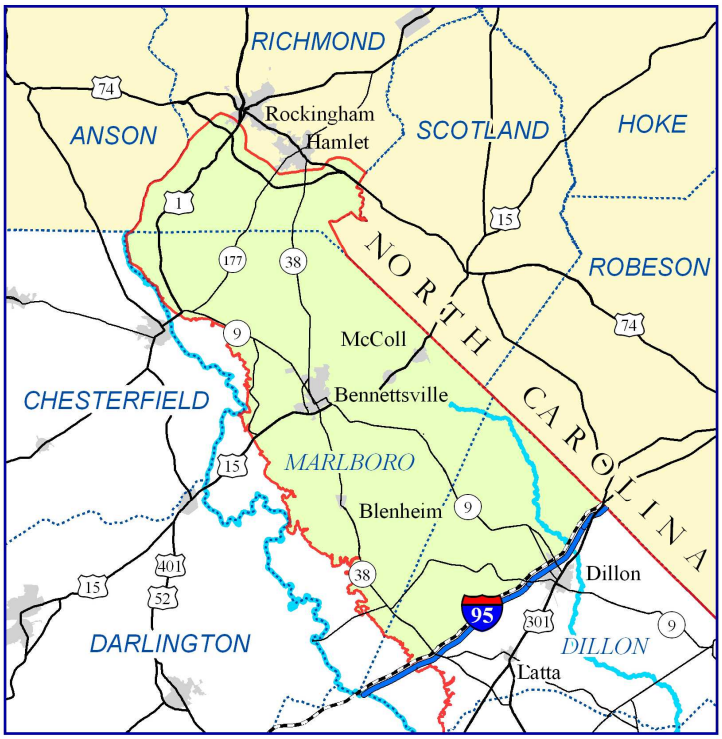


Figure 1-2
Project Study Area

[1] VDOT Website. I-73 Project Webpage, http://www.virginiadot.org/news/newsrelease.asp?ID=SAL-07-127 Last accessed April 16, 2007.
[2] VDOT Website. I-73 Project Webpage. http://virginiadot.org/news/newsrelease.asp?ID=SAL-06-69 Last accessed December 26, 2006.

connect to I-74. The NCDOT also agreed to participate in the environmental and planning phases of the project as well as share a proportionate cost of the studies needed to complete the project.

The purpose of the proposed project is to provide an interstate link between the southernmost proposed segment of I-73 (between I-95 and the Myrtle Beach area) and the North Carolina I-73/I-74 corridor, to serve residents, businesses, and travelers while fulfilling congressional intent in an environmentally responsible and community sensitive manner.

CHAPTER 2 – MODEL DEVELOPMENT AND CALIBRATION

A roadway travel demand model was developed to support traffic analysis undertaken as part of the I-73 Draft EIS. As an initial step in the model development process, a meeting was held with involved agencies (Waccamaw Council of Governments (COG), Florence County and SCDOT) and consultant study team members. This meeting produced several recommendations that were incorporated into the model building task, including:

- Existing data sources were to be used to the extent possible.
- 2030 was to be used as the forecast year, 2005 as the base year. The forecasting process should also include procedures to estimate intermediate year 2010 and 2020 volumes to support lifecycle economic analysis.
- TransCAD model application software was to be used to develop and apply the I-73 model. Use of TransCAD would require the conversion of the existing statewide model, Grand Strand Area Transportation Study (GSATS) model and Florence Area Transportation Study (FLATS) model from TRANPLAN to TransCAD.
- The initial forecasts would use currently available demographic forecasts developed as part of the ongoing statewide, GSATS and FLATS modeling network (refer to Figure 2-1, page 4). As updated forecasts become available, they would be incorporated in the final I-73 corridor demand forecasts.
- The models should be able to identify corridor work commute, other resident, non-resident and truck trips.
- Discussions should be held with NCDOT staff to determine if a model has been developed to estimate traffic in the I-74 corridor and, if such a model exists, could it be incorporated in the I-73 corridor. (No such model was found to exist.)

Data Sources

Several data sources existed which were used in the model development and calibration process. Figure 2-1, page 4, shows the coverage area of each of these models. These included:

- The version of the South Carolina statewide traffic model most recently used in the 2003 SCDOT I-73 Feasibility Study. This model included a road network covering all of South Carolina, estimates of population for approximately 400 analysis zones and total vehicle trip tables for five year increments from 2005 through 2025. The trip tables included estimates of external traffic traveling to, from and through the state.
- The current version of the GSATS urban area model. This model is designed to estimate peak season travel demands. It includes a road network, land use estimates and total vehicle trip tables at five year increments through year 2030.
- The current version of the FLATS urban area model. It includes a road network, demographic data and trip tables for 2000 and 2025.

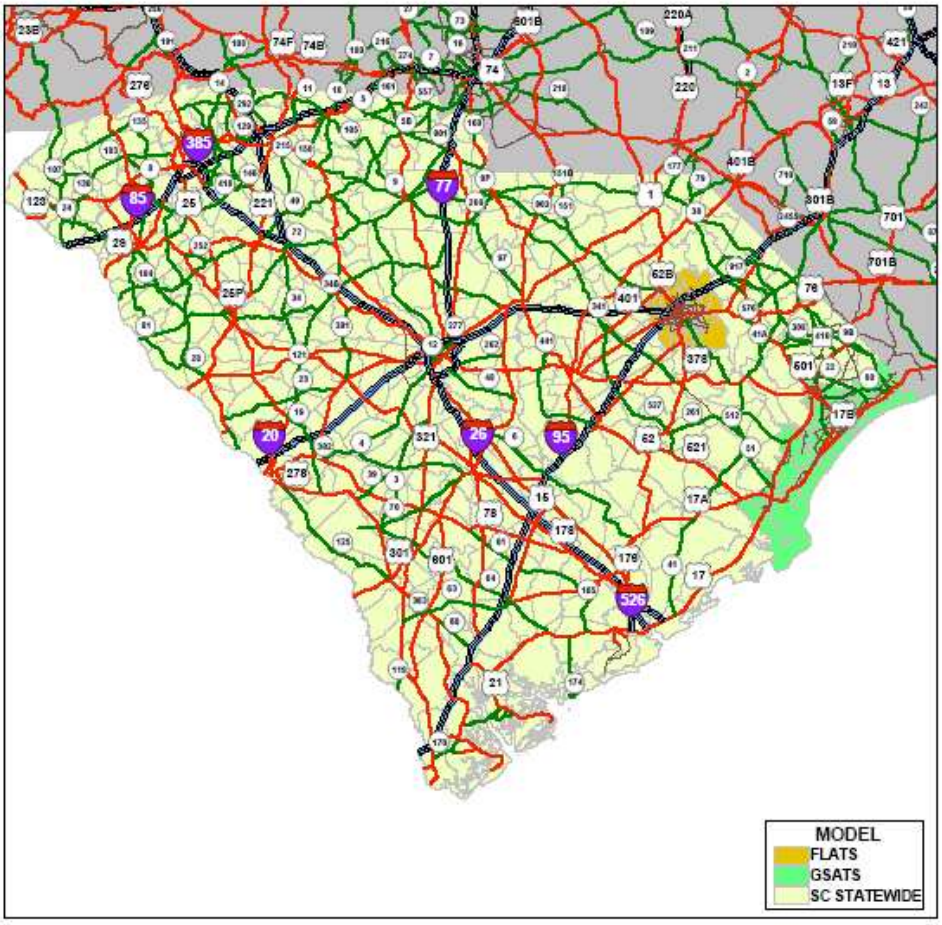


Figure 2-1
FLATS and GSATS Coverage Areas

CHAPTER 3 – ALTERNATIVE EVALUATION

Alternatives for the proposed alignments for I-73 were modeled using the roadway travel demand models developed as described in the Model Development and Calibration section. This network, combined with 2005 and 2030 trip tables, formed the basis of the "No-Build" alternative. In addition to the No-Build alternative, separate networks were created to model three specific alignments for I-73. The three specific alternative alignments for I-73 focused on the potential alignment of I-73 between Future I-73/I-74 (I-74) in North Carolina and I-95. In all alignment alternatives, I-73 was coded as a four-lane rural interstate route with a free-flow speed of 70 miles per hour and combined (two-way) capacity of 58,600 vehicles per day.

I-73 Alignment Alternatives

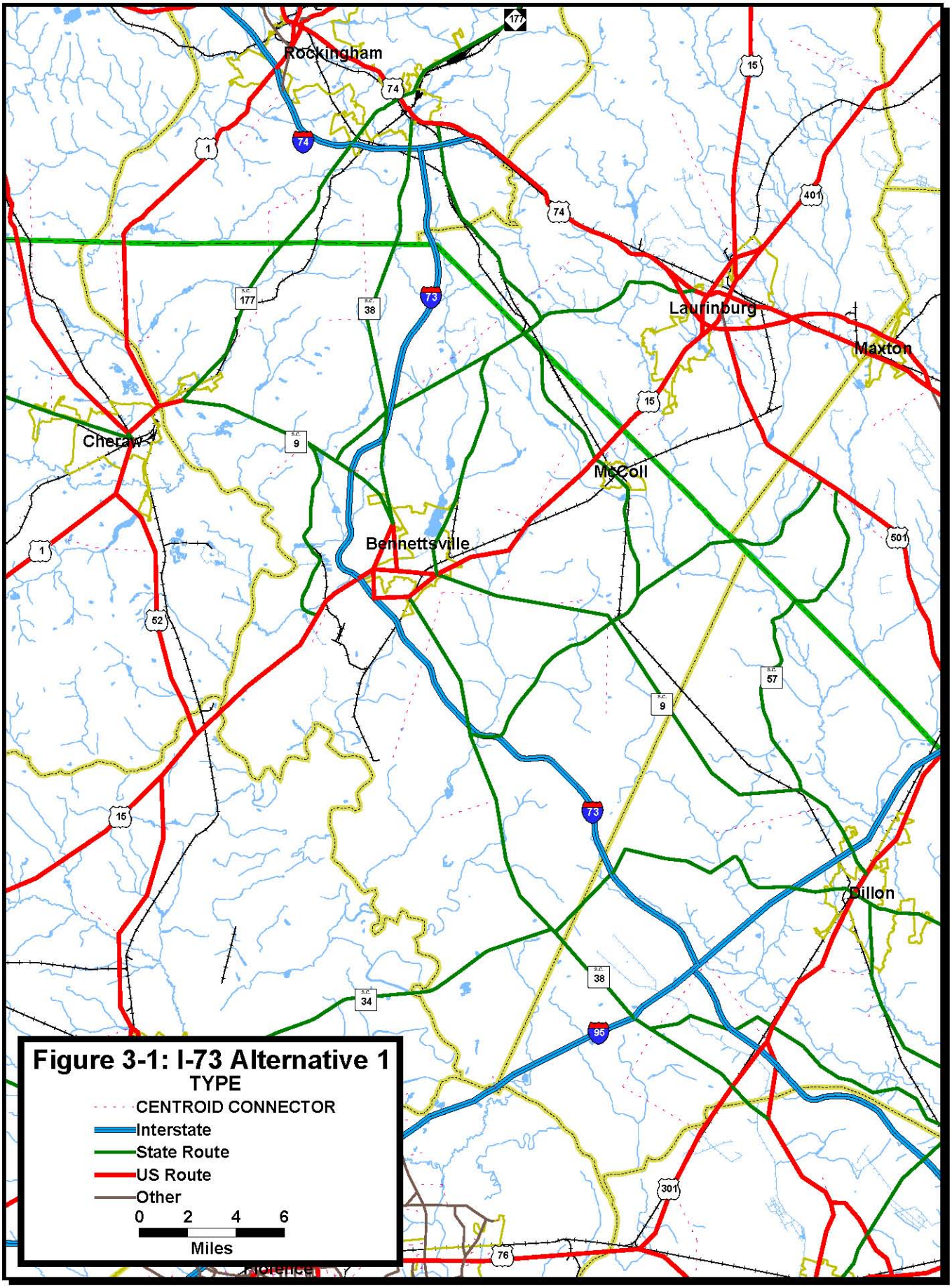
Three alignment alternatives were developed and added to the No-Build network. All alternatives began at I-74 and terminated at I-95. Certain portions of an individual alignment may be a part of other alignment alternatives. For example, the northern portion of the Alternative 2 alignment (between I-74 and SC 79) was identical to the same section in Alternatives 3. The southern portion of Alternative 1 north of SC Route 34 to I-95 was similar to the same section in Alternative 2. Alternatives 1 through 3 are shown in Figures 3-1 through 3-3 (refer to pages 6 through 8).

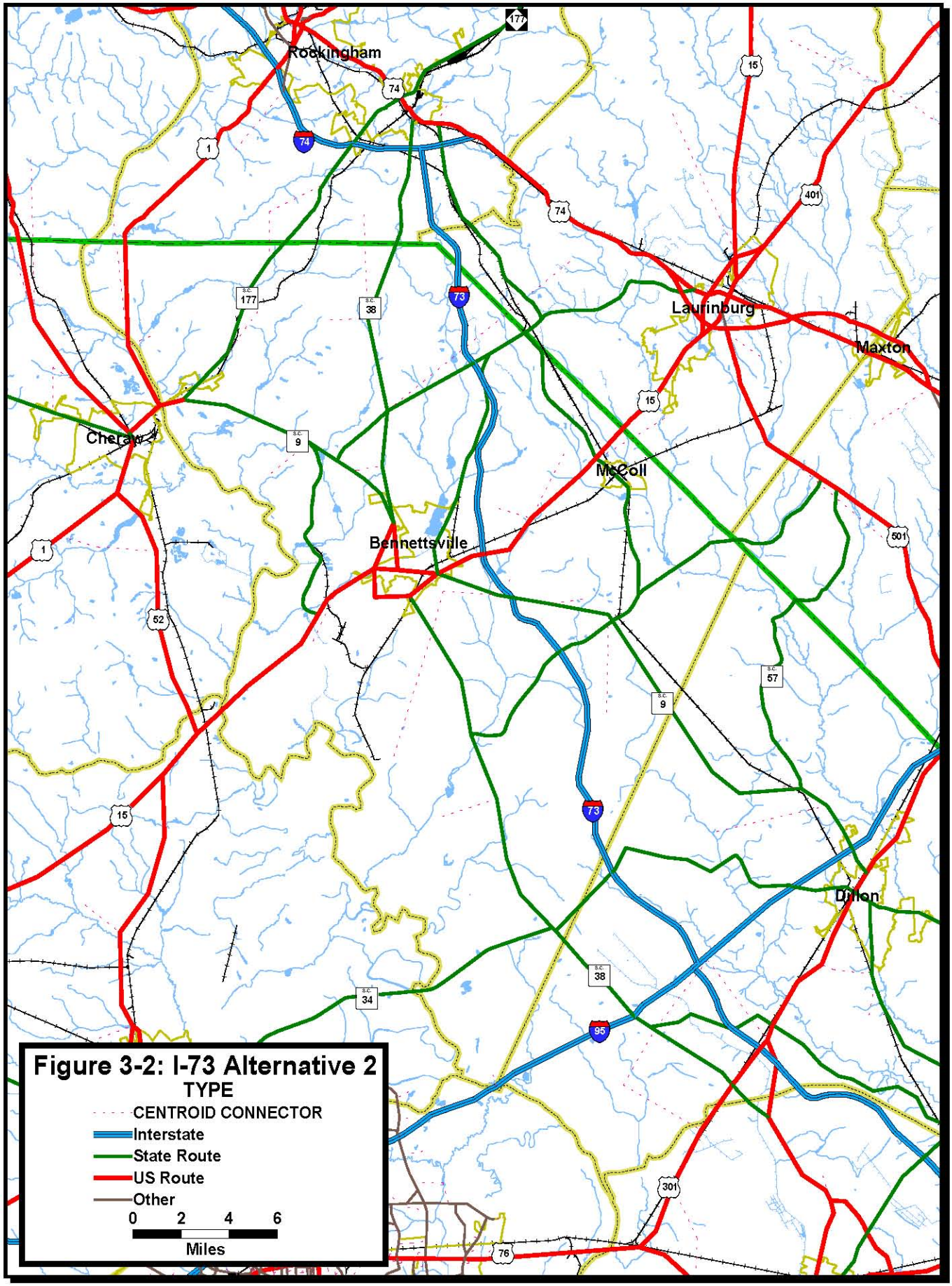
2005 Average Daily Traffic Assignments

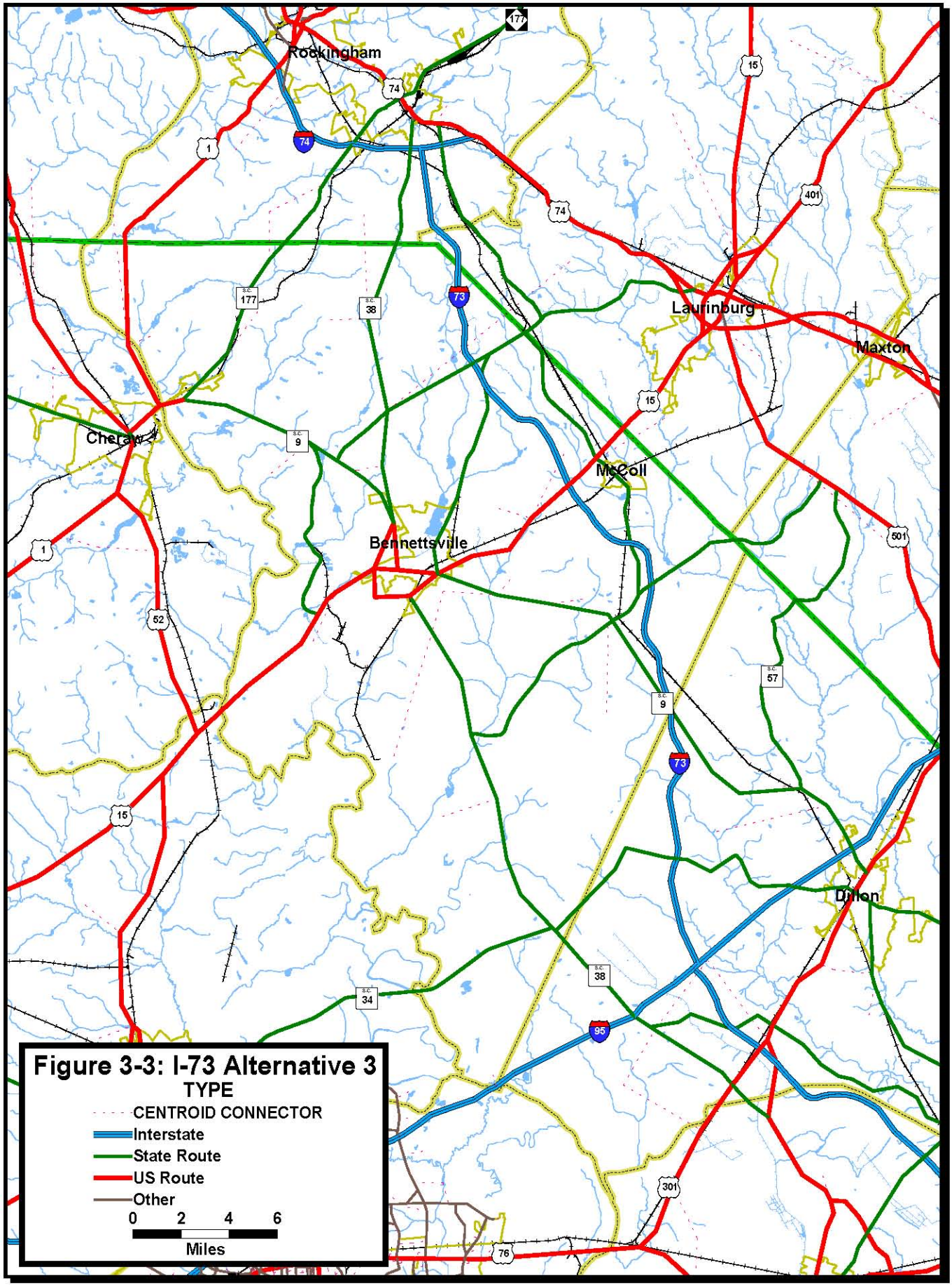
Traffic assignments were developed for the 2005 No-Build Alternative and the three I-73 Alternatives using the 2005 trip tables. The 2005 Traffic Assignments for the No-Build Condition and Alternatives 1 through 3 are shown in Figures 3-4 through 3-7 (refer to pages 9 through 12).

The assignment results were reviewed to assess the impact of each of the I-73 alternatives when compared to the No-Build Alternative. Selected traffic assignment link volumes are summarized in Table 3.1, page 13.

The comparison of the 2005 traffic assignments indicates that the I-73 alternatives that cross US 15 east of Bennettsville (Alternatives 2 and 3) would carry less traffic between I-74 and US 15 (refer to Table 3.1, page 13). The I-73 Alternatives that travel closer to Bennettsville (Alternatives 1 and 2) would carry about 1,000 more vehicles between SC 381 and I-95 than Alternative 3.


Rockingham
Laurinburg
Maxton
Cheraw
McColl
Bennettsville
Dillon
Figure 3-1: I-73 Alternative 1
TYPE
CENTROID CONNECTOR
Interstate
State Route
US Route
Other
0 2 4 6
Miles


Rockingham
Laurinburg
Maxton
McColl
Bennettsville
Cheraw
Dillon
Figure 3-2: I-73 Alternative 2
TYPE
CENTROID CONNECTOR
Interstate
State Route
US Route
Other
0 2 4 6
Miles


Rockingham
Laurinburg
Maxton
Cheraw
McColl
Bennettsville
Dillon
Figure 3-3: I-73 Alternative 3
TYPE
CENTROID CONNECTOR
Interstate
State Route
US Route
Other
0 2 4 6
Miles

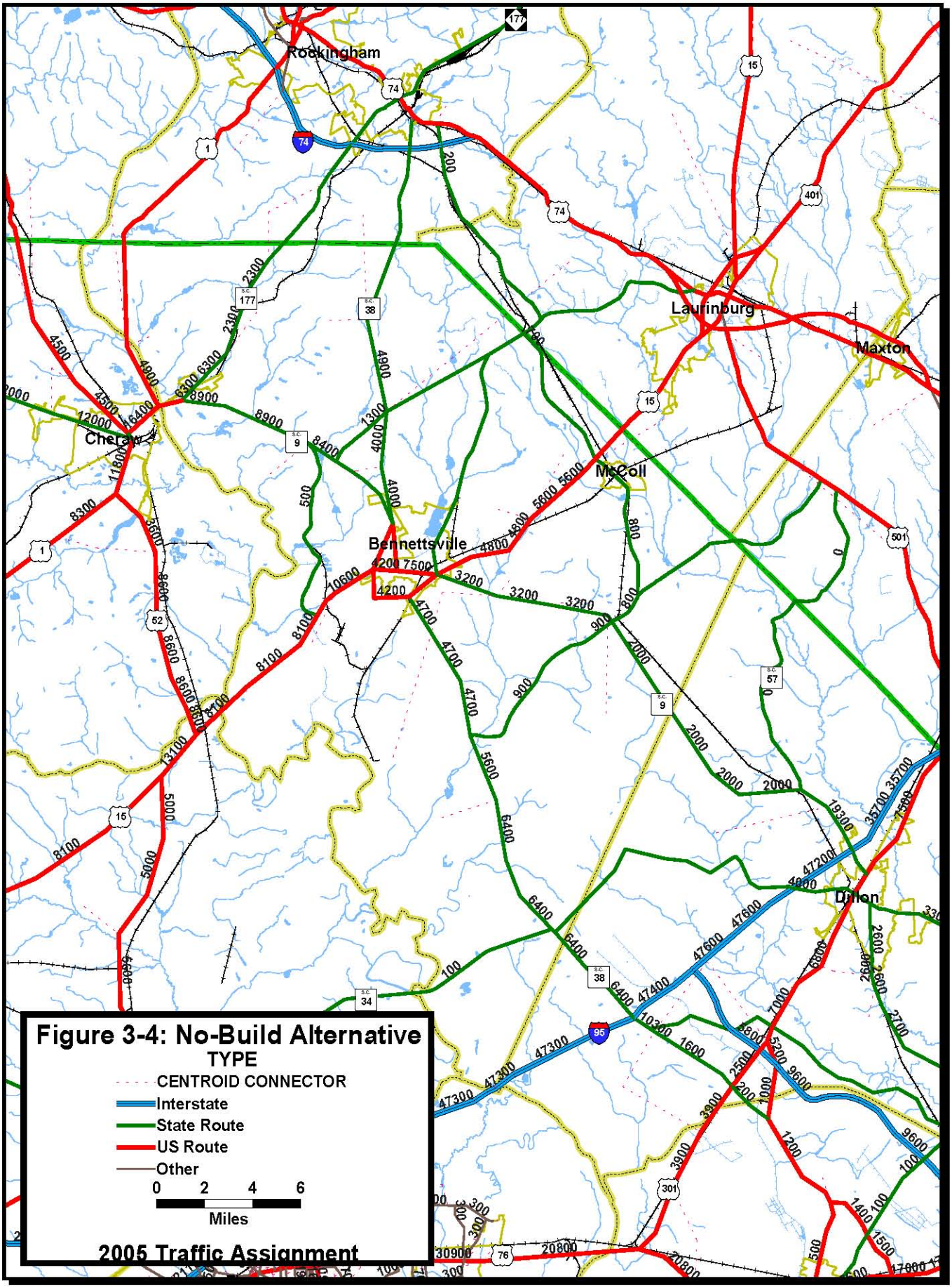


Figure 3-4: No-Build Alternative

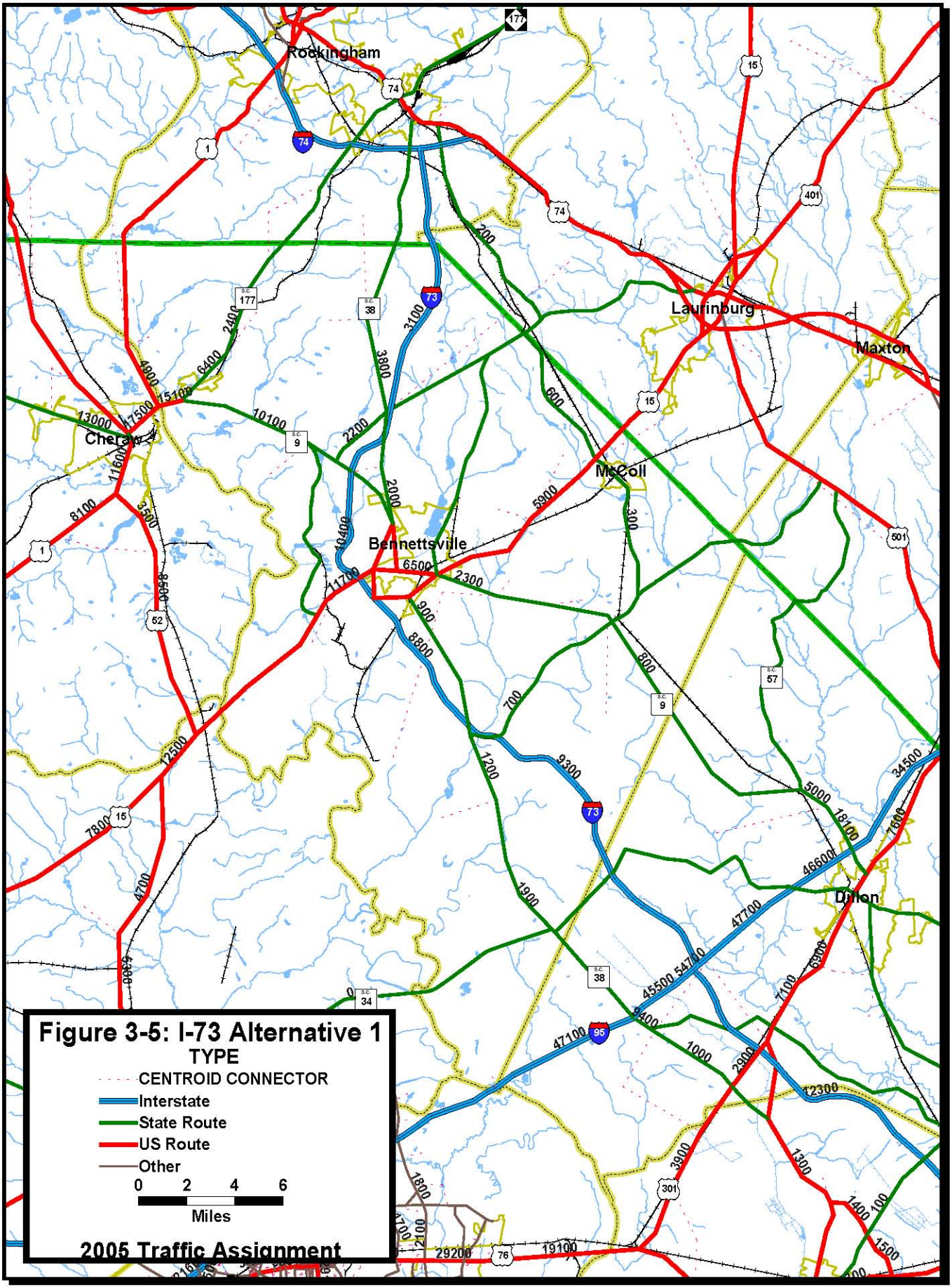
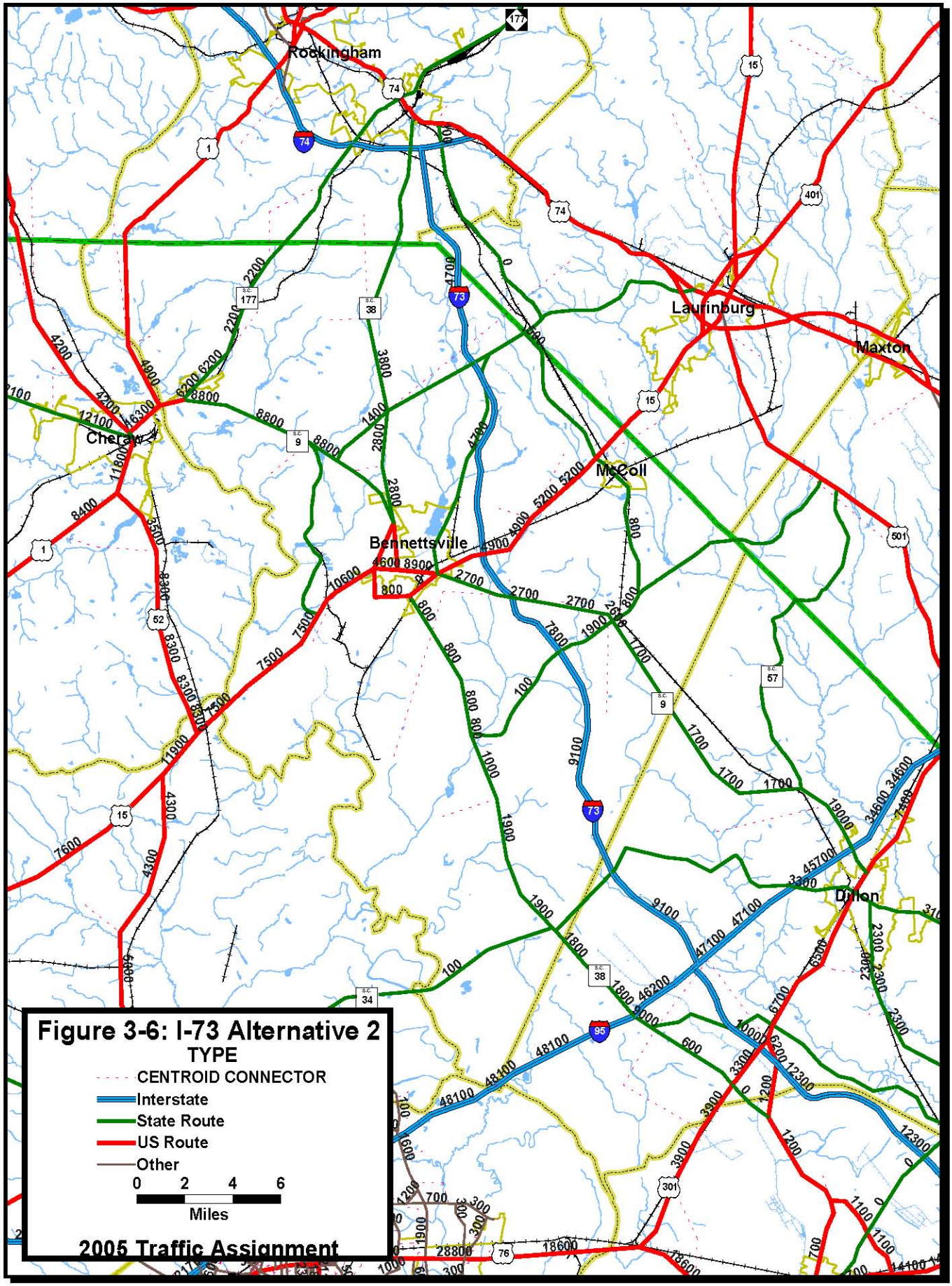


Figure 3-5: I-73 Alternative 1


Rockingham
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Maxton
McColl
Bennettsville
Cheraw
Dillon
Figure 3-6: I-73 Alternative 2
TYPE
CENTROID CONNECTOR
Interstate
State Route
US Route
Other
0 2 4 6
Miles
2005 Traffic Assignment

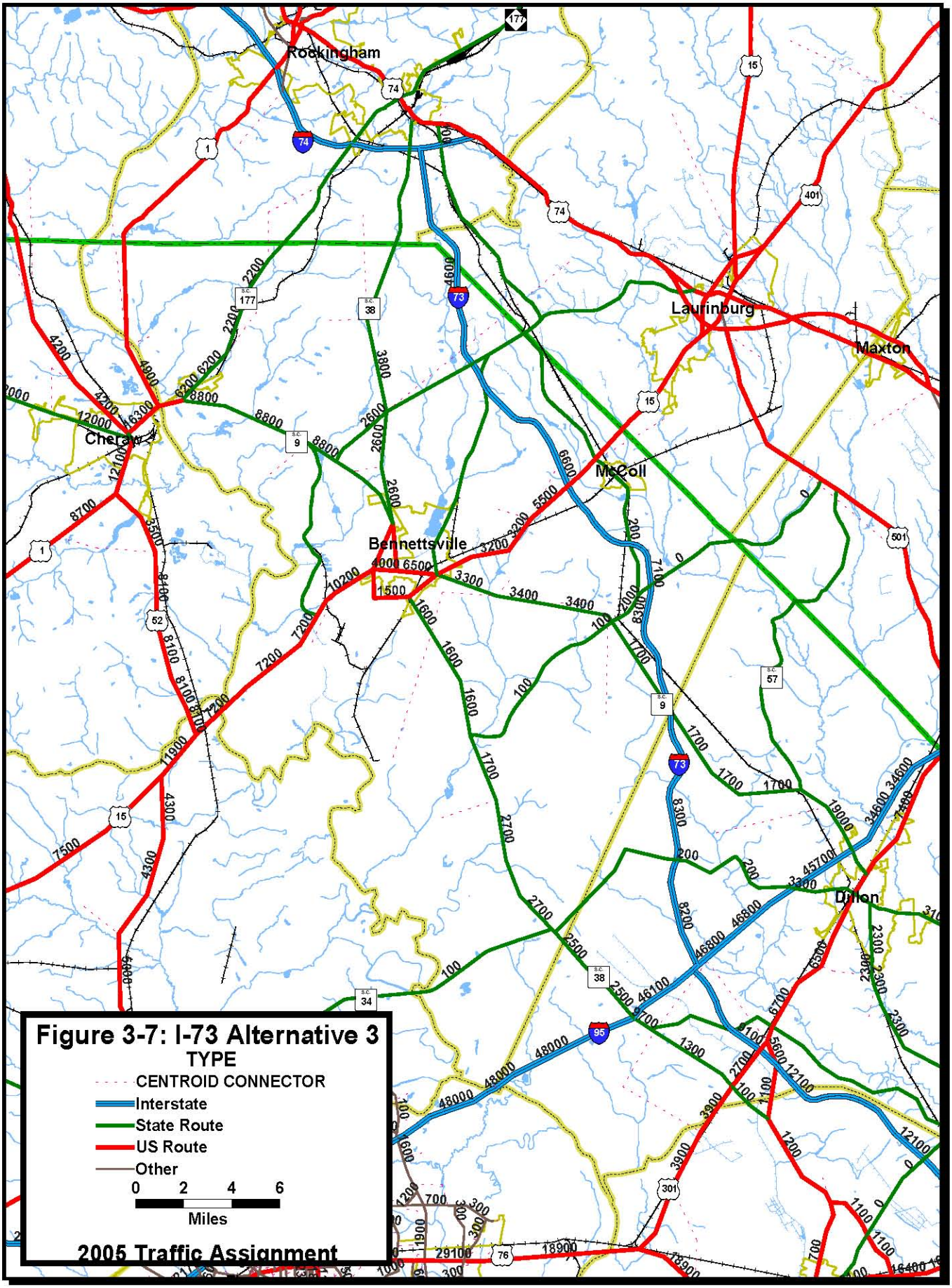


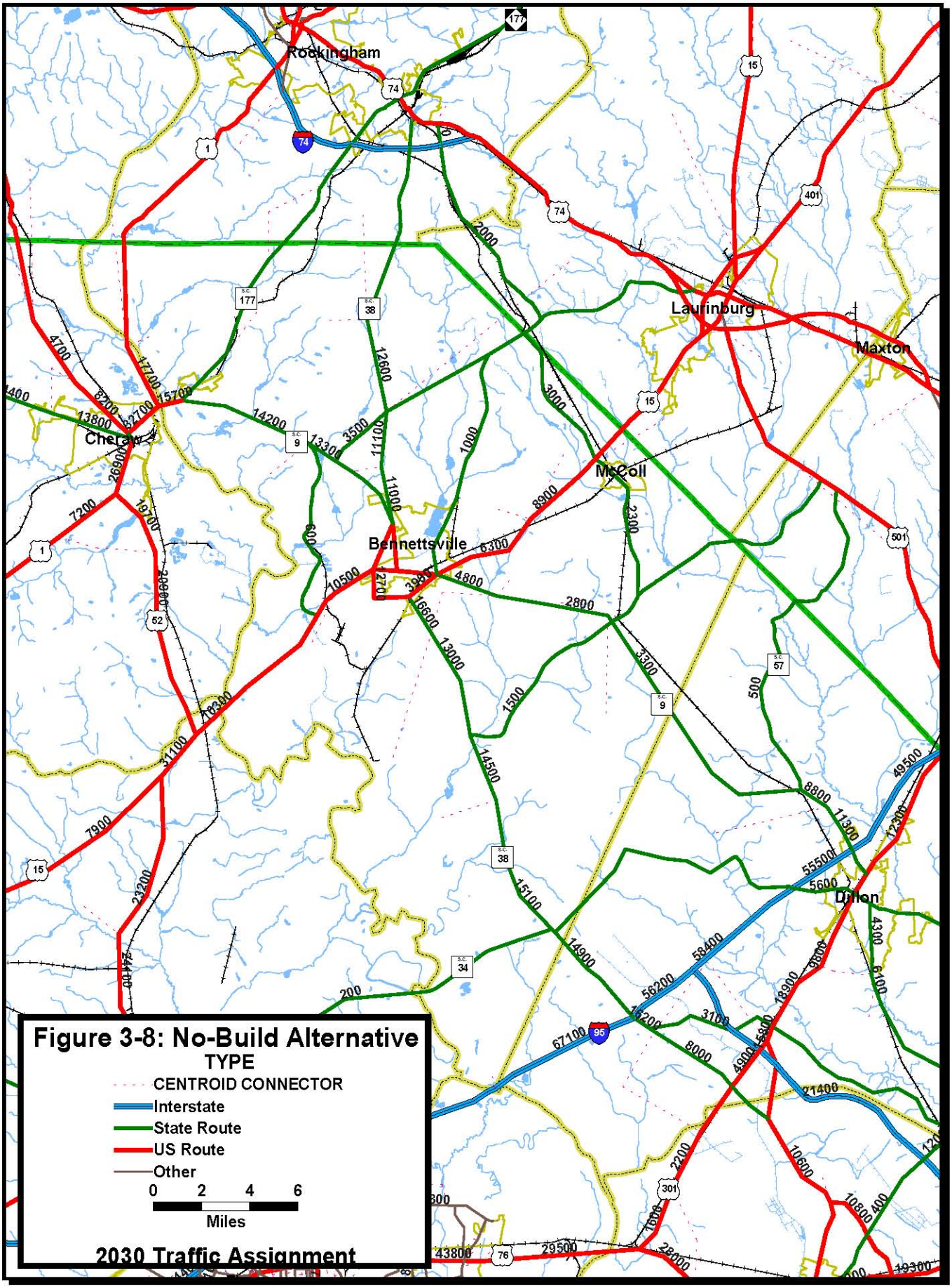
Figure 3-7: I-73 Alternative 3

Table 3.1 2005 Average Daily Traffic Assignments					
Route	**Location**	**No-Build**	**Alt. 1**	**Alt. 2**	**Alt. 3**
I-73	North of SC 79	-	3,100	4,700	4,600
I-73	South of SC 79	-	10,400	4,700	6,600
I-73	South of US 15	-	8,800	7,800	8,300
I-73	North of SC 34	-	9,300	9,100	8,300
I-73	South of SC 34	-	9,300	9,100	8,200
SC 38	North of SC 79	4,900	3,800	3,800	3,800
SC 38	North of I-95	6,400	1,900	1,800	2,500
SC 9	North of SC 79	8,400	10,100	8.800	8,800
US 15	East of SC 912	10,600	11,700	10,600	10,200
US 52	North of US 15	7,100	8,500	8,300	8,100
I-95	North of SC 38	47,400	45,500	46,200	46,100
I-95	South of SC 38	47,300	47,100	48,100	48,000

2030 Average Daily Traffic Assignments

The 2030 Average Daily Traffic Assignments for the No-Build Condition and Alternatives 1 through 3 are shown in Figures 3-8 through 3-11 (refer to pages 14 through 17). Selected traffic assignment link volumes are summarized in Table 3.2.

Table 3.2 2030 Average Daily Traffic Assignments					
Route	**Location**	**No-Build**	**Alt. 1**	**Alt. 2**	**Alt. 3**
I-73	North of SC 79	-	24,500	28,900	28,600
I-73	South of SC 79	-	33,100	28,800	32,100
I-73	South of US 15	-	27,600	32,800	32,500
I-73	North of SC 34	-	30,400	34,900	34,200
I-73	South of SC 34	-	30,400	34,900	33,600
SC 38	North of SC 79	12,600	3,500	3,600	3,600
SC 38	North of I-95	14,900	2,900	2,500	3,400
SC 9	North of SC 79	13,300	15,000	11,500	11,700
US 15	East of SC 912	10,500	11,900	8,500	7,900
US 52	North of US 15	20,900	15,300	14,600	14,200
I-95	North of SC 38	56,200	58,100	64,000	64,100
I-95	South of SC 38	67,100	70,100	75,300	75,500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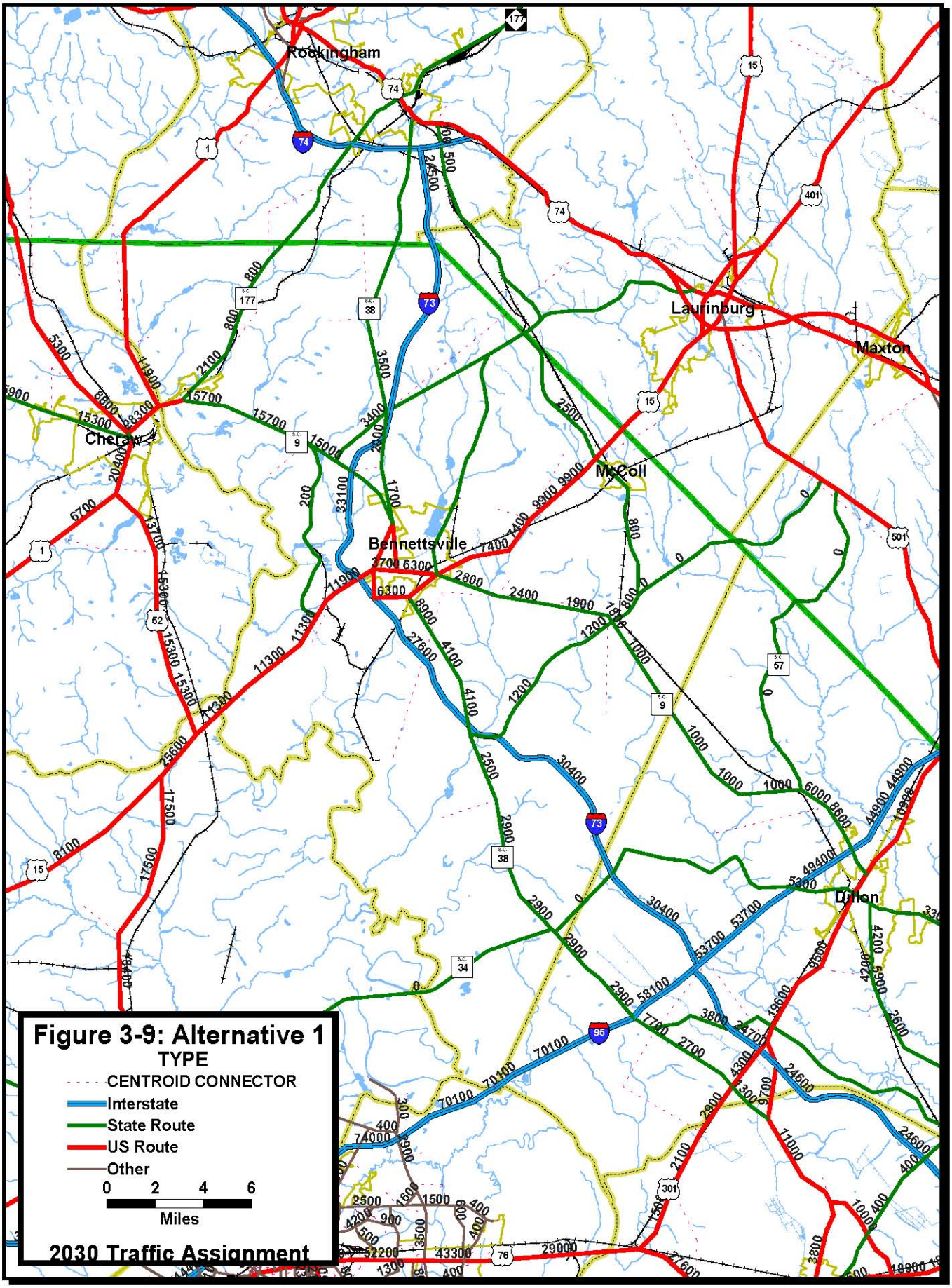
Maxton
McColl
Bennettsville
Cheraw
Dillon
Figure 3-8: No-Build Alternative
TYPE
CENTROID CONNECTOR
Interstate
State Route
US Route
Other
0 2 4 6
Miles
2030 Traffic Assignment


Rockingham
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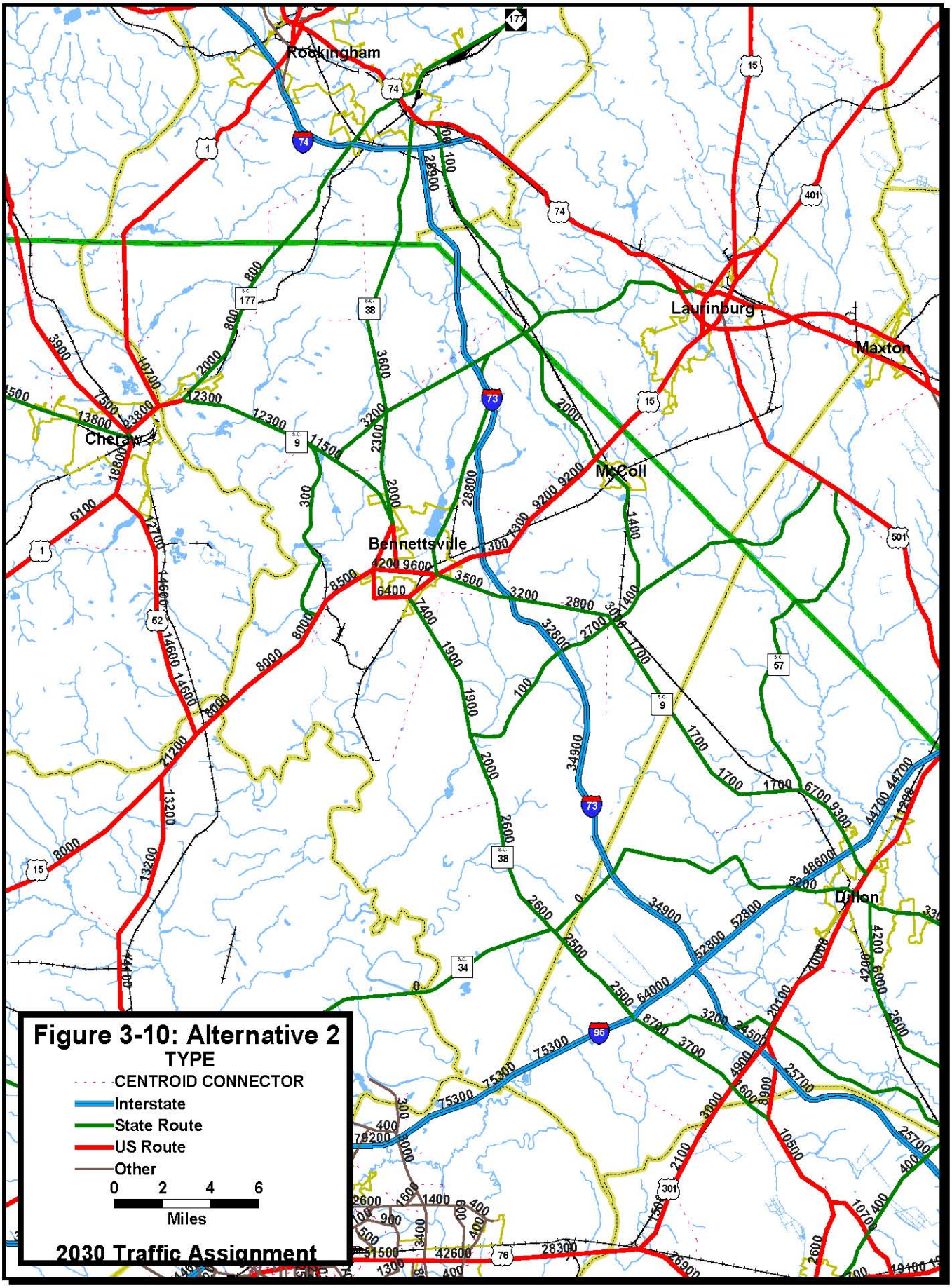
Maxton
McColl
Bennettsville
Cheraw
Dillon
Figure 3-9: Alternative 1
TYPE
CENTROID CONNECTOR
Interstate
State Route
US Route
Other
0 2 4 6
Miles
2030 Traffic Assignment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McColl
Bennettsville
Cheraw
Dillon
Figure 3-10: Alternative 2
TYPE
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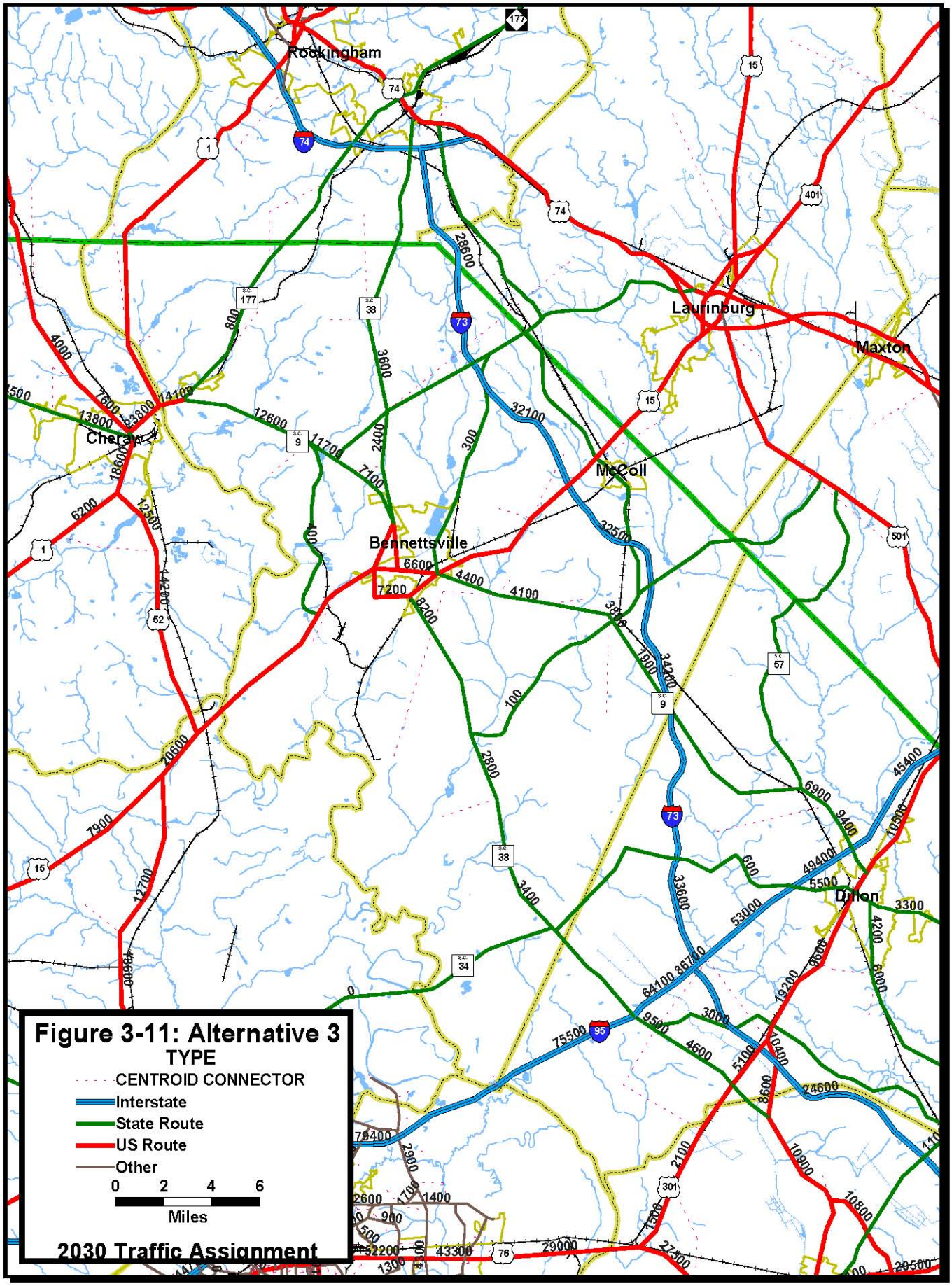
Interstate
State Route
US Route
Other
0 2 4 6
Miles
2030 Traffic Assignment


Rockingham
Laurinburg
Maxton
McColl
Bennettsville
Cheraw
Dillon
Figure 3-11: Alternative 3
TYPE
CENTROID CONNECTOR
Interstate
State Route
US Route
Other
0 2 4 6
Miles
2030 Traffic Assignment

A comparison of the 2030 traffic assignments indicates that the I-73 alternatives would divert traffic primarily from SC 38 and US 52. The alignment of each alternative does not appear to greatly affect the extent to which traffic is diverted from each of these routes. Alternatives 2 and 3 carry slightly more traffic on the northern sections and would also carry more traffic on the southern portion of I-73 than Alternative 1.

Evaluation of Individual I-73 Alternatives

The individual I-73 Build Alternatives were evaluated and compared against each other with respect to their length, traffic assignments, vehicles miles traveled, and traffic density to identify which alternative carried the most traffic, provided the most vehicles miles of travel, or had the highest traffic density. The information evaluated included:

- Total Length – the sum of the link lengths for each I-73 alternative alignment;
- Total Vehicles Miles of Travel (VMT) – the product of the length of each link and its 2030 daily traffic assignment volume;
- Average Annual Average Daily Traffic (AADT) – the weighted average of each link's 2030 daily traffic assignment volume with respect to the link's length;
- Average VMT – the weighted average of the VMT on each link with respect to the link's length;
- Average Traffic Density – calculated based on the equation

Density = ((((2030 Link Assignment Volume x K x D) / PHF)/ FFS)/ n)

Where: ***K*** is a factor converting daily to peak hour traffic (10%)
D is a directional split factor to convert two-way traffic to one-way traffic (55%)
PHF is a factor representing the peaking characteristic of traffic within one hour (0.90)
FFS is the free flow speed of the I-73 Alternative (70 mph)
n is the number of lanes in one direction (2 lanes)

The results of the analysis are summarized in Table 3.3 (refer to page 19). As shown in Table 3.3, the Average AADT are within a range between approximately 29,600 vehicles per day and 32,800 vehicles per day. A statistical analysis was performed to determine if the Average AADT calculated for each alternative was within one standard deviation of the mean Average AADT. The mean Average AADT was calculated to be 31,831 vehicles per day, with a standard deviation of 1,964 vehicles per day. Therefore, any alternatives with an Average AADT between 29,867 and 33,795 vehicles per day are within one standard deviation of the mean for all alternatives. Based on this analysis, Alternative 1 was not within one standard deviation of the mean Average AADT. The Average AADT for Alternatives 2 and 3 could be considered statistically equal to each other, and that these alternatives essentially have the same Average AADT.

Table 3.3 Evaluation of Build Alternatives			
	ALT 1	**ALT 2**	**ALT 3**
Total Length	42.13	38.38	38.63
TOTAL VMT	1,187,876	1,219,122	1,241,196
TOTAL VHT	17,797	18,154	18,107
Average AADT	29,570	33,108	32,815
Average VMT	169,697	152,390	155,149
Average Density	12.91	14.45	14.32

Alternative 1 has the highest Average VMT and is the longest of all the alternatives. However, Alternative 2 has the single highest link volume while Alternative 3 has the highest Link VMT. This is illustrated in Table 3.4.

Table 3.4 Link Volumes and VMT			
	ALT 1	**ALT 2**	**ALT 3**
Maximum Single Link Volume for I-73 Alternative	33,075	34,893	34,200
Link Length with Maximum Single Link Volume	5.07	3.34	7.69
LINK VMT	167,688	116,541	262,998

The I-73 alternative that is the most heavily traveled will be identified by the highest Total VMT, Average AADT, Average VMT and Average Density. The alternatives were ranked in each of these categories, with the highest value being ranked first and the lowest value ranked third. The Total Length was also evaluated, with the shortest total length of the alternative was ranked first, and the longest alternative ranked third. The rankings are summarized in Table 3.5.

Table 3.5 Build Alternative Rankings			
	ALT 1	**ALT 2**	**ALT 3**
Total Length	3	1	2
TOTAL VMT	3	2	1
Average AADT	3	2	1
Average VMT	1	2	3
Average Density	3	2	1
Average Ranking	2.6	1.8	1.6
Final Ranking	3	2	1

Based on this evaluation of the use of each I-73 alternative, Alternative 3 was the highest ranked alternative, with Alternative 2 following. Alternative 1 was the lowest ranked alternative.

Travel Efficiency

Travel Time

Travel Time maps were developed for the 2030 No-Build Alternative and each I-73 alternative. The travel time maps assist in identifying which alternative allows traffic to travel farther from a fixed starting location within certain time intervals. The junction of NC 38 with I-74 was chosen as the starting locations for the travel time maps. This location was chosen since the I-74/NC 38 interchange is near the ultimate terminus of I-73 at I-74 in North Carolina.

The distance traffic could travel in sixty minutes from the junction of US 17 and SC 22 was mapped in five minute intervals using the 2030 link travel times for the No-Build Alternative and the three I-73 alternatives. These maps are shown in Figures 3-12 through 3-15 (refer to pages 21 through 24).

The Travel Time maps show that the construction of I-73 will allow traffic to reach I-95 faster, and therefore increase the distance that traffic will be able to travel when compared to the No-Build condition. In the No-Build condition (refer to Figure 3-12, page 21), traffic will be able to reach I-95 from the junction of NC 38 and I-74 in approximately 50 minutes. Depending on which I-73 alternative is constructed, the amount of time necessary for traffic to reach I-95 ranges from about 35 to 40 minutes. This is a significant time savings accruing to the public.

Table 3.6 summarizes the minimum time required to travel between the junction of I-74 and NC 38 to I-95, as illustrated in Figures 3-12 through 3-15 (refer to pages 21 through 24).

Table 3.6
Minimum Travel Time by Alternative

	No-Build	ALT 1	ALT 2	ALT 3
Minimum Travel Time (minutes)	50	40	35	35

Average Speed

For this project, the traffic benefits result from increased efficiency in travel. To measure the effectiveness of the proposed facility to improve efficiency, the Vehicle Hours Traveled (VHT) for the average annual daily traffic (AADT) on the project study area roadway network was

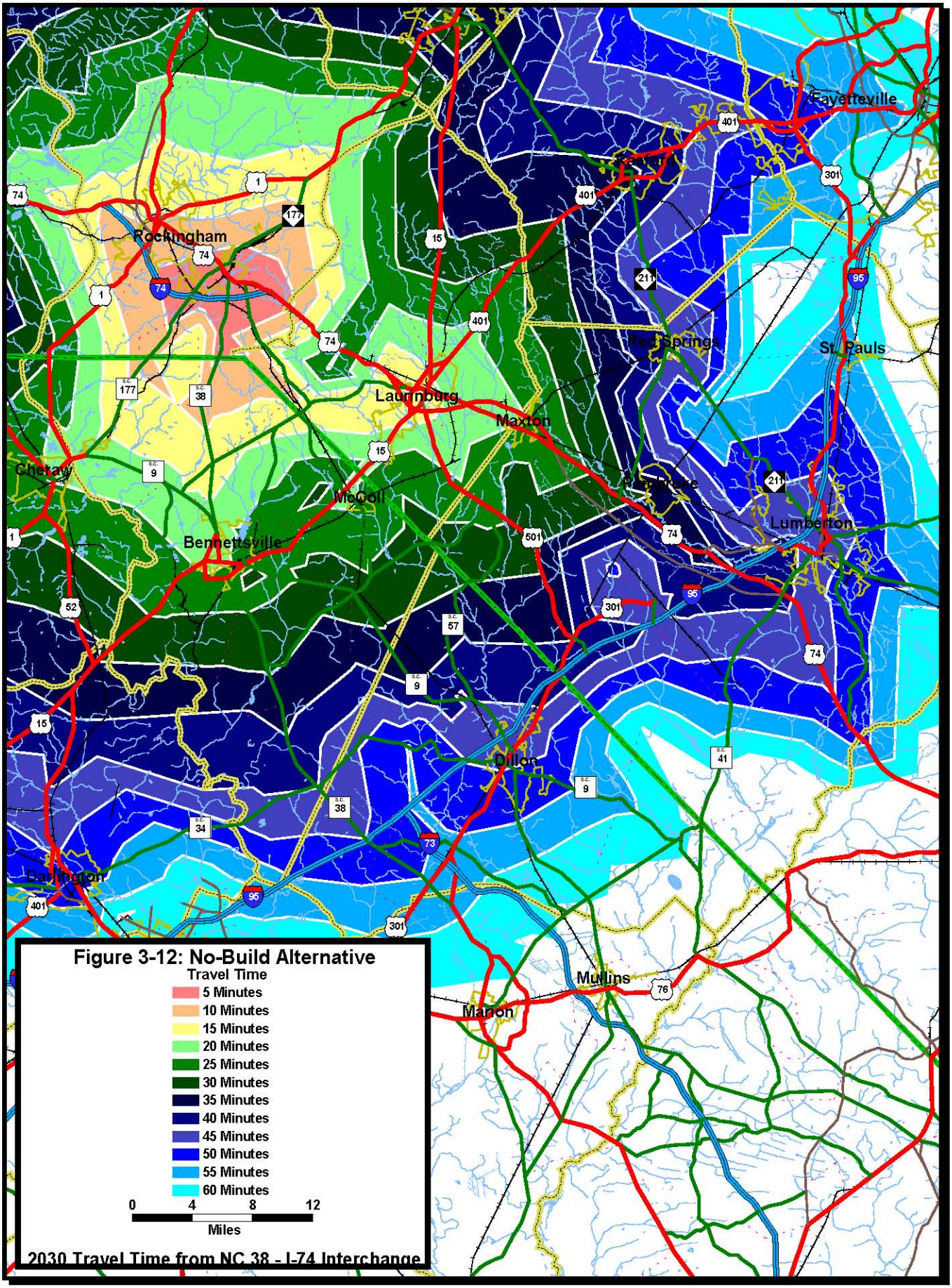
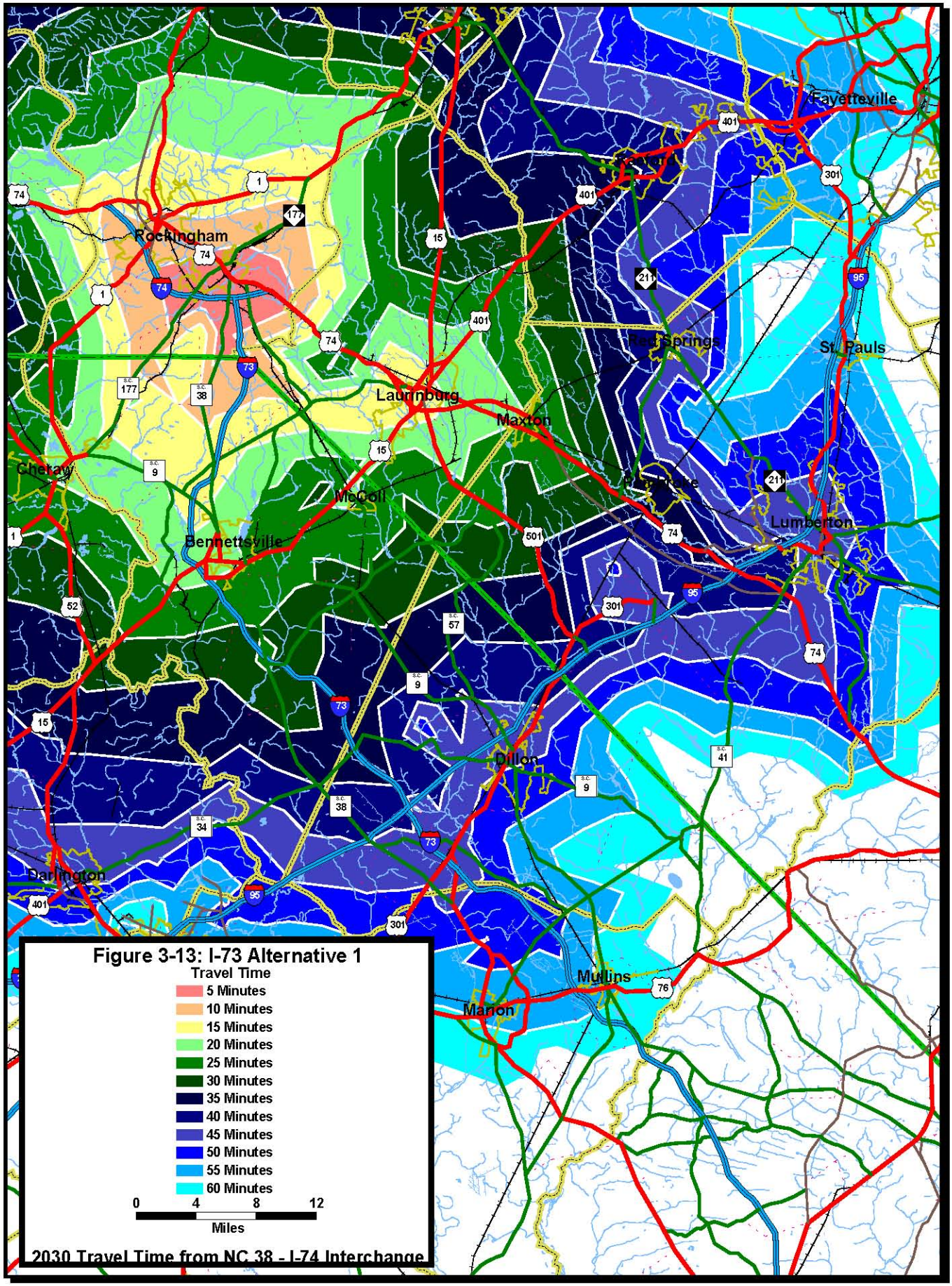
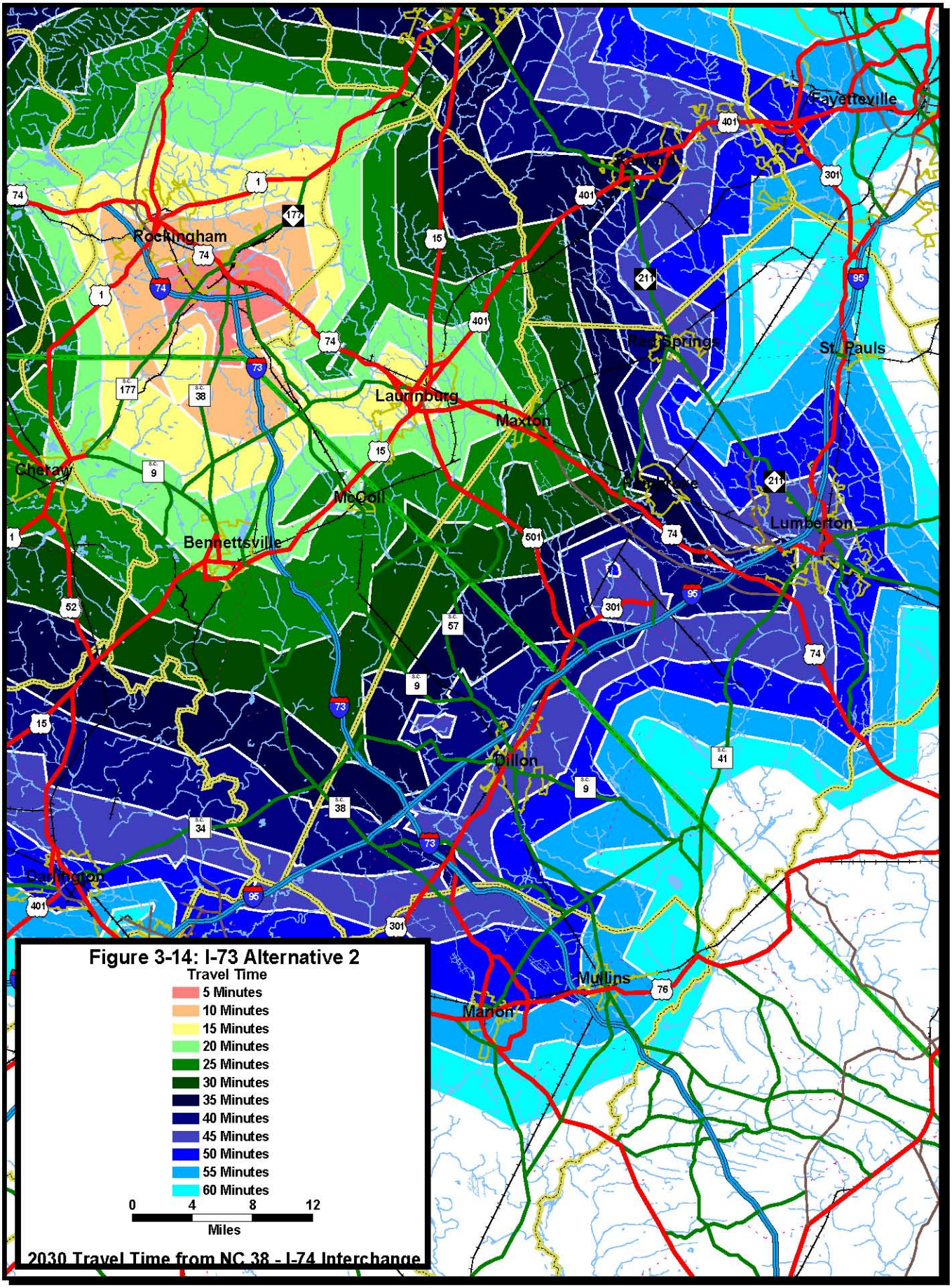


Figure 3-12: No-Build Alternative
Travel Time
5 Minutes
10 Minutes
15 Minutes
20 Minutes
25 Minutes
30 Minutes
35 Minutes
40 Minutes
45 Minutes
50 Minutes
55 Minutes
60 Minutes
0 4 8 12
Miles
2030 Travel Time from NC 38 - I-74 Interchange
Rockingham
Laurinburg
Maxton
Red Springs
St. Pauls
Lumberton
Fayetteville
Bennettsville
Cheraw
Dillon
Marion
Mullins
Darlington


Fayetteville
Rockingham
Laurinburg
Maxton
Red Springs
St. Pauls
Lumberton
Chesterfield
Bennettsville
Dillon
Darlington
Mullins
Marion
Figure 3-13: I-73 Alternative 1
Travel Time
5 Minutes
10 Minutes
15 Minutes
20 Minutes
25 Minutes
30 Minutes
35 Minutes
40 Minutes
45 Minutes
50 Minutes
55 Minutes
60 Minutes
0 4 8 12
Miles
2030 Travel Time from NC 38 - I-74 Interchange


Fayetteville
Rockingham
Laurinburg
Maxton
Red Springs
St. Pauls
Lumberton
McColl
Bennettsville
Cheraw
Dillon
Mullins
Marion
Darlington
Figure 3-14: I-73 Alternative 2
Travel Time
5 Minutes
10 Minutes
15 Minutes
20 Minutes
25 Minutes
30 Minutes
35 Minutes
40 Minutes
45 Minutes
50 Minutes
55 Minutes
60 Minutes
0 4 8 12
Miles
2030 Travel Time from NC 38 - I-74 Interchange

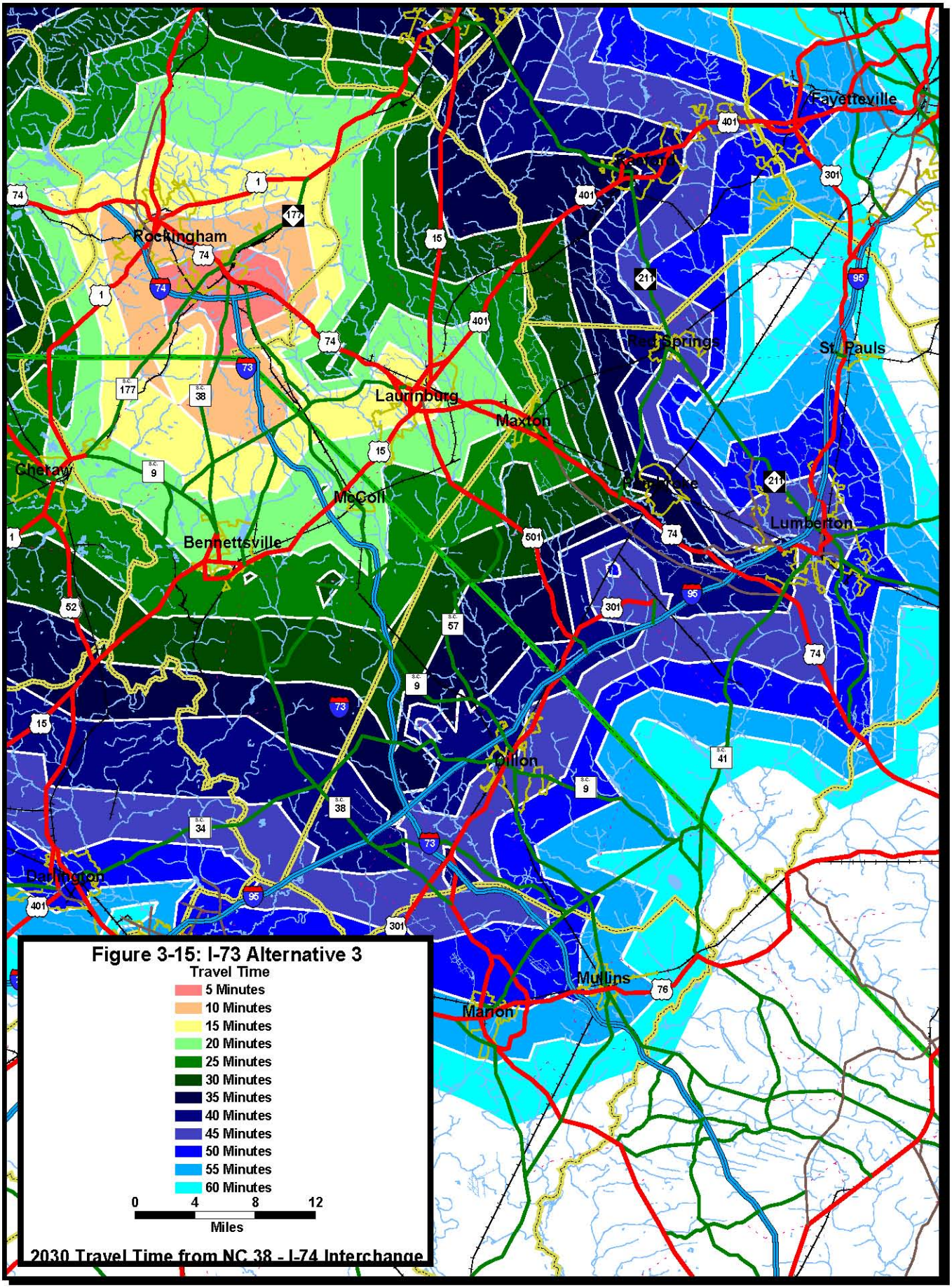


Figure 3-15: I-73 Alternative 3
Travel Time
5 Minutes
10 Minutes
15 Minutes
20 Minutes
25 Minutes
30 Minutes
35 Minutes
40 Minutes
45 Minutes
50 Minutes
55 Minutes
60 Minutes
0
4
8
12
Miles
2030 Travel Time from NC 38 - I-74 Interchange
Rockingham
Laurinburg
Maxton
McColl
Bennettsville
Cheraw
Red Springs
St. Pauls
Lumberton
Fayetteville
Dillon
Marion
Mullins
Darlington

determined for each Build Alternative (refer to Table 3.7). Typically, for a congested network, the VHT should decrease with the addition of a new roadway facility. The VHT for this project increased. This is because I-73 would induce more trips into the project study area, thus more vehicle hours of travel. These are vehicles that would alter travel routes to take advantage of the improved efficiency (shorter travel times) of I-73. The improved efficiency is demonstrated by the ratio of vehicle miles traveled (VMT) to VHT, shown in Table 3.7. This shows that the average speed of each trip in the network within the study area increased.

Table 3.7
Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT) in Network for Alternatives using Average Annual Daily Traffic Volumes (Year 2030)

Alternative	VMT	VHT	VMT/VHT
No-Build	3,381,078	59,698	56.6
1	4,062,263	67,430	60.2
2	4,247,924	69,996	60.7
3	4,168,522	68,842	60.6

Although the difference between the highest speed (60.7) and the lowest (60.2) for the entire traffic network of the Build Alternatives is slight, the difference between the No-Build (56.6) and the lowest of the Build Alternatives (60.2) demonstrates the increase in efficiency of travel. This results in a substantial savings, especially when evaluated in light of the number of miles per day traveled on the network.

This impact on the local road network is even more evident when the I-73 trips are taken out of the calculations. The reduction in VMT and VHT without I-73 shows the amount of traffic taken off the rest of the network (reduction in vehicle hours traveled) because of I-73 (refer to Table 3.8, page 26). The influence of I-73 on travel speed is shown in the drop in the average network speeds with the I-73 trips removed.

Table 3.8 Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT) in Network for Alternatives using Average Annual Daily Traffic Volumes with I-73 Traffic Removed (Year 2030)					
Alternative	**VMT**	**VHT**	**Difference from No-build**		**VMT/VHT**
			VMT	**VHT**	
No-Build	3,381,078	59,698	--	--	56.6
1	2,874,387	49,633	-506,691	-10,065	57.9
2	3,028,802	51,842	-352,276	-7,856	58.4
3	2,927,326	50,735	-453,752	-8,963	57.7

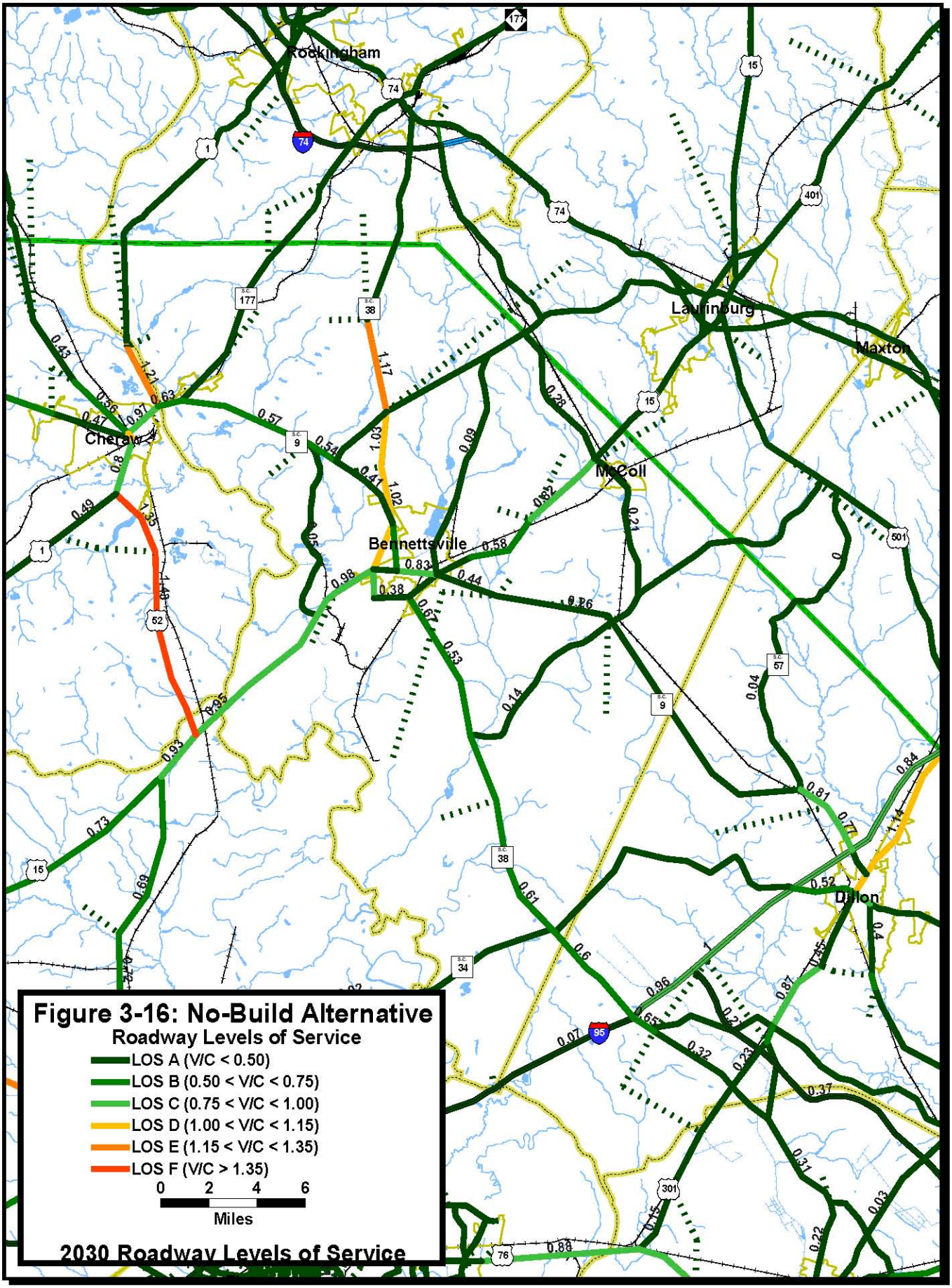
Local Network Level of Service

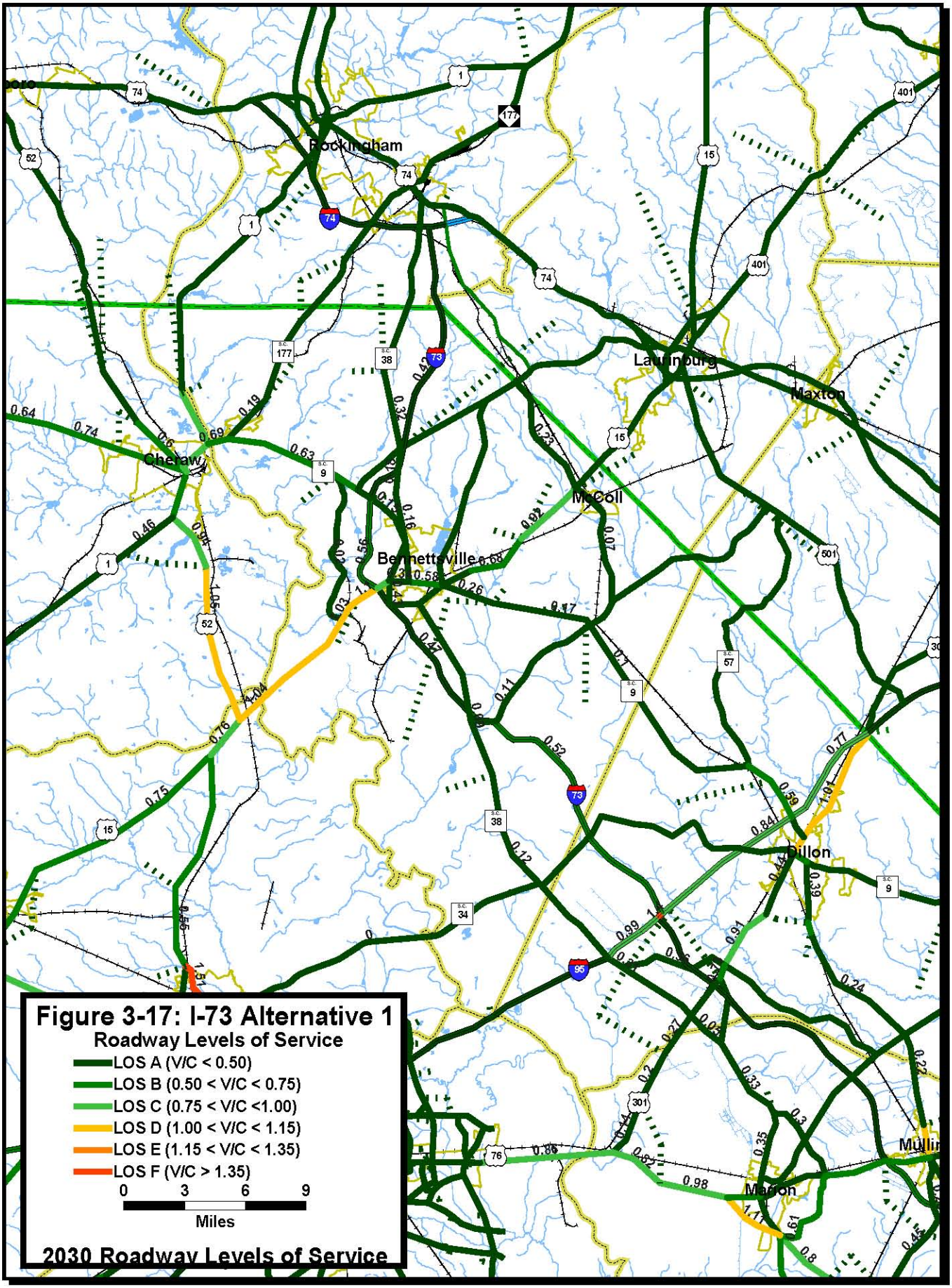
A key issue that the I-73 Build Alternatives address is providing more efficiency of the local road network by diverting through travelers (those coming from outside the I-73 North network with a destination outside the network) onto I-73. This will provide them a faster, more-direct route to their destinations.

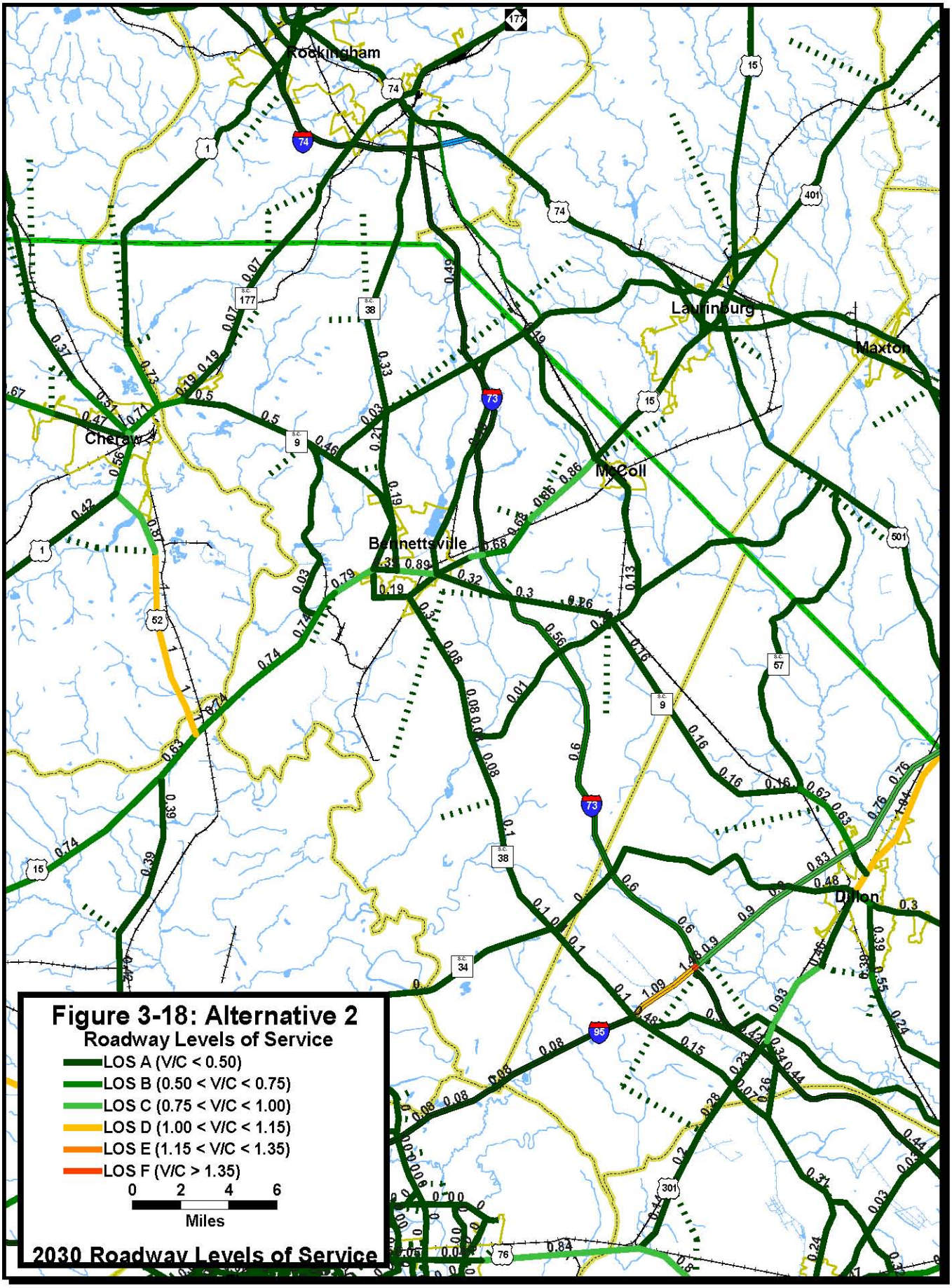
The local road network is projected to have little congestion by the Year 2030. However, as shown in Figure 3-16 (refer to page 27), segments of SC Route 38 just north of Bennettsville are projected to operate at LOS D and LOS E during the 2030 Average Daily No-Build Condition. A portion of US Route 1 north of Cheraw is projected to operate at LOS E. US Route 52 between US Route 1 and US Route 15 is projected to operate at LOS F.

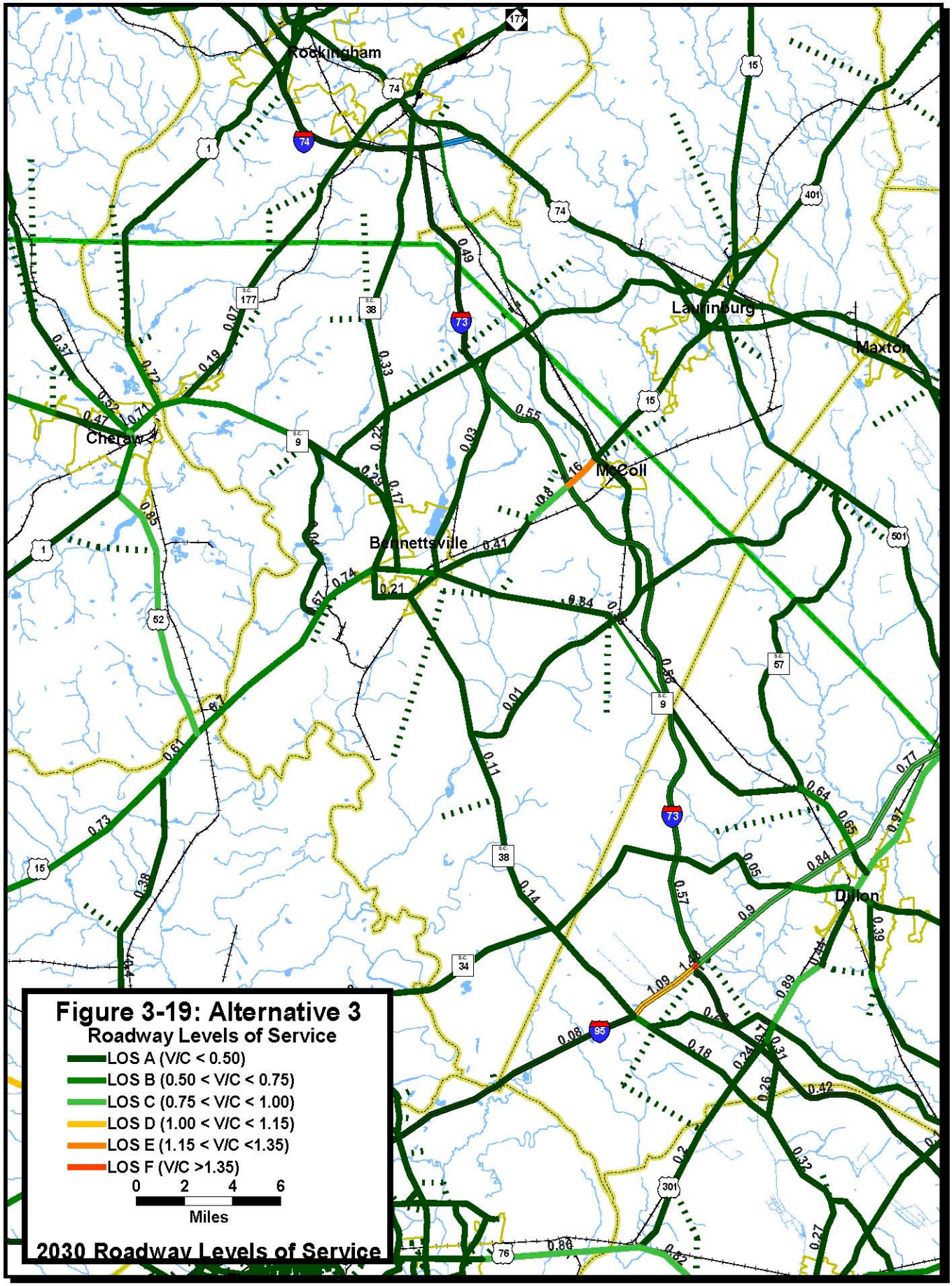
Figures 3-17 through 3-19 (refer to pages 28 through 30) illustrate the projected 2030 roadway LOS for I-73 Alternatives 1 through 3 respectively. As these figures show, the construction of any of the I-73 Build Alternatives reduces traffic volumes throughout the network. This is especially visible along SC 38 north of Bennettsville and along US 52 between US 1 and US 15 south of Cheraw.

One benefit provided by the I-73 Build Alternatives is the diversion of longer distance trips through the study area onto I-73 from the existing local roadway network. This diversion of traffic reduces volumes on the existing roads that results in more capacity that can be used by local residents and businesses for shorter distance trips.


Rockingham
Laurinburg
Maxton
Cheraw
McColl
Bennettsville
Dillon
Figure 3-16: No-Build Alternative
Roadway Levels of Service
LOS A (V/C < 0.50)
LOS B (0.50 < V/C < 0.75)
LOS C (0.75 < V/C < 1.00)
LOS D (1.00 < V/C < 1.15)
LOS E (1.15 < V/C < 1.35)
LOS F (V/C > 1.35)
0 2 4 6
Miles
2030 Roadway Levels of Service


Rockingham
Laurinburg
Maxton
Cheraw
McColl
Bennettsville
Dillon
Marion
Mullin
Figure 3-17: I-73 Alternative 1
Roadway Levels of Service
LOS A (V/C < 0.50)
LOS B (0.50 < V/C < 0.75)
LOS C (0.75 < V/C <1.00)
LOS D (1.00 < V/C < 1.15)
LOS E (1.15 < V/C < 1.35)
LOS F (V/C > 1.35)
0 3 6 9
Miles
2030 Roadway Levels of Service


Rockingham
Laurinburg
Maxton
Cheraw
McColl
Bennettsville
Dillon
Figure 3-18: Alternative 2
Roadway Levels of Service
LOS A (V/C < 0.50)
LOS B (0.50 < V/C < 0.75)
LOS C (0.75 < V/C < 1.00)
LOS D (1.00 < V/C < 1.15)
LOS E (1.15 < V/C < 1.35)
LOS F (V/C > 1.35)
0 2 4 6
Miles
2030 Roadway Levels of Service


Rockingham
Laurinburg
Maxton
Cheraw
McColl
Bennettsville
Dillon
Figure 3-19: Alternative 3
Roadway Levels of Service
LOS A (V/C < 0.50)
LOS B (0.50 < V/C < 0.75)
LOS C (0.75 < V/C < 1.00)
LOS D (1.00 < V/C < 1.15)
LOS E (1.15 < V/C <1.35)
LOS F (V/C >1.35)
0 2 4 6
Miles
2030 Roadway Levels of Service

CHAPTER 4 - CONCLUSIONS

The results of the analyses of the various I-73 Build Alternatives under projected 2030 Average Daily traffic conditions do not point to a single I-73 Build Alternative that is best suited for average traffic conditions. The analyses show that all of the proposed I-73 Build Alternatives would provide better traffic conditions than the No-build alternative. Each of the three I-73 Build Alternatives would carry a large number of vehicle-miles of travel throughout the study area, and would permit traffic to travel more quickly to and from I-95 than conditions would permit under the projected 2030 No-build traffic conditions. The analyses also indicate that all three of the proposed I-73 Build Alternatives would reduce vehicle-miles and vehicle-hours of travel of the rest of the existing No-Build network by diverting longer distance trips, especially those related to recreational and vacation travel, onto I-73. This will help to preserve the capacity of the existing roadway network for local trips made within the study area.