TRAFFIC SEPARATION STUDY

for the

CITY OF LEXINGTON, NORTH CAROLINA

7TH AVENUE AND 15TH AVENUE

Prepared by
Parsons Brinckerhoff
434 Fayetteville Street, Suite 1500
Raleigh, North Carolina 27601

for the

North Carolina Department of Transportation Rail Division Engineering and Safety Branch Raleigh, North Carolina

October 2011

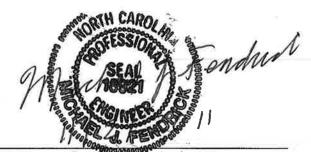
TRAFFIC SEPARATION STUDY

for the

CITY OF LEXINGTON, NORTH CAROLINA

October 2011

Documentation Prepared by Parsons Brinckerhoff, Inc.:



Michael J. Fendrick, P.E., Project Manager Parsons Brinckerhoff, Inc.

For the North Carolina Department of Transportation:



Sandra Stepney, P.E., C.P.M., Project Manager

Table of Contents

EXEC	UTIV	'E SUMMARY	1
1.0	INT	RODUCTION	3
	1.1	Preliminary Phase	5
	1.2	TSS Study Phase	5
	1.3	Implementation Process	5
2.0	PRE	VIOUS STUDIES	6
	2.1	Lexington West Bypass (NCDOT TIP No. U-2545)	6
	2.2	Lexington Depot District Master Plan	6
3.0	DAT	TA COLLECTION	7
4.0	SAF	ETY AND MOBILITY ISSUES AND ANALYSIS	9
	4.1	Exposure Index	9
	4.2	Accident Analysis	. 11
	4.3	Delay and Crossing Level of Service Analysis	. 11
	4.4	Diversion Delay and Redundant Crossing Analysis	. 12
	4.5	Vehicles Queuing Across Railroad Tracks	. 12
	4.6	Traffic Signal Preemption	. 13
	4.7	Humped Crossings	. 13
	4.8	Grade Crossing Condition – Geometry	. 13
	4.9	Grade Crossing Condition – Crossing Surface and Pavement	. 14
	4.10	Grade Crossing Condition – Sight Distance	. 14
	4.11	Vehicles Driving Around Automated Gates	. 15
	4.12	Signs and Markings	. 15
	4.13	Railway Gates	. 16
5.0	ALT	ERNATIVES EVALUATED	. 16
	5.1	Crossing Protection/Safety Improvements – Near-Term Options	16
	5.2	Mid-Term and Long-Term Alternatives (including Grade Separation Structures)	. 17

		5.2.1	7th Avenue Alternatives Considered	17
		5.2.2	15th Avenue Alternatives Considered	19
6.0	PUI	BLIC IN	VOLVEMENT	22
	6.1	Stakeh	nolders Meetings	22
		6.1.1	Stakeholders Meeting 1	
		6.1.2	Stakeholders Meeting 2	24
	6.2	Public	Workshop	25
	6.3	Newsl	etters	26
	6.4	Lexing	gton City Council Presentation and Public Hearing	26
APP	ENDI	X A: CC	ONCEPTUAL CONSTRUCTION COST ESTIMATES	A-1
APP	ENDI	X B: PU	BLIC INVOLVEMENT MATERIALS	B-1
Lis	st of	Tab	oles	
		-	of Near-Term Recommended Improvements	
		-	of Long-Term Recommended Improvementssing Data	
			Analysis Factors	
		0	Capacity Manual LOS Thresholds for Average Delay	
			Delay Analysis for Impact of Closing At-Grade Crossings	
			provements for 7th Avenue Grade Crossing	
Table	e 8. Sa	nfety Im	provements for 15th Avenue Grade Crossing	17
Lis	st of	f Figu	ures	
Ei ~	ma 1 (24d ^ -	woo More	1
			rea Mapue Alternatives	
_			nue Alternatives	
0-				

Executive Summary

In a joint cooperative effort with the City of Lexington, the North Carolina Department of Transportation has completed a Traffic Separation Study (TSS) of the existing 7th Avenue and 15th Avenue at-grade railroad crossings of the Norfolk Southern Railroad in the City of Lexington, North Carolina. The purpose of the study was to evaluate these existing public street crossings to determine the need for improvements to and/or the elimination of the at-grade crossings.

Evaluation of Existing Crossings

The improvements that were considered for these crossings as part of the study included installation of additional crossing safety equipment, crossing closures, and grade separations, as well as projects needed to mitigate any crossing closures. A detailed review and assessment of the crossings was conducted based on a combination of available data, a field review, and evaluation of multiple criteria as summarized in Chapter 3 and Chapter 4.

Development of Alternatives

Utilizing the data and analysis compiled in the evaluation of existing crossings, the study attempted to identify near-term, mid-term, and long-term recommendations for improvements at these crossings. As a result, potential safety improvements were identified for implementation in the near-term at 15th Avenue. In addition, long-term alternatives were identified for both 7th Avenue and 15th Avenue including consideration of grade separations. Note, however, that there is currently no funding available for long-term improvements. As funding becomes available, future studies will be conducted to implement the long-term recommendations generated by the study. The evaluation of the project alternatives is summarized in Chapter 5.

Stakeholder and Public Involvement Process

The Lexington TSS included two stakeholder meetings (March 1, 2011 and June 21, 2011) with representatives of local government agencies to gather information and receive feedback during the alternatives development process. In addition, a public informational workshop was held on May 3, 2011 to inform the public about the study and receive public comments on the alternatives under consideration. A public hearing was held on August 8, 2011 by the City of Lexington to present the study alternatives and recommendations in order to solicit final comments from the public. A summary of the public involvement process is included in Chapter 6 of this document.

Recommendations

Based upon the findings of this report and the input received from the City of Lexington, NCDOT Rail Division, local stakeholders, and the general public, the

proposed near-term, mid-term, and long-term recommendations for this study are summarized in Table 1 and Table 2. The final recommended alternatives process is discussed in Chapter 7 of this document.

Table 1. Summary of Near-Term Recommended Improvements

Crossing	Time-Frame	Proposed Improvement	Estimated Cost
7 th Avenue	Near-Term	 Prepare marking and signing improvements. 	\$5,000
15 th Avenue	Near-Term	 Prepare marking and signing improvements. Close eastbound approach of Salisbury Street to 15th Avenue adjacent to railroad track crossing. 	\$10,000 - \$100,000

Table 2. Summary of Long-Term Recommended Improvements

Crossing	Time-Frame	Proposed Improvement	Estimated Cost
7 th Avenue	Long-Term	Construct grade separation using either Alternative 1A or 1B alignment and close existing 7 th Avenue at-grade crossing.	\$8.3 to \$9.0 million
15 th Avenue	Long-Term	Construct grade separation using Alternative 2E alignment and close existing 15 th Avenue at-grade crossing.	\$5.3 million

1.0 Introduction

Every year more than 450 persons are killed and nearly 500 injured nationwide as a result of accidents between vehicles and trains. During the year 2010, North Carolina recorded 49 rail-highway grade crossing collisions that resulted in 1 death and 37 injuries. The North Carolina Department of Transportation (NCDOT) has developed the Traffic Separation Study (TSS) as an effort to pursue a more systematic approach to crossing safety. Traffic Separation Studies are a comprehensive evaluation of traffic patterns and road usage for an entire municipality or region that determines the need for improving and/or eliminating public grade crossings.

NCDOT and the City of Lexington entered into a municipal agreement to complete a TSS examining two at-grade crossings – 7th Avenue and 15th Avenue. This report summarizes the results of this TSS. For reference, a study area map is shown on Figure 1.

There are two rail lines that run through the City of Lexington. The shared North Carolina Railroad (NCRR)/Norfolk Southern Railroad (NS) tracks run southwest to northeast through the middle of the City, roughly parallel to and south of South Main Street through the central business district. The Winston-Salem Southbound (WSSB) rail line runs north to south through the City just to the west of the central business district. The two lines cross at a grade-separation just east of the South Salisbury Street/East 13th Avenue intersection on the west side of the central business district. There is a connecting track between the two lines.

While there are at least nine at-grade public street crossings for the WSSB/CSX rail line as it traverses the Lexington area, there are only three at-grade public street crossings for the NCRR/NS rail line in the Lexington area. These three at-grade crossings are (from east to west): 7th Avenue, 15th Avenue, and Prospect Street.

The Prospect Street crossing is planned to be closed as part of the West Bypass (NCDOT TIP No. U-2545) with the Bypass providing a new grade-separated railroad crossing to the southwest of the existing Prospect Street crossing. Prospect Street will be extended to the southwest (i.e., Future Connector as shown on Figure 1) to intersect the Henry Link Road, which will intersect with the Bypass, thereby providing access to the West Bypass grade-separated rail crossing. Once the West Bypass and these other improvements are completed, 7th Avenue and 15th Avenue will be the only at-grade public street crossings of the NCRR/NS rail line in the Lexington Area.



Crossing has 3 tracks-2 mainline & 1 side track

Traffic Conditions: > 2,600 vehicles per day

- **Land Uses Served**
- Future Depot project (including train station)
- City maintenance facilities

2 accidents since 2001



15th Avenue At-Grade Crossing

Existing Conditions:

- Crossing gates are in place
- Intersections immediately adjacent to crossing:
- 15th Avenue at Copley Street/Moore Drive
- 15th Avenue at Salisbury Street Crossing has 2 tracks-2 mainline
- **Traffic Conditions:**
- > 4,250 vehicles per day 4 accidents since 2001
- **Land Uses Served**

Multiple houses/neighborhoods in SW Lexington



- > 32 freight trains
- 6 switching/local trains Train speeds through Lexington
- Up to 79 mph for passenger trains > Up to 50 mph for freight trains
- Lexington has 6 crossings of Norfolk Southern Railway Tracks > 3 grade separations-Cotton Grove Road, Center Street,
- and 1-lane tunnel at 3rd Avenue
- > 3 at-grade crossings-7th Avenue, 15th Avenue, and Prospect Street
- Proposed U-2545 West Bypass would replace Prospect Street at-grade crossing with new grade separation

Diversion Effects of RR **Crossing Closures**

If 7th Avenue RR Crossing Closed:

- Primary connection is Main Street to Talbert Blvd
- Two primary alternate routes:
- Cotton Grove Road (bridge) Center Street (bridge)
- If 15th Avenue RR Crossing Closed:
- Primary connection is Main Street to Copley St/Moore Drive neighborhoods > One primary alternate route: Hickory Street to Cotton Grove Road (bridge)

Additional Travel Time & Distance if Crossing Closed

dditional Travel Time & Distance if Crossing Closed				
Diversion to	15th Avenue	7th Avenue		
Main Street west	1 mile, 4-6 minutes (via Hickory Street to Cotton Grove)	0 miles, 0-2 minutes (via Cotton Grove)		
Main Street near crossing	0.7 mile, 4-6 minutes (via Hickory Street to Cotton Grove)	0.7 mile, 2-4 minutes (via Cotton Grove)		
Main Street east	0.4 mile, 0-2 minutes (via Hickory Street to Cotton Grove)	0.7 mile, 2-4 minutes (via Cotton Grove)		

FIGURE



U-2545 WEST BYPASS PROPOSED BRIDGE



DEPOT DISTRICT

EXISTING AT-GRADE CROSSING

U-2545 WEST BYPASS:

CROSSING LONG-TERM

- 4-LANE ROAD ON NEW ALIGNMENT - NEW RR GRADE SEPARATION - PROVIDE NEW CONNECTOR TO

PROSPECT STREET & CLOSE PROSPECT STREET AT-GRADE

LEXINGTON TRAFFIC SEPARATION STUDY PROJECT STUDY AREA EXISTING CONDITIONS



This Lexington TSS evaluates the 7th Avenue and 15th Avenue at-grade crossings of the NCRR/NS rail line in the City of Lexington to determine the need for improvements to and/or the elimination of the at-grade crossings. The improvements that were considered to these crossings as part of the study included installation of additional crossing safety equipment, crossing closures, and grade separations, as well as projects needed to mitigate any crossing closures. The study attempted to identify near-term, mid-term, and long-term recommendations for improvements at these crossings, although there is currently no funding for long-term improvements. As funding becomes available, future studies will be conducted to implement the long-term recommendations generated by the study.

The Lexington TSS process has three phases, as discussed in the following sections.

1.1 Preliminary Phase

NCDOT and the City of Lexington have contractually agreed to make a "best effort" to approve and implement improvements that will be identified by the TSS. NCDOT then selected the engineering consulting firm to conduct the TSS.

1.2 TSS Study Phase

The engineering consultant evaluates the existing crossing conditions, average daily traffic (both trains and vehicles) and socioeconomic impact of potential closings for the public crossings under study and prepares recommendations for NCDOT and local officials to review. Near-term recommendations (within 3-5 years) may include installation of flashing lights and gates, enhanced devices such as four-quadrant gates and longer gate arms, installation of concrete or rubber crossings, crossing closures, median barrier installation, pavement markings, roadway approach modifications and crossings realignments, connector roads, roadway realignments, relocations of existing crossings to safer locations and feasibility studies to evaluate potential grade-separation locations. Mid-term recommendations (within 5 to 7 years) may include relocations of existing crossings, realigning roadways, and crossing closures. Long-term recommendations (within 7 to 15 years) may include grade separations, construction of connector roads, and crossing closures. Recommendations are presented to the public for comment.

1.3 Implementation Process

Upon acceptance of the TSS recommendations, NCDOT officials will identify potential funding sources for improvements, develop project agreements with the City of Lexington, coordinate project design, coordinate crossing closures with railroad and state highway officials, and oversee project implementation. City staff assists with project development, utility relocation, and right-of-way acquisition, if needed.

2.0 Previous Studies

2.1 Lexington West Bypass (NCDOT TIP No. U-2545)

The Design Public Hearing Map for the Lexington West Bypass (NCDOT TIP No. U-2545) was obtained and analyzed in the development of the proposed crossing alternatives for the Lexington TSS. In addition to the West Bypass, the project also includes a local road connection from existing Prospect Street to the West Bypass.

The extension of Prospect Street to the Bypass is included to allow for the planned closing of the Prospect Street crossing over the Norfolk Southern Railroad tracks. The Prospect Street crossing will be closed once the Bypass is completed. Traffic needing to access South Main Street from the Prospect Street vicinity will use the Prospect Street extension to access the new grade-separated railroad crossing on the Bypass to the southwest of the existing Prospect Street crossing.

The final approved alignments for the West Bypass and the Prospect Street extension are shown on Figure 1. These alignments also were shown at the public workshop so that the public could consider this information while making comments on the preliminary alternatives for the Lexington TSS.

For the TSS, two proposed crossing alternatives for 15th Avenue that would extend existing roads (i.e., Bridge Street with Alternative 2B, or Farmer Avenue with Alternative 2C) to Prospect Street were developed taking into account the future location of the West Bypass, as well as the future extension of Prospect Street to the Bypass. This additional extension to Prospect Street would allow traffic from the 15th Avenue vicinity to access the new railroad crossing on the Bypass if the 15th Avenue crossing were closed.

2.2 Lexington Depot District Master Plan

The City of Lexington is considering redevelopment of the Lexington Train Depot area, much of which consists of the abandoned Lexington Home Brands furniture factory. The City recently issued a Request for Proposals (RFP) for a master plan for the Depot District, which includes all of the abandoned industrial buildings immediately to the northeast of the 7th Avenue crossing. The master plan will include an analysis to determine which of the abandoned buildings, all owned by the City, should be saved and which should be demolished. The City plans to select a consulting firm to prepare the master plan during the summer of 2011, with the master plan taking approximately one year to complete. The proposed Depot District is shown on Figure 1.

The City has already completed a study evaluating the historic potential of the buildings within the proposed Depot District. The redeveloped Lexington Train Depot will be a multi-modal facility, so many different transportation modes will converge at the train station. The new train station platform is currently planned between 3rd Avenue and 4th Avenue.

The City's plans for the Depot District were considered in the development of the two proposed crossing alternatives for 7th Avenue (Alternatives 1A and 1B). NCDOT will continue to coordinate plans for any proposed improvements at the 7th Avenue crossing with the City's plans for and progress on the Depot. As part of the study process, it has been recognized that the Depot District planning process requires flexibility in defining future roadway connections with an access and circulation plan being identified as part of the year-long study.

3.0 Data Collection

As a preliminary analysis step, data collection was conducted to summarize roadway and railroad data at both the 7th Avenue and 15th Avenue crossings. This data is summarized in Table 3.

Table 3. Rail Crossing Data

Data Item	Source	7 th Avenue	15 th Avenue
Crossing Number	NCDOT Rail	722 306Y	722 303D
Railroad Milepost	NCDOT Rail	317.21	317.99
Railroad	NCDOT Rail	NCRR/ Norfolk Southern Railroad	NCRR/ Norfolk Southern Railroad
Street Name	NCDOT Rail	East 7 th Avenue	East 15 th Avenue
Street Classification	NCDOT Rail	Urban Collector	Urban Collector
Warning Devices	NCDOT Rail and Site Visit	Two quadrant crossing longer gates and median separator	Four quadrant crossing gates
Land Use	Site Visit and Coordination with City	Residential, commercial, and municipal services to the south; industrial and commercial to the north	Residential to the south; residential and commercial to the north
Annual Average Daily Traffic (AADT)	NCDOT Counts	2,600 vpd (in 2011)	4,250 vpd (in 2011)

7

Table 3 (concluded). Rail Crossing Data

Data Item	Source	7 th Avenue	15 th Avenue
Estimated Percent Trucks	USDOT Crossing Inventory Form	1%	1%
24-Hour Train Volume	NCDOT Rail	46	46
Accident History	City of Lexington Accident Reports & NCDOT Rail	2 accidents since 2001 (1 fatal involving train, 1 PDO)	4 accidents since 2001 (4 PDO, 2 track related, 1 gate related, none involved train)
Transit Route	Stakeholder Meeting	Paratransit only (no fixed route)	Paratransit only (no fixed route)
School Bus Route	USDOT Crossing Inventory Form	Yes	Yes
Truck Route	North Carolina Truck Network Map	No	No
Sidewalk/Pedestrian Access	Site Visit	No sidewalks on 7 th Avenue at railroad crossing, Carolina Avenue has sidewalk to south of Talbert Blvd, no sidewalks on Talbert Blvd near 7 th Avenue	None in vicinity of crossing
Economic Impact if Closed	Stakeholder Input	Potential impact on long-term success of Depot District if grade separation not provided to replace	Minimal

4.0 Safety and Mobility Issues and Analysis

A detailed field evaluation of both the 7th Avenue and 15th Avenue crossings was conducted on March 30, 2011, to determine the existing conditions at the crossings. The field evaluation also included an investigation of multiple issues related to the interaction of roadway and railroad traffic. Based on the results of this field evaluation, as well as an analysis of the other crossing data collected, potential safety issues and mitigating enhancements at the crossings were identified and are discussed in the following sections. In addition, traffic mobility issues at the crossings also were identified and are discussed in the following sections. The key results of these analyses are summarized in Table 4.

4.1 Exposure Index

The exposure index is the basis of the NCDOT Rail Division's Rail Grade Separation Guidelines. The guidelines state the following:

- Separations should be considered in rural areas when the exposure index is 15,000 or more.
- Separations should be considered in urban areas when the exposure index is 30,000 or more.

The exposure index is defined as the "product of the number of trains per day and the projected average daily highway traffic."

The 7th Avenue crossing has a 2011 AADT of 2,600 vpd and 46 trains per day use the crossing, which leads to an exposure index of 119,600. The 15th Avenue crossing has a 2011 AADT of 4,250 vpd and 46 trains per day use the crossing, which leads to an exposure index of 195,500. In both cases, the exposure index is over the guideline's threshold of 30,000 for grade separations in urban areas. Other factors that need to be considered in the feasibility of grade separation include accident history, topography, adjacent land use, construction impacts, and cost.

Table 4. Crossing Analysis Factors

Report Section	Safety/Mobility Issue	Criteria/Source of Data	7 th Avenue Crossing	15 th Avenue Crossing
4.1	Exposure Index	Greater than 30,000 in urban area indicates potential grade separation	119,600	196,500
4.2	Accident Analysis	Data provided by City of Lexington	2 accidents since 2001 (1 fatal involving train, 1 PDO)	4 accidents since 2001 (4 PDO, 2 track related, 1 gate related, none involved train)
4.3	Delay (LOS at crossing)	NCDOT Rail Spreadsheet	LOS B	LOS B
4.4	Diversion Delay Analysis (extra time if at-grade crossing closed)	Network Analysis	0-2 minutes to west 1-3 minutes to east	4-6 minutes to west 1-3 minutes to east
4.4	Redundant Crossing Analysis	Site Visit and Network Analysis	Yes	No
4.5	Queuing	Impacts to adjacent intersections	No cases observed impacting adjacent intersections.	Crossing geometry and very close spacing results in queues impacting adjacent intersections.
4.6	Traffic Signal Preemption	If signal spaced less than 200 feet from crossing – required.	Not required since Talbert Road signal located 300 feet from crossing.	Not Applicable
4.7	Humped Crossing	Site Visit	No.	No.
4.8	Crossing Condition – Geometry	Site Visit	Isolated crossing with 3 tracks	Multiple roadway approaches (5) converge at crossing; 2 tracks
4.9	Crossing Surface Condition	Site Visit	Good at mainline (2 tracks); poor at siding (1 track).	Good at NB mainline (1 track); fair at SB mainline (1 track) because of drainage issue.
4.10	Crossing Condition – Sight Distance	Site Visit	Poor sight distance	Fair to poor sight distance
4.11	Vehicles Driving Around Automated Gates	Accident Data	Of 2 accidents, 1 involved driver violating gate (fatal accident with train)	Of 3 accidents, 1 involved driver violating gate (PDO)
4.12	Need for Enhanced Warning Devices (i.e., Signs and Markings)	Site Visit	Signing and marking recommended in near- term	Signing and marking recommended in near- term
4.13	Railway Gates	Site Visit	Sealed with gate and delineators on east. Sealed with longer gate on west.	Sealed with 4 quadrant gates.

4.2 Accident Analysis

A accident analysis was conducted examining all available accident reports from the City of Lexington Police Department for the 7th Avenue and 15th Avenue railroad grade crossings. This data was supplemented by information from NCDOT Rail back to 2001. This analysis indicated that two accidents had occurred at the 7th Avenue crossing dating in the past ten years. Three accidents were documented at the 15th Avenue crossing in the past ten years. The following observations were noted regarding the accidents:

- 7th Avenue (2 accidents 1 fatal, 1 property damage only (PDO)
 - One accident involved a driver ignoring flashers, crossing the tracks, and getting hit by a train.
 - One accident involved a rear- end accident when a driver backed up when flashers started as a train approached.
- 15th Avenue (4 accidents 4 PDO)
 - One accident involved a driver getting confused and turning onto the railroad tracks.
 - A second accident involved a driver driving too fast and losing control during a turning movement over the tracks.
 - One accident involved a collision between two vehicles as one vehicle tried to pass the gates during a malfunction of the flashers and gates.
 - Limited information is available for a fourth accident dating back to 2001.

4.3 Delay and Crossing Level of Service Analysis

Level of Service is a measure of the operational efficiency of the at-grade crossing. It is determined using procedures from the *Highway Capacity Manual* procedures. Level of service is expressed as a letter ranging from A (free flowing) to F (severely congested) and is determined using the average delay for all vehicles during the peak hour. Table 5 summarizes the relationships between average delay and level of service.

Table 5. Highway Capacity Manual LOS Thresholds for Average Delay

Level of Service	Average Delay/Vehicle (seconds)
A	≤ 5.0
В	>5.0 to ≤15.0
С	>15.0 to ≤25.0
D	>25.0 to ≤40.0
E	>40.0 to ≤60.0
F	>60.0

To quantify changes in traffic delays, several values were calculated for each of the atgrade crossings. These formulas were modified as needed for this project. The analysis examines traffic volumes on the roadway, the frequency of trains, and both the length and speed of trains at the crossing.

The level of service (LOS) for each crossing was determined based on these values and the *Highway Capacity Manual* procedures. Based on the analysis, the 7th Avenue crossing operates at LOS B and the 15th Avenue crossing operates at LOS B under existing conditions.

4.4 Diversion Delay and Redundant Crossing Analysis

A diversion delay analysis was conducted to determine the additional travel time that would be encountered if the existing at-grade crossings were to be closed and not replaced. The analysis examined trips originating on the south side of the tracks and bound for points located on Main Street to the west (near I-85) and to the east (near Center Street). This analysis is summarized in Table 6.

Table 6. Diversion Delay Analysis for Impact of Closing At-Grade Crossings

	7 th Avenue	15 th Avenue
Additional Mileage and Time to West	0 mile	1 mile
(Main Street at I-85)	0-2 minutes	4-6 minutes
Additional Mileage and Time to East	0.3 mile	0.3 mile
(Main Street at Center Street)	1-3 minutes	1-3 minutes

As part of this analysis, a review of the redundancy of the roadway network was conducted. If 7th Avenue were closed, traffic would be diverted to either Cotton Grove Road crossing (approx. ½ mile) or Center Street (approx. ½ mile). If 15th Avenue were closed, traffic would be diverted to Cotton Grove Road (approx. ¼ mile). In both cases the actual travel distances would be greater since the distances shown are measured along the railroad tracks, and do not follow the roadway network.

4.5 Vehicles Queuing Across Railroad Tracks

Both 7th Avenue and 15th Avenue were examined for the potential of queuing into adjacent intersections as a result of train crossings and gate closures. At neither crossing were queues observed during the field observations that blocked nearby intersections. However at 15th Avenue the presence of even a couple queued vehicles would introduce delays for vehicles at the intersection of 15th Avenue at Salisbury Street, as well as along

Copley Street and Moore Drive, since the railroad crossing is located immediately adjacent to these intersections.

4.6 Traffic Signal Preemption

Standard practice as cited in the 2009 Manual on Uniform Traffic Control Devices (MUTCD) requires that signalized intersections within 200 feet of an at-grade rail crossing must utilize signal preemption tied into the railroad crossing. Since, the 7th Avenue section is located slightly further than 300 feet from the traffic signal at Talbert Boulevard with 7th Avenue/Carolina Avenue, signal preemption is not required. No traffic signals are located on any approaches to the 15th Avenue crossing.

4.7 Humped Crossings

A "humped" crossing generally exists where the elevation of the railroad is significantly higher than the crossing roadway which causes vehicles to ascend over one side of the tracks and descend on the other. NCDOT is currently refining the definition of a humped crossing specifically examining the maximum rate of rise at the crossing.

Taking into account these issues, a field review was conducted for both the 7th Avenue and 15th Avenue crossings that concluded that both crossings introduce some discomfort at normal speeds necessitating slowing down. In addition, the NCDOT database indicated that both of these crossings were humped. As technical definitions are being revised, however, NCDOT may reclassify both crossings at a later date as part of refinements to the definition of a humped crossing..

4.8 Grade Crossing Condition - Geometry

As part of the field review, the geometry of the railroad tracks at the two grade crossings was also evaluated. Key items included:

- 7th Avenue
 - Tracks are tangent through the crossing.
 - Three tracks go across 7th Avenue, including 2 main tracks and 1 short siding.
 - Approximately 750 feet north of the crossing, the two main tracks begin a right hand curve.
 - The railroad has a descending grade going north.
 - 7th Avenue has a slight grade from the west.
 - 7th Avenue on the east side is a steep uphill grade on approach to the crossing from Talbert Boulevard.
 - 7th Avenue on the east side has a left hand curve approaching the crossing.

- 15th Avenue
 - Tracks are in a curve with a vertical grade.
 - Two main line tracks go across 15th Avenue.
 - There are 5 roadway approaches to the crossing:
 - o 15th Avenue and two directions of Salisbury Street on the west.
 - o Copley Street and Moore Drive on the east.

4.9 Grade Crossing Condition - Crossing Surface and Pavement

As part of the March 30, 2011 field visit, a detailed visual inspection of the tracks at both the 7th Avenue and 15th Avenue crossings was conducted. The issues identified were maintenance related and, therefore, not eligible for funding related to TSS identified improvements. The following items were noted with respect to pavement conditions at the two crossings:

- 7th Avenue 3 tracks
 - Siding: 32 foot long 131# rail, timber, and asphalt Poor condition.
 - Main northbound line: 32 foot long 132# rail, rail seal, and asphalt Good condition.
 - Main southbound line: 32 foot long 132# rail, rail seal, and asphalt Good condition.
- 15th Avenue 2 tracks
 - Main northbound line: 40 foot long 132# rail, rail seal, and asphalt Good condition.
 - Main southbound line: 40 foot long 132# rail, rail seal, and asphalt Fair condition because of drainage issue on southeast corner.

4.10 Grade Crossing Condition - Sight Distance

In addition, sight distance was evaluated for each crossing location. The findings of this review indicated:

- 7th Avenue Good sight distance
 - In both directions, the gates and crossing warning signs have high visibility.
 - From Talbert Boulevard, the approach to the tracks is up a steep hill and there is minimal sight distance.
 - From Main Street and Salisbury Street, a building is located adjacent to the roadway up to the track crossing on the east side of the road severely limiting sight distance. On the west side of the road, a building, vegetation, and trees limit sight distance.

- 15th Avenue Good sight distance
 - In both directions, the gates and crossing warning signs have high visibility.
 - Complicated by five roadway approaches to the railroad crossing.
 - Moore Drive parallels track from the south, and drivers cannot see train approaching from the south.
 - Copley Street approach has an uphill grade and fair sight distance at crossing.
 - Salisbury Street parallels the track from north and south, and drivers can only see train from opposing direction.
 - 15th Avenue from the west side (i.e., from Main Street) has fair sight distance.
 - Tracks are in a left-hand curve going northbound exacerbating sight distance.

At both crossings, gates are in place and highly visible. The provision of the gates provides positive mitigation for restricted sight distance by closing the crossing whenever a train passes.

4.11 Vehicles Driving Around Automated Gates

Vehicles driving around automatic gates can occur as a result of multiple scenarios. At both 7th Avenue and 15th Avenue, the City of Lexington accident records indicated instances of vehicles circumventing causing accidents, in one case a fatal accident between a car and train.

4.12 Signs and Markings

The field review also examined existing signing and marking and identified potential enhancements to be applied. Items noted from the field review included:

- 7th Avenue
 - Pavement markings, including stop lines and railroad crossing symbols, are faded
 - No signs in place for humped rail crossing. Need for these signs should be evaluated utilizing updated NCDOT humped crossing definitions when these are finalized.
- 15th Avenue
 - Pavement markings, including stop lines and railroad crossing symbols, are faded.
 - No signs in place for railroad crossing at intersection.
 - No signs in place for humped rail crossing. Need for these signs should be evaluated utilizing updated NCDOT humped crossing definitions when these are finalized.

4.13 Railway Gates

The current Norfolk Southern Railroad carries 46 trains per day and is a high volume facility. Existing gates are provided as follows:

• 7th Avenue

- On the westbound approach from Talbert Boulevard, the crossing is closed by providing a single gate combined with delineator posts for the 100-foot approach to the grade crossing.
- On the eastbound approach, a single longer gate is used to block off traffic and seal the rail corridor.
- Construction of the crossing was completed on August 8, 2001.

• 15th Avenue

- Four quadrant gates are provided on both approaches, completely sealing this crossing from the rail corridor.
- Construction of the four quadrant gates at this crossing was completed on August 1, 2002.

5.0 Alternatives Evaluated

Near-term, mid-term, and long-term alternatives were investigated for both the 7th Avenue and 15th Avenue rail crossings. A discussion of these alternatives is included in the following sections.

5.1 Crossing Protection/Safety Improvements – Near-Term Options

Near-term options for each crossing have been considered and identified for both 7th Avenue and 15th Avenue. These improvements would fit in the near-term time-frame (3-5 years).

5.1.1 7th Avenue

A review of the 7th Avenue crossing identified the potential improvements shown in Table 7. The conceptual estimate of overall cost for the near-term safety improvements at 7th Avenue would be approximately \$5,000 or less.

Table 7. Safety Improvements for 7th Avenue Grade Crossing

Number	Recommended Near-Term Improvements
1	Re-paint pavement markings, stop lines, and railroad crossing symbols.
2	Install two hump grade-crossing signs (W10-5).

5.1.2 15th Avenue

A review of the 15th Avenue crossing identified the potential improvements shown in Table 8. The conceptual estimate of overall cost for the near-term safety improvements at 15th Avenue would be between \$10,000 and \$100,000, depending upon the extent of improvements applied and need for right of way.

Table 8. Safety Improvements for 15th Avenue Grade Crossing

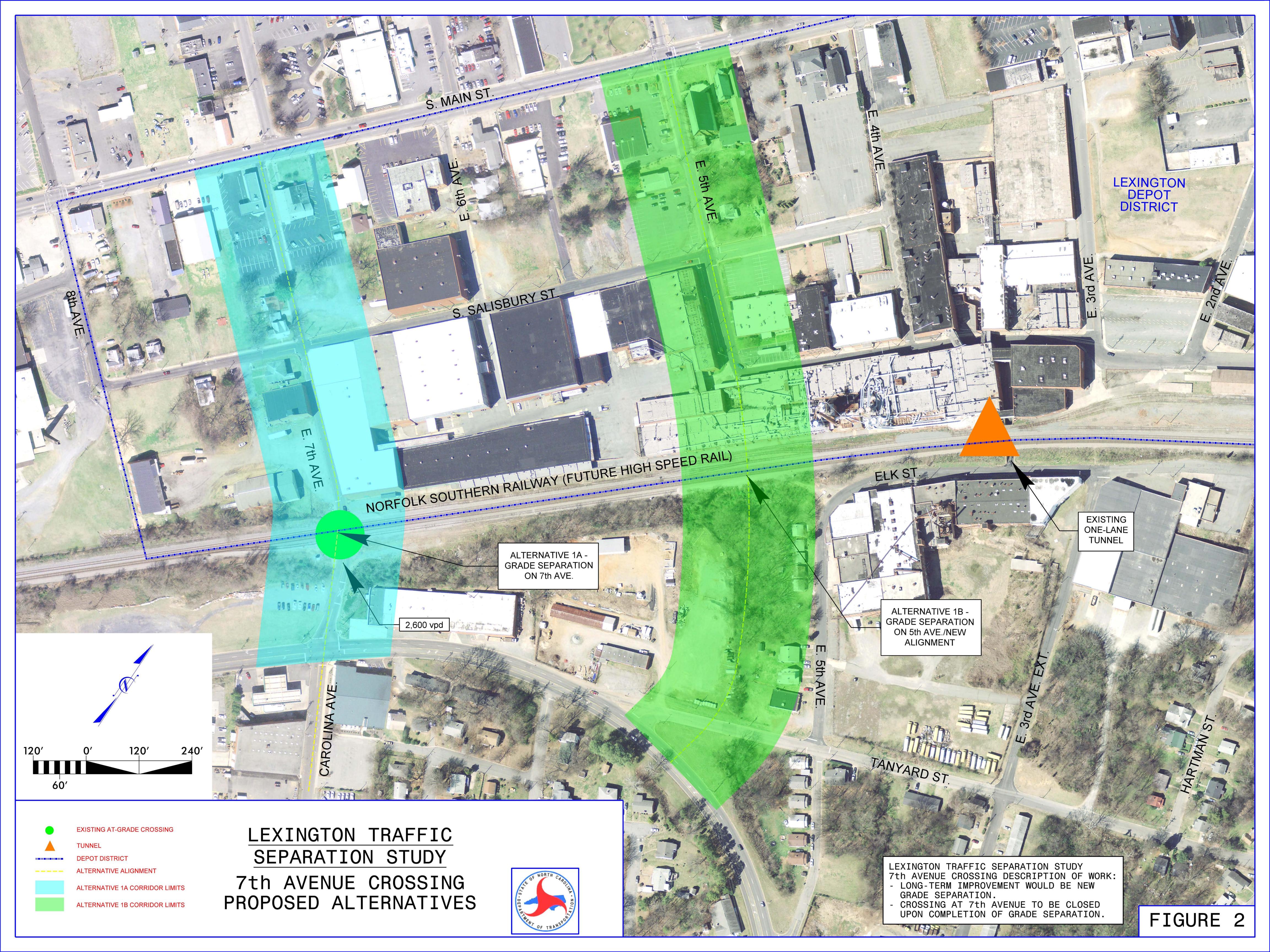
Number	Recommended Near-Term Improvements
1	Close off northbound approach of Salisbury Street and remove pavement. Verify signage and access requirements.
2	Install one "Stop Here When Flashing" sign (R8-10) on the west side of crossing.
3	Re-paint three sets of pavement markings, stop lines, and railroad crossing symbols.
4	Install two railroad tracks at intersection signs (W10-11).
5	Install three railroad tracks at intersection signs (W10-2).
6	Install three hump grade-crossing signs (W10-5).

5.2 Mid-Term and Long-Term Alternatives (including Grade Separation Structures)

Multiple mid-term and long-term improvements were considered for both 7th Avenue and 15th Avenue. These were developed based upon engineering analysis and input from local stakeholders and the general public. These alternatives are discussed in the following sections.

5.2.1 7th Avenue Alternatives Considered

After a review of existing conditions, nearby geography and consultation with City officials, two alternatives were considered for 7th Avenue. These alternatives are illustrated on Figure 2. The alternatives are:



- Alternative 1A which essentially follows a similar alignment to existing 7th Avenue and provides an underpass roadway below the railroad tracks. By utilizing the existing 7th Avenue alignment, existing travel patterns and direct access to the City facilities on Carolina Avenue are maintained. The alternative would likely require demolition of two buildings on the western edge of the Depot District. This alternative is estimated to cost \$8.3 million and would be a long-term project.
- Alternative 1B which follows new alignment on the east side (i.e., the Talbert Boulevard side), provides an underpass below the railroad tracks, passes through the abandoned furniture factory buildings, and connects with 5th Avenue to Main Street. The establishment of a new alignment between Talbert Boulevard and Main Street would alter traffic patterns and provide a new direct connection to 5th Avenue north of Main Street. The alignment would require demolition of four buildings in the Depot District. This alternative is estimated to cost \$9.0 million and would be a long term project.

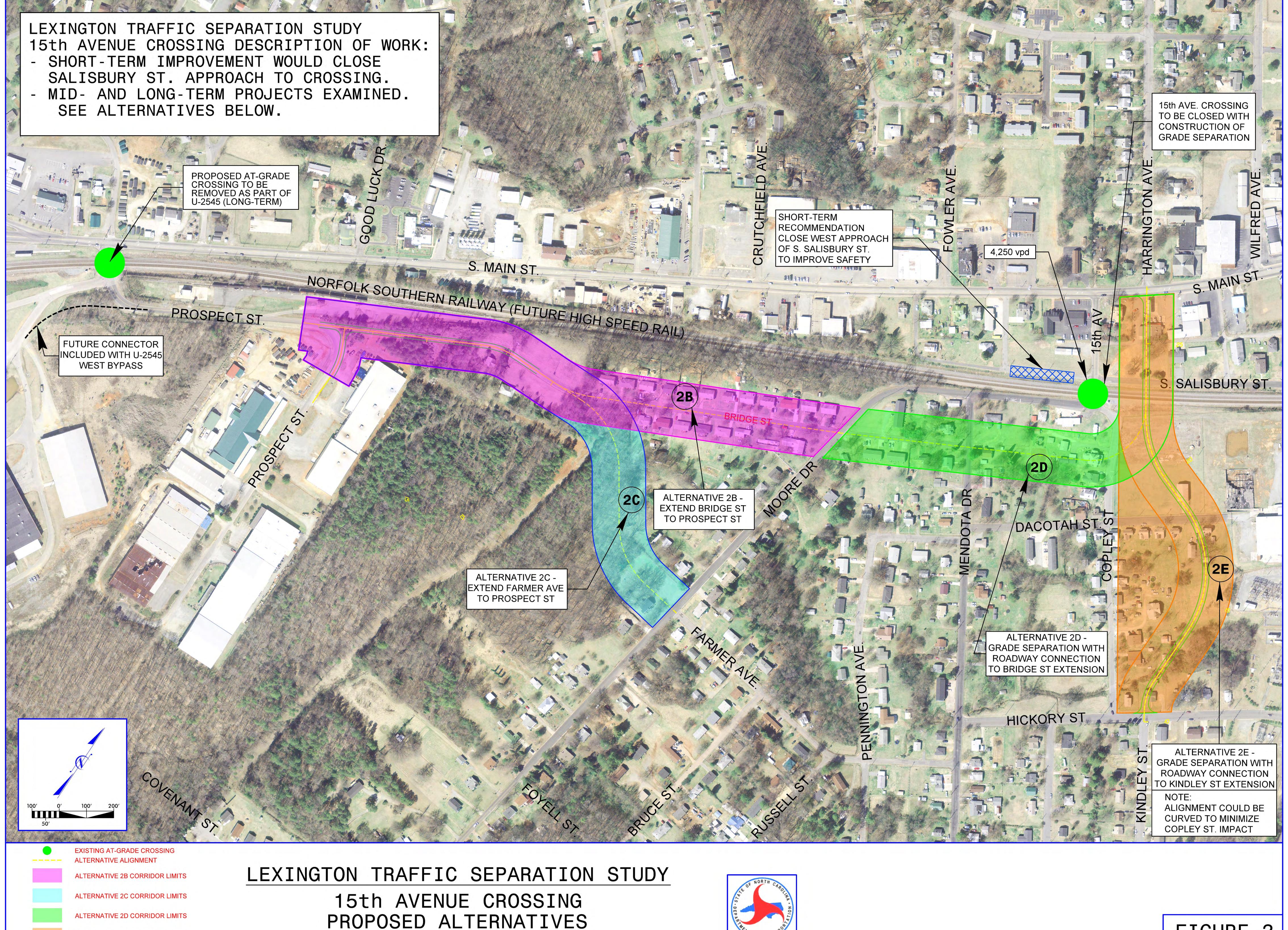
A comparison of alternatives was discussed with NCDOT and local stakeholders. Input from the City indicated a strong desire to maintain flexibility in order to allow the Depot District study to be completed. It is recommended that the preferred long-term solution at 7th Avenue is to construct a new grade separation (a roadway underpass) along either the Alternative 1A or 1B alignments (but not both) and close the existing 7th Avenue atgrade crossing as part of the grade separation project.

5.2.2 15th Avenue Alternatives Considered

After a review of existing conditions, nearby geography and consultation with City officials, two types of alternatives were considered for 15th Avenue. The alternatives included mid-term options that proposed a new network connection linking the area currently served by the 15th Avenue to the future West Bypass project. Grade separations were also considered as long-term options. Both the mid-term and long-term alternatives are illustrated on Figure 3 for 15th Avenue and discussed in the following sections.

5.2.2.1 Mid-term Alternatives – New Connection to West Bypass via Prospect Street to Replace 15th Avenue At-Grade Crossing

Two alternatives (Alternative 2B and 2C) were examined to provide a new connection linking the area currently served by the 15th Avenue crossing to the proposed West Bypass. The proposed connections would require approximately one-quarter mile of roadway on new alignment that would be constructed upon completion or as part of the construction of the West Bypass. The two mid-term alternatives are discussed below:



ALTERNATIVE 2E CORRIDOR LIMITS

- Alternative 2B involved providing connection between Moore Drive and Prospect Street. Drivers could then use the proposed local road improvements planned as part of the West Bypass to access the West Bypass and a proposed grade separation of the Norfolk Southern line. Alternative 2B proposes using the existing Bridge Street for this connection with a 1,000-foot extension from Bridge Street to Prospect Street. This alternative would likely require improvements to the existing Bridge Street, a local residential street that is currently a dead end road. The potential improvements could include widening of the roadway to 12 foot lanes and/or removal of on-street parking as increased traffic volumes would be expected. This alternative was presented as the May 3, 2011 public workshop. This mid-term alternative requires \$0.8 million in construction costs and would include the closure of the 15th Avenue crossing.
- Alternative 2C also proposes connecting Moore Drive to Prospect Street. Instead of
 utilizing the existing Bridge Street, however, this alternative utilizes new alignment
 to connect with Moore Drive in the vicinity of Farmer Avenue. This alternative
 requires approximately 2,000 feet of new alignment, but does not impact Bridge
 Street. This alternative was developed after the May 3, 2011 public workshop in
 response to concerns over impacts to Bridge Street properties. This mid-term
 alternative requires \$1.1 million in construction costs and would include the closure
 of the 15th Avenue crossing.

Although an alternate route had originally been identified as a potential mid-term improvement that would allow closing down of the 15th Avenue connection, sentiment from the general public and updated input from emergency services personnel indicated that this would not be a suitable replacement for the 15th Avenue at-grade crossing because of a likely increase in emergency response times. Therefore, neither of these mid-term alternatives is recommended as part of the TSS recommendations.

The proposed connection could have local value as an alternate route and may be worth consideration by the City of Lexington as part of future improvements to the local roadway network. Based on the review conducted to date, Alternative 2C would likely be the better mid-term solution since it eliminates the need for impacts along Bridge Street. Alternative 2B utilizes Bridge Street reducing the length of construction, but impacting approximately 20 houses with the potential need for widening thereby necessitating the elimination of on-street parking, and increasing traffic on a residential street.

5.2.2.2 Long-term Options – New Grade Separation to Replace 15th Avenue At-Grade Crossing

Based on the input from the Public Meeting, alignments were investigated as potential grade separations near the existing 15th Avenue crossing as illustrated in Figure 3. A grade separation at the current location of the 15th Avenue crossing (Alternative 2A) was

not feasible due to grade considerations and the inability to make connections to the local road network. Two alternatives were developed which cross over the NS railroad and Salisbury Street approximately 200 feet east of the existing crossing. This would require a 7 percent grade.

- Alternative 2D This alternative would introduce create a new intersection with Main Street approximately 200 feet from the existing 15th Avenue intersection. A roadway bridge over the railroad would be provided. A low speed horizontal curve would be provided turning the road toward Mendota Drive and Moore Drive. Grade would be reached at Mendota Drive, but the roadway would be extended to connect with Moore Drive. This alignment would likely impact multiple houses and potentially split the existing neighborhood. The impact on travel times and emergency response times would be minimal compared with the existing 15th Avenue crossing. This long-term alternative requires \$4.5 million in construction cost.
- Alternative 2E Alternative 2E utilizes the same roadway section on the Main Street side of the tracks as Alternative 2D. It then crosses the railroad with a roadway bridge and continues on an alignment generally paralleling Copley Street. The alignment could continue straight (impacting more homes) or be curved slightly to minimize housing impacts along Copley Street. The impact on travel times and emergency response times would be minimal compared with the existing 15th Avenue crossing. This long-term alternative requires \$5.3 million in construction cost.

Based on a preliminary review of the comparison data, it was agreed that Alternative 2E would likely be the preferred alternative during the second stakeholder meeting. Future design studies would examine alternate alignments along Copley Road in order to minimize impacts.

6.0 Public Involvement

6.1 Stakeholders Meetings

Two stakeholders meetings were held during the alternatives development stage of the Lexington TSS so key agencies could participate and provide critical input on reaching consensus on grade crossing recommendations. The following agencies participated in at least one of these meetings:

- City of Lexington Public Works Department
- City of Lexington Community Development Department

- City of Lexington Police Department
- City of Lexington Fire Department
- Davidson County Office of Emergency Management
- NCDOT Rail Division
- Lexington City Council

The meeting minutes for the two stakeholders meetings are included in Appendix B, and the following sections provide a summary of the meetings.

6.1.1 Stakeholders Meeting 1

The first stakeholders meeting was held on March 1, 2011, at the City of Lexington Human Resources Building. The purpose of this meeting was to give NCDOT the opportunity to introduce the Lexington TSS to local public officials, as well as to collect data and receive feedback on potential alternatives from the local stakeholders.

With respect to the 7th Avenue crossing, emergency responders stressed the importance of this crossing as an alternative route to avoid congestion on Main Street when responding to emergencies. The grade implications of going both over and under the existing tracks along 7th Avenue were discussed. Going over the tracks would require a grade exceeding 20 percent. Preliminary analysis indicated that going under the railroad tracks may be possible but would require additional study.

An alternative location for a new grade separated crossing in the vicinity of 5th Avenue as a replacement for the 7th Avenue crossing also was discussed. This alternative would require new roadway alignment on both sides of the tracks, as well as removal of some existing buildings. The initial feedback from the meeting attendees was that they liked the potential option of building a tunnel under the tracks at this location approximately midway between the existing bridges at Cotton Grove Road and Center Street, but that this option needed to be coordinated with the City's plans for the Lexington Depot District. Based on concerns expressed at the meeting related to emergency response, it was determined that the 7th Avenue at-grade crossing could not be closed until some mitigation or a grade-separation is put in place.

With respect to the existing 15th Avenue crossing, similar concerns were expressed related to the impact on the ability to provide emergency services in the area to the south of the railroad tracks if the crossing were closed. It was discussed that if the decision is made to close the 15th Avenue crossing, the option of extending Bridge Street to the west to connect with Prospect Street once the Western Bypass (NCDOT TIP No. U-2545) is built would be a possible good solution for providing access to this area. The Bypass project will provide a new railroad overpass that will replace the Prospect Street crossing and could also potentially replace the 15th Avenue crossing. It was discussed

that extending Bridge Street to the southwest to Prospect Street could be a good midterm solution to making improvements at 15th Avenue, and could also serve as a long-term solution.

With respect to public involvement for the Lexington TSS, it was discussed that residents of the areas using the two crossings are expected to be very actively involved in the project. Additionally, both crossings will likely have significant minority/low income populations speaking out in support of not closing their crossing.

6.1.2 Stakeholders Meeting 2

The second stakeholders meeting was held on June 21, 2011, at the City of Lexington offices on Carolina Avenue in Lexington. The purpose of this meeting was to discuss the results of the public workshop with local stakeholders, as well as to identify alternatives for each crossing to present to City Council and at the public hearing.

6.1.2.1 Public Meeting Summary

The first item was discussed was findings from the May 3, 2011 public meeting and written comments received during the 30-day comment period following the meeting. This overview followed the basic framework of the public meeting summary document attached to this meeting summary.

6.1.2.2 Discussion of 7th Avenue Crossing

The 7th Avenue crossing was discussed at the meeting. The general public and local officials that attended the public meeting had generally been in support of the previously developed Alternative 1A along 7th Avenue (near the existing crossing) or Alternative 1B near 5th Avenue. The Depot Area was beginning the planning phases which will include the development of a revised street system to serve the area. Therefore, it was discussed that a possible recommendation could be to build either Alternative 1A or 1B (combined with closing the at-grade crossing). The alternatives are illustrated on Figure 2.

6.1.2.3 Discussion of 15th Avenue Crossing Alternatives

As a result of comments received at the Public Meeting grade-separated alternatives were evaluated for the 15th Avenue crossing. An updated map of alternatives for the 15th Avenue crossing was presented. These alternatives are illustrated on Figure 3.

Two alternatives (Alternative 2B and 2C) were identified as a potential mid-term improvement that would allow closing down of the 15th Avenue crossing with an alternate route. Comments received from the public and emergency services personnel indicated that this would not be a suitable replacement for the 15th Avenue crossing. Therefore, neither of these alternatives are recommended as part the TSS review.

The proposed connection could have local value as an alternate route and should be considered as part of future improvements to the local roadway network. Alternative 2C would likely be the preferred solution since it eliminates the need for impacts along Bridge Street. Alternative 2B utilizes Bridge Street to reduce the length of construction, but could impact approximately 20 houses with the potential need for widening a narrow Bridge Street section and possible elimination of on-street parking as well as introducing increased traffic on a residential street.

Based on comments received from the Public Meeting, two additional alignments were evaluated as potential grade separations near the existing 15th Avenue crossing. Both options would cross over the NS railroad and Salisbury Street approximately 200 feet east of the existing crossing tying into Main Street. South of the railroad tracks, two alignments were considered:

- Alternative 2D This alternative would require horizontal curve to reach grade at Mendota Drive. Copley Street would need to be closed between Dacotah Street and 15th Avenue. This alignment would likely impact multiple houses and potentially split the existing neighborhood. It was the general consensus at the Stakeholder meeting that this alternative was not the preferred alignment for a grade separation.
- Alternative 2E Alternative 2E crosses the railroad via a bridge and parallels Copley Street to tie into Hickory Street near Kindley Street. Following Copley Street was an option, but would impact an increased number of houses. As an option the alignment could be curved to minimize impacts to the backyards of houses east of Copley Street. It was agreed that Alternative 2E would likely be the preferred alternative. Future design studies will examine alternate alignments along Copley Street to minimize impacts.

6.2 Public Workshop

The public workshop was held on May 3, 2011, at the City of Lexington Municipal Club. A total of 39 people signed the sign-in sheet to register their attendance at the workshop. Approximately 50 percent of the attendees were City staff and other local agency officials. The objective of the public meeting was to present the alternatives and potential effect on traffic movements resulting from improvement scenarios under consideration and to receive public comment on the alternatives.

While the proposed grade separation at 7th Avenue was generally well received, the majority of concerns expressed dealt with the proposed closure of 15th Avenue with no grade separation. A total of nine written comments were received wither at the public meeting or the 30 day comment period after the meeting. A summary of oral and written comments from the public workshop can be found in Appendix B.

6.3 Newsletters

One newsletter was prepared for the Lexington TSS. The newsletter was distributed at the May 3, 2011 Public Workshop. It provided an introduction to the Lexington TSS, as well as information on the public involvement process for the study. It also discussed the three phases of the study process and the current study schedule. Finally, the first newsletter provided contact information for questions about the Lexington TSS. The newsletter is included in Appendix B. No website was developed for the Lexington TSS.

6.4 Lexington City Council Presentation and Public Hearing

A public hearing was held on August 8, 2011. A formal presentation was made to City Council and the public. Upon completion of the presentation, a request for public comments was formally made by the City Council. No comments were made either for or against the proposed TSS recommendations. At the closure of the public hearing, the City Council approved the preliminary recommendations of the 7th Avenue and 15th Avenue crossings based upon the following principles:

- Both crossings are vital and necessary
- Crossings to be maintained by either bridges or tunnels
- These improvements are in the long term planning
- Short term improvements to include closing one lane alley from 15th Avenue to 17th Avenue.

In addition to the presentation, the agenda and meeting minutes for the City Council meeting are included in Appendix B.

Appendix A

Conceptual Construction Cost Estimates

A. Conceptual Construction Cost Estimates

Index and Summary of Cost Estimates:

Crossing which Alternative Replaces	Alternative	Planning Level Construction Cost Estimate
7 th Avenue	Alternative 1A Underpass on 7 th Avenue alignment	\$8.3 million
7 th Avenue	Alternative 1B Underpass on new 5 th Avenue alignment)	\$9.0 million
5 th Avenue	Alternative 2B – Extend Prospect Street via Bridge Street (no grade separation)	\$0.8 million
5 th Avenue	Alternative 2C – Extend Prospect Street via new alignment (no grade separation)	\$1.1 million
5 th Avenue	Alternative 2D Overpass to Mendota/Moore	\$4.5 million
5th Avenue	Alternative 2E Overpass to Dacotah/Hickory	\$5.3 million

Notes:

- All costs are preliminary and subject to change with design refinements and more detailed analysis.
- Costs shown do not reflect right of way acquisition and related costs.

Appendix B

Public Involvement Materials

B. Public Involvement Materials

Local Stakeholders Meeting No. 1 (March 1, 2011)	B-5
Public Workshop (May 3, 2011)	B-11
Newsletter (May 2011)	B-17
Local Stakeholders Meeting No. 2 (June 21, 2011)	B-21
Public Hearing (August 8, 2011)	B-27

Local Stakeholders Meeting No. 1 March 1, 2011

Lexington Traffic Separation Study

NCDOT TIP No. P-3309B, WBS No. 32268

AGENDA

Meeting with Local Stakeholders to Discuss Project Status and Receive Feedback/Collect Data

March 1, 2010 at 10:00 AM City of Lexington Human Resources Building

- 1. Introductions
- 2. Project Overview
 - 7th Avenue at-grade crossing
 - 15th Avenue at-grade crossing
- 3. Traffic Volumes & Travel Time Comparison
 - Emergency services, school buses, transit
- 4. Proposed Depot Facility
 - Layouts under consideration
 - Road connectivity
 - Building Removal/ Renovation
- 5. Other projects
 - NCDOT Project U-2545
 - Prospect Avenue Rail Crossing
- 6. Development of Alternatives
 - Have not determined formal alternatives
 - Mid-term and Long-term alternatives
 - Grade issues
- 7. Schedule

Contact Information:

Mike Fendrick Parsons Brinckerhoff 919-836-4053

B-5



To: Meeting Attendees

From: Mike Fendrick

Date: March 24, 2011

Subject: Lexington TSS (WBS 32268, TIP# P-3309B)

Meeting Minutes - March 1, 2011 Meeting with Local Stakeholders to Discuss

Project Status and Receive Feedback/Collect Data

Attendees:

Rick Comer – City of Lexington
Ken Gallimore – City of Lexington
Tammy Kepley – City of Lexington
Phil Hartley – City of Lexington Fire Department
Tim Curry – City of Lexington Fire Department
Mark Sink – City of Lexington Police Department
Larry Morgan – Davidson County Emergency Management
Sandra Stepney – NCDOT Rail Division
Nancy Horne – NCDOT Rail Division
Craig Newton – NCDOT Rail Division
Mike Fendrick – PB
Bobby Norburn – PB

Rick Comer opened the meeting by stating that the meeting purpose was for NCDOT and their consultant (Parsons Brinckerhoff) to be able to discuss the status of the Lexington Traffic Separation Study (TSS) with local public officials, as well as to collect data and receive feedback from the local stakeholders. He also asked the attendees to introduce themselves.

Mike Fendrick discussed that the purpose of the project was to study the existing 7th Avenue and 15th Avenue public street crossings of the Norfolk Southern Railway in the City of Lexington to determine the need for improvements to and/or the elimination of the at-grade crossings. He discussed that in addition to the desire to improve safety conditions for motorists and rail passengers at the crossings, there is a desire at the state level to close at-grade crossings on this rail corridor because it is part of the proposed Southeast High Speed Rail (SEHSR) Corridor. He mentioned that improvements could include installation of additional crossing safety equipment, crossing closures, and grade separations, as well as projects needed to mitigate any crossing closures. Mike briefly went through the meeting agenda (see attached).

Sandra Stepney discussed that the study will attempt to identify near-, mid-, and long-term recommendations for improvements at these crossings, but that there is currently no funding for long-term improvements. As funding becomes available, future studies would be conducted to implement the long-term recommendations.

Rick discussed that the at-grade crossing at Prospect Street cannot be closed until the Western Bypass (NCDOT TIP No. U-2545) is completed because there is no other public



street access for the commercial/industrial development on Prospect Street. The Bypass would provide a new crossing of the railroad to the southwest of the existing Prospect Street crossing. He mentioned that the Western Bypass is the RPO's number one project on their priority list of projects, and that it was also at one time a high priority project for NCDOT, but it has fallen in priority at the state level because of lack of funding.

Discussion on 7th Avenue Crossing

- Mike showed pictures of the 7th Avenue crossing and discussed issues of concern related to the crossing.
- Tammy Kepley said the City recently issued an RFP for a master plan for the Depot District, which includes all of the old buildings immediately to the northeast of the 7th Avenue crossing. The master plan will include an analysis of which buildings should be saved and which should be demolished. She said that all of these buildings are already owned by the City. The City hopes to select a firm to conduct the master plan this summer, and the study will take approximately one year to complete. She noted that the City has completed a study evaluating the historic potential of the buildings that she could provide to PB for use in completing the Lexington TSS.
- Tammy discussed that the East Street Park is not a City park, but rather is a privately
 owned parcel that was a parking lot for an adjacent furniture company that is no longer
 in business. Now it is used for parking and storage by other adjacent private
 companies.
- Mike discussed travel time for motorists using 7th Avenue if the crossing was closed. He then asked for feedback from the attendees related to this potential closing.
- Mark Sink responded that closing the 7th Avenue crossing would negatively impact the Police Department's ability to serve adjacent neighborhoods because response times would be much slower especially during peak periods. The police department frequently uses 7th Avenue to avoid some of the numerous stop lights along Main Street to the west of the Police Department's headquarters at 106 N. Main Street, as well as to avoid the peak hour congestion at the Main Street/Cotton Grove Road intersection. Mark emphasized that even a small diversion because of closing the 7th Avenue crossing would substantially hurt their response times.
- Sandra asked if there was a way to mitigate the negative impact of closing the 7th
 Avenue crossing. Rick responded that it would probably be necessary to provide a
 grade-separation in the same general vicinity to mitigate this impact. Nancy Horne said
 that if NCDOT and the City agreed to close the 7th Avenue crossing, funding could be
 sought for solutions to mitigate the negative impacts, but that grade-separations are
 typically long-range projects placed on the TIP.
- Phil Hartley said that the Fire Department rarely uses the 7th Avenue crossing because the road is too narrow and the grade at the crossing is too steep for fire trucks.
- Larry Morgan said that ambulances do not often use the 7th Avenue crossing because of the location of the EMS stations (i.e., it is generally not on their emergency response routes based on the station locations). However, the rescue squad does based on their location, as well as their desire to avoid using Main Street as an emergency response



route (i.e., because of the potential to further exacerbate traffic congestion by operating their sirens on Main Street).

- Rick said that he has seen school buses on 7th Avenue, but he does not know their routes. It was also discussed that paratransit services use 7th Avenue, but their exact routes also are not known. The attendees agreed that many City services use the 7th Avenue crossing as an alternate route to avoid congestion on Main Street, particularly at the Cotton Grove Road intersection.
- Tammy discussed that the Depot will be multi-modal, so many different transportation modes will converge at the train station. Between 3rd Avenue and 4th Avenue is currently considered a likely location for the train station platform (this is the "Broken" alternative).
- Craig Newton discussed the re-alignment of the curves on the tracks that would likely be needed in the vicinity of the potential train station platform locations. He also said that the one-lane tunnel under the tracks at 3rd Avenue would likely have to be removed. It was discussed that in addition to the train station platform between 3rd Avenue and 4th Avenue, a freight depot could possibly be located at 2nd Avenue.
- Mike discussed the vertical profile sketches showing the grade implications of going both over and under the existing tracks. It was presented that going over the tracks with 7th Avenue would require a grade exceeding 20 percent which is not acceptable and would not be provided. Preliminary analysis indicated that going under the railroad tracks may be possible although there could be clearance and drainage issues that would prevent such a solution on the existing 7th venue alignment.
- Mike also showed on the aerial photographs potential alternative locations for a new crossing in the vicinity of 5th Avenue as a replacement for the 7th Avenue crossing. This alternative would require new roadway alignment on both sides of the tracks as well as removal of some existing buildings. Tammy indicated that the furniture factory building is located within the railroad right-of-way, so the City is hesitant to use it. The attendees liked the potential option of building a tunnel under the tracks at this location approximately midway between the existing bridges at Cotton Grove Road and Center Street.
- Sandra said that NCDOT would continue to coordinate plans for improvements at the 7th
 Avenue crossing with the City's plans for and progress on the Depot.
- Rick noted that moving the new crossing to the east of the existing crossing at 7th
 Avenue would make it farther from the existing 15th Avenue crossing, which could be an
 issue if the decision was made to close the 15th Avenue crossing. In addition, he said
 that any negative impacts to pedestrians being able to cross the tracks would be a
 public relations problem for the City.
- It was determined that the 7th Avenue at-grade crossing could not be closed until some mitigation or a grade-separation is put in place.

Discussion on 15th Avenue Crossing

 Mike showed pictures of the 15th Avenue crossing and discussed issues of concern related to the crossing. He then discussed travel time for motorists using 15th Avenue if



the crossing was closed. He then asked for feedback from the attendees related to this potential closing

- Phil said that the City has plans to close Fire Station #2 after completing a new station.
 He is concerned about access issues to/from the west if the 15th Avenue crossing is closed.
- Rick said that if the decision is made to close the 15th Avenue crossing, he thinks the option of extending Bridge Street to the west to connect with Prospect Street once the Bypass is built would be a possible good solution for providing access to this area. The Prospect Street railroad crossing is already planned to coincide with the construction of the U-2545 Western Bypass and connection of Prospect Avenue to the new facility. This project will provide a new railroad overpass that will replace the Prospect Avenue crossing and could also potentially replace the 15th Avenue crossing. He noted that the City already has utilities in this corridor and that there used to be an old wooden bridge along Bridge Street east of 15th Avenue.
- Mark pointed out that there is a low and narrow crossing under the railroad tracks on Old Linwood Road that forces large vehicles to use the 15th Avenue crossing for access to this area.
- Sandra said that extending Bridge Street could be a good mid-term solution and could serve as a long-term solution also.
- Larry said that the 15th Avenue crossing is critical for ambulance access to this area, particularly considering the location of Lexington Memorial Hospital to the northwest of the area (at the US 70/I-85 Business interchange). However, the extension of Bridge Street to Prospect Street would address this concern if the 15th Avenue crossing is closed.
- Rick said that he thinks the residents of the area would like this solution, and reiterated that it makes sense because the City already has utilities in this corridor.
- Sandra said that she will check on the status of the Bypass as well as agreements/studies related to the Prospect Road closure. Rick said that it was being planned as a four-lane divided facility. [Note: subsequent to the meeting, it was determined that the Draft TIP has U-2545 unfunded for right-of-way acquisition and the construction in future years.]
- Rick said that Prospect Street as currently designed may not be able to accommodate
 the extra traffic that would be diverted to it if the 15th Avenue crossing is closed, so it
 would have to be upgraded. In addition, closing the crossing at Prospect Street would
 likely result in industrial traffic that is generated in this area to use residential streets for
 access to the industrial park.

Schedule

- Mike went through the draft project schedule. It was agreed that it needed to be revised
 to reflect NCDOT requirements for public meeting notification and comment periods.
 Sandra would identify whether 15 days or 30 days are required for this type of study.
- Tammy explained the City policy on advertising for public meetings, which requires less advance notice than NCDOT's policy.



- Rick suggested that we should coordinate with the schedule for local community watch
 meetings to use those meetings as a forum for our public information meetings. It was
 discussed that based on trying to coordinate with the schedule of already scheduled
 community watch and City council meetings, the public hearing for the proposed project
 may have to be pushed back into June.
- Sandra summarized the public involvement process for the project. We will first use the
 discussions at today's meeting to develop more specific project alternatives, and then
 we will meet again with this group to further discuss the alternatives. We will then hold
 a public meeting to get public feedback on the alternatives, followed by holding a
 meeting with City Council to get their feedback. Once all comments and concerns from
 these groups have been addressed, we will hold the public hearing.
- Rick said that we will not want to have any surprises at the meeting with City Council, so
 he thinks we should get certain people involved as soon as possible so that we can start
 to gauge the feelings of the council on the project. The City will identify these key
 players and inform PB. He also said that he expects residents of the areas that use the
 two crossings to be very actively involved in the project because of the possibility of
 having their neighborhood access changed.
- Tammy noted that City Council meetings are on the second and fourth Mondays each month. She said the schedule is posted on the City's web site.
- Mike noted that a 30 day advertisement period would increase the project schedule.
 Sandra will identify the required waiting period. [Note: subsequent to the meeting, it was determined that the new NCDOT policy is to use a 15-day advertisement period for public meetings and maintain the 30-day advertisement period for public hearings.]
- Rick discussed that some councilmen have their favorite crossings that they will likely
 not want to be closed. In addition, both crossings will likely have significant minority/low
 income populations speaking out in support of not closing their crossing.
- Sandra mentioned NCDOT's Spanish-speaking community outreach methods and asked if this would be an issue on this project. City representatives discussed that the City publishes public meeting announcements in Spanish, but typically still gets low Spanish-speaking community turnout at meetings. In general, many public informational meetings get low citizen turnout, but if the announcement says that the meeting is to discuss possible railroad crossing closures, then this typically will generate public involvement and turnout to meetings. It was suggested that a non-threatening meeting location, like potentially a Catholic church, could be used to encourage Spanish-speaking community turnout.

e-mail: fendrick@pbworld.com direct line: 919-836-4053

Enclosure

c: meeting attendees

file no.: 173439A

J:\Traffic\PROJECTS\Lexington TSS\Meetings\Stakeholder Meeting (3-1-11)\Lexington TSS - Local Stakeholders Meeting (3-1-11) - final meeting minutes 3-24-11.doc

Public Workshop May 3, 2011



To: Sandra Stepney, PE

From: Mike Fendrick, PE

Date: June 21, 2011

Subject: Lexington Traffic Separation Study

WBS 32268, TIP No. P-3309B Davidson County, North Carolina

Summary of Public Workshop Comments

A public workshop was held for the Lexington Traffic Separation Study (TSS) on May 3, 2011, at the City of Lexington Municipal Club. A total of 39 people signed the sign-in sheet to register their attendance at the workshop. A table listing the names and contact information for these individuals is attached. Note that of the attendees, approximately 50% were City staff and other local agency officials.

Oral Comments from General Public

The oral comments received at the workshop from the general public primarily focused on the specific issues related to the existing grade crossings and the proposed future options. Specific issues included:

- Most participants came to find out more information. Although there had been some
 effort to get out local participants, there was not an organized group pushing a
 specific agenda.
- With respect to the 7th Avenue crossing, there was general feedback that the closure of this crossing would require a grade separation. Although there were some differences, the overall feeling was that either the 7th Avenue underpass or the 5th Avenue underpass would be acceptable replacements. In terms of a specific alternative, the comments were mixed but in general maintaining the existing 7th Avenue connection was more favored.
- With respect to the 15th Avenue crossing, there was more specific interest from locals that would be affected by the closure. While there was general sentiment that a connection to Prospect Street and eventually to the future West Bypass was positive, it was generally viewed as inadequate for a replacement of the 15th Avenue at-grade crossing. There was a push to keep 15th Avenue as an at-grade crossing if a grade separation was not feasible.
- In terms of specific impacts at 15th Avenue, there were opinions expressed that Bridge Street would suffer from increased traffic volumes and may require improvements if the connection to Prospect Street were provided. It was discussed that an alternative that did not impact Bridge Street may be desired.
- There was some sentiment that the existing crossovers were adequate and should be maintained.



Sandra Stepney, PE June 21, 2011 page 2

Oral Comments from City/Agency Staff

The City/agency staff that attended was from multiple groups. In general, they provided some background information on issues affecting the City overall. Specific comments included:

7th Avenue Crossing

- The Depot Area is a critical piece in the long-term plan for Lexington. The plan is still in the preliminary phases and there is some flexibility in the roadway plan. Based on this, there was some desire from the study to leave flexibility that either the 7th Avenue underpass (approximate existing crossover location) or the 5th Avenue underpass alignment could be utilized as a replacement for the 7th Avenue at-grade crossover.
- There were some questions on the existing one-lane tunnel at Elk Street. It was indicated that this existing underpass was not part of the closure recommendation related to this study.
- It was noted that the 7th Avenue crossover is used extensively by City of Lexington vehicles to access Main Street from their City facilities just south of the tracks on Carolina Avenue.
- The 7th Avenue crossover is used by emergency vehicles to avoid the intersection of Main Street at Cotton Grove Road during peak periods.

15th Avenue Crossing

- There were several emergency service providers for the City of Lexington in attendance that expressed concerns about the increased travel time caused by closing 15th Avenue. They anticipate increased travel time related to diversion of traffic to a future West Bypass and Prospect Street connector. Delays of even 5 minutes were important for some emergency response trips.
- Options for a grade separation were discussed. There was a general desire to see if a grade separation could be identified that would be feasible in this area.

Written Comments

A total of nine written comments were received either at the workshop or by mail during the 30-day public comment period following the workshop. A tabular summary of the written comments received is provided below (note that one comment only provided an e-mail address with no comments on the project):

Comments Only Related to 15 th Avenue Crossing								
Don't close 15 th Avenue crossing (or provide bridge at same location) 4								
Comments Only Related to 7 th Avenue Crossing								
Prefer Alternative 1A 1								
Comments Related to Both Crossings								
Don't close either crossing (provide improvements instead)	3							



Sandra Stepney, PE June 21, 2011 page 3

The written comments are repeated below (note that the comments are repeated almost verbatim with only minor edits for typos or to make the comment clearer):

- Comment 1 We need a bridge over 15th on South Salisbury. This road is too important to close completely.
- Comment 2 Please do not close South Salisbury Street at 15th. This is an important crossing for all in this community.
- Comment 3 Given what I've seen and heard today, I think improvement to the crossings would be better than closing either track crossing.
- Comment 4 On the 7th Street crossing, proposal 1A is vastly preferred as it requires less use of Eminent Domain and use of tax payers money.
- Comment 5 This crossing (15th Avenue) is convenient for people living in this area because we are closer to the hospital, doctor's offices, and the interstate. Also other businesses on that end of town.
- Comment 6 In my opinion, both crossings are convenient and safe as they are. I
 would say improve them and leave them where they are.
- Comment 7 I am not in favor of closing either of these railroad crossings, even if the proposed alternatives (mentioned at the meeting) are implemented. I am afraid this would mean additional driving and expense for many citizens to simply reach Main Street, and it would take emergency vehicles more time to respond when accessing homes near these areas. I do however believe additional roadway options could be used in conjunction with increased safety measures at these existing two crossings to alleviate traffic burdens. I particularly like the idea of connecting Bridge Street to Prospect Street. The fact of the matter is, it is each licensed driver's personal responsibility to cross the tracks properly and cautiously.
- Comment 8 Commenter provided e-mail address with no further comment.
- Comment 9 Reference to the closing of the 15th Street crossing, as an emergency services, this street crossing provides a direct route to a community of approximately 1500 citizens. Closing this crossing will increase response times for our ambulances 3-5 minutes depending on traffic. This crossing is a direct route to the local hospital and closing could be detrimental to patients. Request that we take another look at our options and it is imperative that we do not close the 15th Street crossing. Not only will increase ambulance times, but increase response times for police and fire as well. Thank you for your time. (Note that this comment was received from Davidson County Emergency Services.)

e-mail: fendrick@pbworld.com direct line: 919-836-4053

Enclosure

file no.: 173439

J:\Traffic\PROJECTS\173439 Lexington TSS\Public Involvement\Lexington TSS - Public Workshop 1 Summary (final 6-21-11).doc

ZIP Phone E-mail	27292 (336) 256-2934 waynealley@lexcomine.net	27292 (336) 770-6155	27317 (336) 243-1744	27292	27292 (336) 238-3791	27292	27292 (336) 248-3930 rickc@lexingtonnc.net	27292 kcurry@triad.rr.com		27292 (336) 956-6150 director@visitdavidsoncounty.com	27293 (336) 240-1975 jonnye@lexingtonnc.net	27292 (336) 243-1361 sonshiners@lexcominc.net	28144 (336) 236-2056	$\overline{}$	27292 (336) 249-7301	27293 (336) 248-3935 philliph@lexingtonnc.net	27292	27292 (336) 248-4890	27293 (336) 248-3930 rjones@lexingtonnc.net	27292 (336) 248-3900 tammyk@lexingtonnc.net	27292 (336) 499-3804	27293 (336) 248-3910 alanc@lexingtonnc.net	27292 (336) 243-1361 <u>sonshiners@lexcominc.net</u>	27292	27292 (336) 289-4869 <u>dmcbride14@tria.rr.com</u>	27293 (336) 248-3965 tammym@lexingtonnc.net	27292 (336) 239-2939	27292 (336) 239-5965	27292 (336) 239-8759 travleemoody@hotmail.com	27292 (336) 242-2270 larry.morgan@davidsoncountync.gov	27292 (336) 248-8382	27292 (336) 248-8382	27292 (336) 243-7909 missangie@lexcominc.net	27292 (336) 249-0559	27127 (336) 703-6500	27295 david sp8@yahoo.com	27292 (336) 499-4358	27292 (336) 248-8042	27292 (336) 242-6717
State	2	SC	2	SC	SC	2	2	2	2	2	2	S	SC	2	SC	2	SC	S	2	SC	SC	S	SC	2	SC	2	SC	SC	2	2	SC	SC	SC	2	SC	S	2	2	2
City	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Lexington	Winston-Salem	Lexington	Lexington	Lexington	Lexington
Address	20 Williams Circle	904 Oak Ave	1 Cedar Lane	11 Grant St	704 Moore Dr	221B Bookington Dr	711 S Talbert Blvd	135 Garden Drive	235 Moot	PO Box 1411	28 W Center St.	604 Adams Street	15th S. Salisburg St	28 W Center St.	515 Moore Drive	28 W Center St.	433 Garden Drive	700 Moore Dr	28 W Center St.	31 W 1st St	Moore Dr	28 W Center St.	604 Adams Street	223 Bookington Dr	812 Mitchell Ave	28 W Center St.	702 Moore Dr	535 Garden Drive	511 Garden Drive	935 North Main Street	395 Garden Drive	395 Garden Drive	200 Smith Ave.	101 Village Drive	375 Silas Creek Pkwy	245 Ridge Rd	206 Montclair Dr	1&3 Copley	4735 Linwood Southmont Rd
Organization	City of Lexington	City of Lexington	City of Lexington				City of Lexington	N.A.A.C.P.		Tourism Recreation Investment Partnership	City of Lexington	City of Lexington		City of Lexington		Lexingon Fire Department			City of Lexington	City of Lexington		City of Lexington	City of Lexington		City of Lexington	City of Lexington				Davidson County Emergency Management		City of Lexington	City of Lexington		NCDOT			City of Lexington	
First Name	Wane	Ulyeese Jr.	Larry	Alvin	Rebecca	Tommie L.	Ricky	Keith	Pruce	William	Johnny	Robert	Charles	John L.	Leon	Phillip	Kilvon	Sylvester	Roger	Tammy	Ricky	J Alan	Tonya	Vernice	Donald	Tammy	Bobby	Lynn W.	Travis	Lary	Mary	Ronald	Angela	Loraine	David	David	Mary	Jack	Billy
Last Name	Ally	Arrington	Beek	Bolo	Brooks	Carter	Comes	Curry	Davis	Deal	Everhart	Freeman	Funchess	Gray	Hargrave	Hartley	Henderson	Holt	Jones	Kepley	King	Langn	Lanier	Lindsay	McBride	Michael	Mitchell	Moody	Moody	Morgan	Reid	Reid	Smith	Smith	Spainhour	Speight	Walser	Whitehead	Williams

Newsletter May 2011



LEXINGTON TRAFFIC SEPARATION STUDY

NCDOT and City of Lexington Conduct Traffic Separation Study (TSS) for 7th Avenue and 15th Avenue

During 2008 there were 69 rail-highway grade crossing collisions in North Carolina, resulting in eight deaths and 27 injuries. To reduce the potential for train-vehicle collisions, NCDOT is working with communities across the state – such as Lexington – to conduct detailed engineering evaluations and implement recommended rail crossing improvements. As of December 2006, NCDOT has closed approximately 120 public rail crossings based on recommendations from various TSS and corridor studies.

The NCDOT and the City of Lexington are conducting a TSS to consider alternatives to close and/or improve two railroad crossings in Lexington. The two crossings under study are the 7th Avenue and the 15th Avenue crossings of the Norfolk Southern Railroad (see the photographs of these crossings on this page and the project area map on the next page).

As vehicle and train traffic continues to increase, a high priority must be given to safety enhancement projects like the Lexington TSS. Since Norfolk Southern Railroad operates trains through Lexington, continued improvements to crossings can help lessen the potential for train-vehicle collisions. Improved crossings can help traffic flow through this corridor.

Potential improvements may include the following: upgrading existing, or adding new, flashing lights and gates; relocating existing crossings; and closing the crossing and providing a new connector road or a grade separation (new bridge over/under the railroad). These enhancements result in improving the safety of motorists, pedestrians, rail passengers and train crews.

The alternatives development process for the Lexington TSS is being coordinated with the City of Lexington's Depot District Master Plan for redeveloping the Lexington Train Depot and surrounding areas of the city. In addition, recommended improvements from the Lexington TSS will take into account planned roadway improvements for the Lexington Western Bypass (NCDOT TIP No. U-2545). The recommended alternative for the Bypass includes closing the at-grade railroad crossing at Prospect Street and building a new grade-separated crossing of the railroad on the Bypass to the southwest of the existing Prospect Street crossing.

PUBLIC OUTREACH

The public outreach program's top priority is to initiate early and open communication with stakeholders, including area residents, property owners, agency representatives, and others who might be interested in the Traffic Separation Study. Public meetings are part of a comprehensive public outreach process being conducted jointly by the City of Lexington and the NCDOT, Rail Division to provide information and obtain public comments on plans to improve the 7th Avenue and 15th Avenue railroad crossings.

NEXT STEPS IN PUBLIC INVOLVEMENT PROCESS

Comments may be submitted at tonight's meeting or mailed to the address shown at the bottom of the comment form. Following tonight's meeting, there will be a 30-day comment period for receiving public comments. A Public Hearing will be held at the end of the study to give residents a chance to formally voice their opinions about the proposed recommendations for rail crossing improvements. It is currently expected that the Public Hearing will be held at a Lexington City Council meeting in early July 2011.



CONTACTINFORMATION

If you have additional questions or would like to be included on the study mailing list, please contact **Sandra Stepney** or **Mike Fendrick** as per the information below. You can also visit www.bytrain.org to learn more about the Rail Division's safety programs and to read about specific studies and improvements that have been completed.

Sandra Stepney, PE

Senior Project Engineer NCDOT Rail Division

1556 Mail Service Center Raleigh, NC 27699-1556 Phone: (919) 715-0296

Mike Fendrick, PE

Parsons Brinckerhoff

434 Fayetteville Street Suite 1500 Raleigh, NC 27601 Phone: (919) 836-4053

Study Process and Schedule Involves Three Phases:

Preliminary Planning Phase (completed in late 2010): During this phase, NCDOT and the City of Lexington agreed to work together to identify and implement improvements at 7th Avenue and 15th Avenue outlined in the future TSS. An engineering consultant (in this case, Parsons Brinckerhoff) was then selected by NCDOT to conduct the TSS.

2 Study Phase (currently underway): Parsons Brinckerhoff is evaluating the 7th Avenue and 15th Avenue public crossings to determine the existing crossing conditions, average daily traffic (both trains and vehicles), and impacts of potential closures. The firm is in the process of preparing preliminary near-, mid-, and long-term recommendations for NCDOT and local officials to review and presenting preliminary alternatives based on these recommendations to the public for comment. The preliminary improvement recommendations are summarized below, but additional recommendations may be added based on feedback received from elected officials and the general public during the public involvement process.

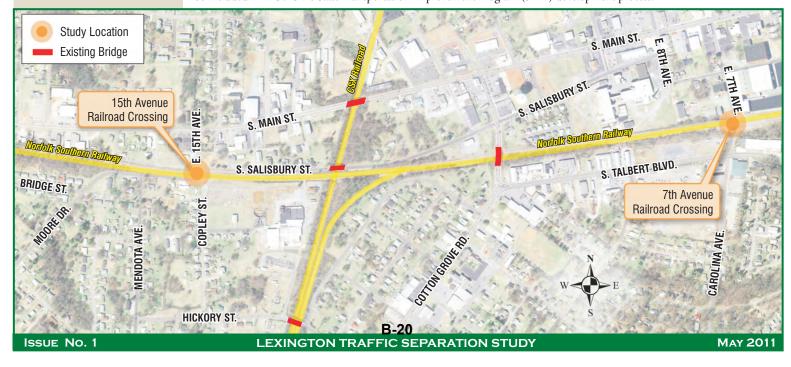
NEAR-TERM RECOMMENDATIONS (within two years) - Typical near-term improvement recommendations may include installation of flashing lights and gates, enhanced devices such as four-guadrant gates and longer gate arms, installation of concrete or rubber crossings, crossing closures, median barrier installation, pavement markings, roadway approach modifications, and crossings realignments. The existing 7th Avenue crossing has twoquadrant crossing gates and a median separator, and the existing 15th Avenue crossing has fourquadrant crossing gates. Therefore, based on the existing safety devices already installed at both crossings and the effective sealing of the crossing gates, no additional near-term improvement recommendations are currently being proposed.

MID-TERM RECOMMENDATIONS (two to five years) – Typical mid-term improvement recommendations may include connector roads, roadway realignments, crossing closures, relocations of existing crossings to safer locations, and feasibility studies to evaluate potential grade separation

locations. The preliminary mid-term improvement recommendation for the 15th Avenue crossing is to close the 15th Avenue crossing and connect the western end of Bridge Street to Prospect Street. Until the completion of the U-2545 Western Bypass, traffic can be re-routed to the Prospect Street rail crossing.

LONG-TERM RECOMMENDATIONS (five to ten years) – Typical long-term improvement recommendations may include grade separations, connector roads, and crossing closures. The preliminary long-term improvement recommendation for the 7th Avenue crossing is to close the crossing and provide a grade-separation (i.e., a road under the tracks) in the vicinity of the existing crossing. The preliminary long-term recommendation for the 15th Avenue crossing is to close the Prospect Street rail crossing and re-route traffic to the new bridge over the railroad tracks that will be included in the U-2545 Western Bypass. These preliminary long-term improvement recommendations for closing each crossing are on display at tonight's meeting to encourage public feedback.

Implementation Process: This phase will commence once the Study Phase is complete. During this phase, NCDOT officials identify funding sources for recommended near- and mid-term improvements, develop project agreements with the City of Lexington for these improvements, coordinate project design and any potential property acquisition, and oversee project implementation. Based on the recommendations approved from the Study Phase, the study team will develop a plan for implementation of those projects. Potential long-term recommendations, such as crossing closures and construction of grade separations, typically require a higher level of funding. Therefore, any such recommended improvements would need to be included in NCDOT's State Transportation Improvement Program (STIP) development process.



Local Stakeholders Meeting No. 2 June 21, 2011

Lexington Traffic Separation Study

NCDOT TIP No. P-3309B, WBS No. 32268

AGENDA

Meeting with Local Stakeholders to Discuss Public Workshop Results

June 21, 2011 at 1:30 PM City of Lexington Offices, 425 Carolina Avenue (Training Room)

- 1. Introductions
- 2. Summary of Public Workshop Comments
- 3. Potential Recommended Alternatives
 - 7th Avenue
 - 15th Avenue
- 4. Public Hearing
- 5. Project Schedule

Contact Information: Mike Fendrick, PE

Parsons Brinckerhoff

(919) 836-4053



To: Meeting Attendees

From: Mike Fendrick

Date: June 28, 2011

Subject: Lexington TSS (WBS 32268, TIP# P-3309B)

Meeting Minutes - June 21, 2011 Meeting with Local Stakeholders to Discuss

Project Status and Receive Feedback/Collect Data

Attendees:

Rick Comer – City of Lexington Public Works
Roger Jones – City of Lexington Public Works/ Engineering
Mark Sink – Lexington Police Department
Tad Kepley – Lexington Police Department
Paul Jarrett – Lexington Fire Department
Larry Morgan – Davidson County Emergency Management
Sandra Stepney – NCDOT Rail Division
Nancy Horne – NCDOT Rail Division
Mike Fendrick – Parsons Brinckerhoff

The meeting began with an introduction of attendees. Mike Fendrick then provided a brief overview of the meeting agenda (see attached).

Public Meeting Summary

The first item discussed was findings from the May 3, 2011 public meeting and written comments received during the 30-day comment period following the meeting. This overview followed the basic framework of the public meeting summary document attached to this meeting summary. The primary finding was that closure of the 15th Avenue crossing without provision of a grade separated replacement had strong local opposition. In addition, the existing crossing was viewed as important in maintaining existing emergency response times to approximately 1,500 persons.

Discussion of 15th Avenue Crossing Alternatives

As a result of the support for a grade supported alternative at 15th Avenue, additional grade separated alternatives were investigated for the 15th Avenue crossing. Mike Fendrick presented an updated map of alternatives for the 15th Avenue crossing. These are illustrated in the attached PDF for the 15th Avenue crossing alternatives.

Connections to Prospect Street and the Future West Bypass:

Two alternatives (Alternatives 2B and 2C) were examined to provide this connection. Although it had originally been identified as a potential mid-term improvement that would allow closure of the 15th Avenue highway/rail crossing with an alternate route, sentiment from the general public and updated input from emergency services personnel indicated that this would not be a suitable replacement for the 15th Avenue crossing. Therefore, neither of these alternatives is recommended as part the TSS review.



June 28, 2011 page 2

It should be noted, however, that the proposed connection could have local value as an alternate route and may be worth consideration as part of future improvements to the local roadway network. Based on the review conducted to date, Alternative 2C would likely be the preferred solution since it minimized impacts to existing residences. In particular, the provision of a new alignment with Alternative 2C eliminates the need for impacts along Bridge Street. Alternative 2B utilizes Bridge Street to reduce the length of construction, but would impact approximately 20 houses with the potential need for widening a narrow Bridge Street section, possibly require the elimination of on-street parking, and would introduce increased traffic on a residential street.

Grade Separation Alternatives:

Based on the input from the Public Meeting, two additional alignments were evaluated as potential grade separations near the existing 15th Avenue crossing. Both options are proposed to cross over the NS railroad and Salisbury Street approximately 200 feet east of the existing crossing and tie from there to Main Street. South of the RR tracks, two alignments were considered. The two alternatives are:

Alternative 2D – This alternative provides an overpass of the NS railroad at a location 200 feet east of the existing crossing. The bridge connects into Main Street to the north with a 7 percent grade. South of the railroad track, this alternative would introduce a horizontal curve to reach grade at Mendota Drive. The section would be extended to a four leg intersection with Moore Drive at Bridge Street. This connection would require a 6 percent grade. The existing Copley Road would need to be closed between Dacotah Street and 15th Avenue. This alignment would also likely impact multiple houses and potentially split the local neighborhood. It was the general consensus at the Stakeholder meeting that this alternative was not the preferred alignment (although it was preferred to no grade separation).

Alternative 2E – This alternative provides an overpass of the NS railroad at a location 200 feet east of the existing crossing. The bridge connects into Main Street to the north with a 7 percent grade on the same location as Alternative 2D. South of the railroad track, Alternative 2E crosses the RR via a bridge and then roughly parallels Copley Street to tie into Hickory Street near Kindley Street with a 6 percent grade. It was discussed during the meeting that following Copley was an option, but would impact an increased number of houses. As an option the alignment could be curved to minimize impacts to the backyards of houses east of Copley. As part of the stakeholder meeting, it was agreed that Alternative 2E would likely be the preferred alternative with the caveat that future design studies would examine alternate alignments along Copley Road to minimize impacts.

Discussion on 7th Avenue Crossing

The 7th Avenue Crossing was discussed at the meeting. It was presented that the general public and local officials that attended the public meeting had generally been in support of the previously developed Alternative 1A along 7th Avenue (near the existing crossing) or Alternative 1B near 5th Avenue. The planning phases for the Depot Area are beginning and will include the development of a revised street system to serve the area. Therefore, it was determined that a possible recommendation could be to build either Alternative 1A or 1B (combined with closing the at-grade crossing).

As part of the discussion, some items were noted specific to each alternative:



June 28, 2011 page 3

- Both Alternative 1A and 1B would require the roadway to pass under the railroad tracks since the grade for an overpass would exceed 15 percent. Alternative 1A (7th Avenue) would create a sag with a 9 percent downgrade from Main Street followed by a 7 percent upgrade to Talbert. In contrast, Alternative 1B (5th Avenue) would require a 7.4% downgrade from Main Street. But a 1 percent downgrade on the Talbert Boulevard approach due to a longer approach and lower elevation at the proposed connection with Talbert.
- Alternative 1A (7th Avenue) would require closure of the at-grade crossing during construction. Alternative 1B would allow the existing 7th Avenue crossing to remain in place during construction.
- Construction of either alternative would require a railroad detour on the south side of the tracks. Ideally this construction would coincide with track work required for the High Speed Rail and/or tracks for the passenger depot. In any event, this trackwork would introduce impacts on the south side of the tracks.
- Alternative 1B (the 5th Avenue alignment) would provide a better connection into the regional roadway network because 5th Avenue provides access to I-85 Business.
- Alternative 1A (the 7th Avenue alignment) provides a direct connection to the municipal buildings, maintenance facilities, and equipment/vehicle storage facilities on Carolina Avenue.

Schedule

- The next steps in the completion of the TSS are the advertisement of and holding of a public hearing. This needs to be done by the City. After discussion, it was determined that the City will only have one City Council meeting in July. It was discussed that the public hearing would be advertised at the meeting in July and the public hearing held one month later (allowing for a 30 day advertisement period). The exact dates will be confirmed by the City.
- It was requested that information be provided to the City followed up by a possible meeting with specific members of the City council and staff. Prior to this meeting, updated drawings (see attached) will be provided to illustrate the alternatives that have been considered.
- PB is preparing the draft version of the TSS report. This will be available in late June/early July for review prior to the public hearing. The final report would be completed after the public hearing.

e-mail: fendrick@pbworld.com direct line: 919-836-4053

Enclosure

c: meeting attendees

file no.: 173439A

J:\Traffic\PROJECTS\173439 Lexington TSS\Meetings\Stakeholder Meeting (6-21-11)\Lexington TSS - Local Stakeholders Meeting (6-21-11) - final meeting minutes.docx

Public Hearing

August 8, 2011

City of Lexington Agenda for City Council Meeting	B-29
Presentation for Lexington TSS	B-33
City of Lexington Meeting Minutes for City Council Meeting	B-43

CITY OF LEXINGTON LEXINGTON, NORTH CAROLINA

CITY COUNCIL MEETING

AUGUST 8, 2011

7:00 P.M.

CITY HALL

- I. CALL TO ORDER
- II. **INVOCATION** (Mayor Pro-Tem Larry G. Beck)
- III. PLEDGE OF ALLEGIANCE
- IV. APPROVAL OF MINUTES
 - 1. City Council Regular Meeting July 11, 2011
 - 2. City Council Special Meeting July 21, 2011
- V. <u>PETITIONS FROM CITIZENS</u> Members of the public may address the City Council on items not listed on the printed agenda. Please state your name, address, and observe the three-minute time limit.

VI. ADOPT AGENDA

VII. **RECOGNITIONS**

- 1. Recognitions Lexington Area Chamber of Commerce, Lexington City Schools and Uptown Lexington, Inc. Representatives
- 2. Introduction of New Lexington Senior High School Principal and Update on Lexington City Schools by Lexington City Schools Superintendent Rick Kriesky

VIII. PUBLIC HEARINGS

1. Public Hearing – Lexington Traffic Separation Study – 7th and 15th Avenues Railroad Crossing Improvements – Public Works Department and N.C. Department of Transportation

2. Public Hearing and Second Reading – Application for Zoning Map Amendment – Rezoning from Business District and Mixed Use District to Industrial District – Burgin Street – Johnson Concrete Company, Inc. and Others – Ordinance No. 12-01 – Community Development Department

IX. REGULAR BUSINESS

- 1. Authorize Budget Amendment and Installment Financing Debt Agreement for Fire Pumper Truck Finance and Fire Departments
 - A. Transfer Funds from General Administration to Debt Service for Installment Financing Debt Contract Payments Resolution No. 02-12
 - B. Award Bid for Installment Financing Debt Agreement Resolution No. 03-12
- 2. Year-End Encumbrances for Fiscal Year 2010-2011 <u>Budget Ordinance No. 12-03</u> Finance Department
- 3. Authorize Submission of 2011 Grant Applications Police Department
 - A. U.S. Department of Justice Edward Byrne Memorial Justice Assistance (JAG) Local Solicitation Grant
 - B. N.C. Governor's Crime Commission Project Safe Neighborhoods (PSN) Grant
- 4. Allocate Funds from City Council Neighborhood Revitalization Program Finance Department
 - A. Assistance for Drainage Pipe Installation Costs in Ward 3 at 413 Hillside Drive Resolution No. 01-12 Councilor Linwood Bunce
 - B. Donation to Hotdog Heaven Second Annual Back to School and Community Day Celebration at Washington Park Pool Resolution No. 04-12 Councilor Ronald Reid

- 5. Approve Amendments to City's Land Use Plan Community Development Department
 - Properties along Cotton Grove Road between Harkey Street and Federal Street Reclassify from Traditional Neighborhood to Neighborhood Center
 - Neighborhood Center Description for Businesses to Exclude Outdoor Operations and Storage

X. CONSENT AGENDA

The following item(s) have either been recommended by the Lexington Utilities Commission, require a call for public hearing or are routine, non-controversial items. Consent Agenda item(s) will be enacted by one motion and one vote. There will be no separate discussion of item(s). If discussion is desired, that item will be removed from the Consent Agenda and will be considered separately.

- 1. Ratify Execution of N.C. Department of Transportation (NCDOT) Right-of-Way Encroachment Agreement for Abbotts Creek Bridge Replacement Project East Center Street (SR 1243) Public Works Department
- 2. Call for Public Hearing and First Reading Amendment to City's Code of Ordinances, Appendix A, Land Use Ordinance, to include Chapter 16, Airport Height Restrictions Ordinance No. 12-02 Community Development Department

XI. <u>CITY MANAGER'S REPORTS</u>

- 1. Set Date for 2012 City Council Annual Retreat
- 2. Lexington City Schools Teachers and Support Staff Breakfast Friday, August 19, 2011, at 8:00 a.m. at Charles England Cafeteria/Multi-Purpose Room
- 3. City Offices to Close for Labor Day Monday, September 5, 2011

XII. <u>CLOSED SESSION</u>

In accordance with N.C. General Statute 143-318.11(a)(3) and (6) for the purpose of discussing matters relating to attorney-client privilege and personnel.

XIII. RECONVENE TO OPEN SESSION

XIV. ADJOURNMENT

Anyone who needs an accommodation to participate in the meeting should notify the City Manager's Office at 336-248-3910 at least forty-eight (48) hours prior to the meeting or call North Carolina Relay at 1-800-735-8262.



NCDOT Rail Division Parsons Brinckerhoff August 8, 2011







Approach: Lexington TSS

- Background
 - NCRR Corridor, Operated by Norfolk Southern
 - 8 daily passenger train trips, 40 freight trains
 - 7th Avenue & 15th Avenue at-grade crossings
- Recommendations
 - Near Term (3-5 years)
 - Mid Term (5-7 years)
 - Long Term (7-15 years)





NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RAIL DIVISION

Timeline: Lexington TSS

- Initiated in Spring 2010
- Two stakeholder meetings March 1, 2011 & June 21, 2011
- Public meeting held on May 3, 2011
- Draft Report prepared July 2011
- Public Hearing on August 8, 2011

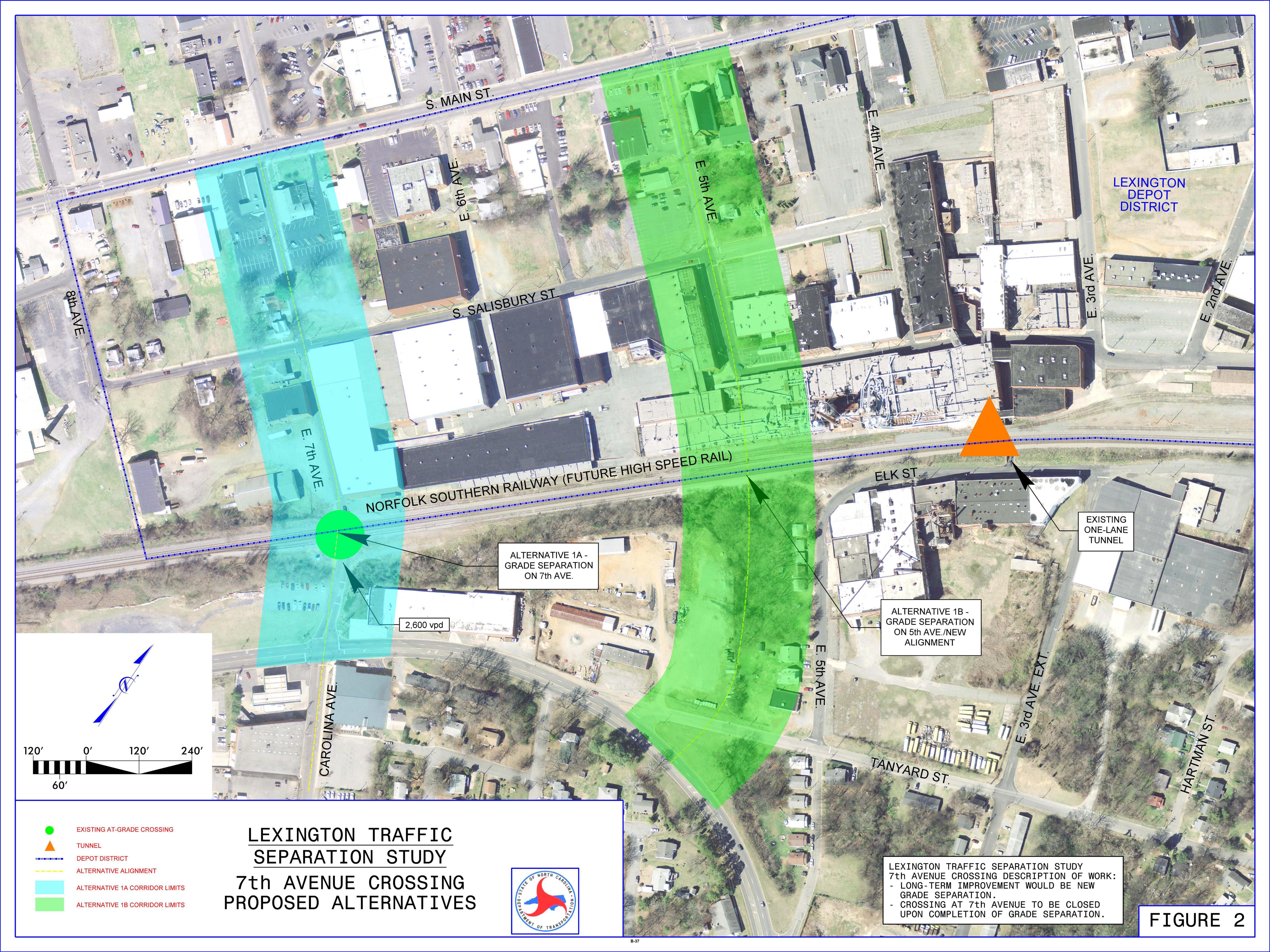




NORTH CAROLINA DEPARTMENT OF TRANSPORTATION-RAIL DIVISION TSS Report Layout & Overview

- Executive Summary with Recommendations
- Chapters 1 & 2 Introduction & Overview of Studies
- Chapters 3 & 4 Field Review & Safety/ Mobility Analysis
- Chapter 5 Alternatives Overview
 - 7th Avenue
 - 15th Avenue
 - Chapter 6 Public Involvement



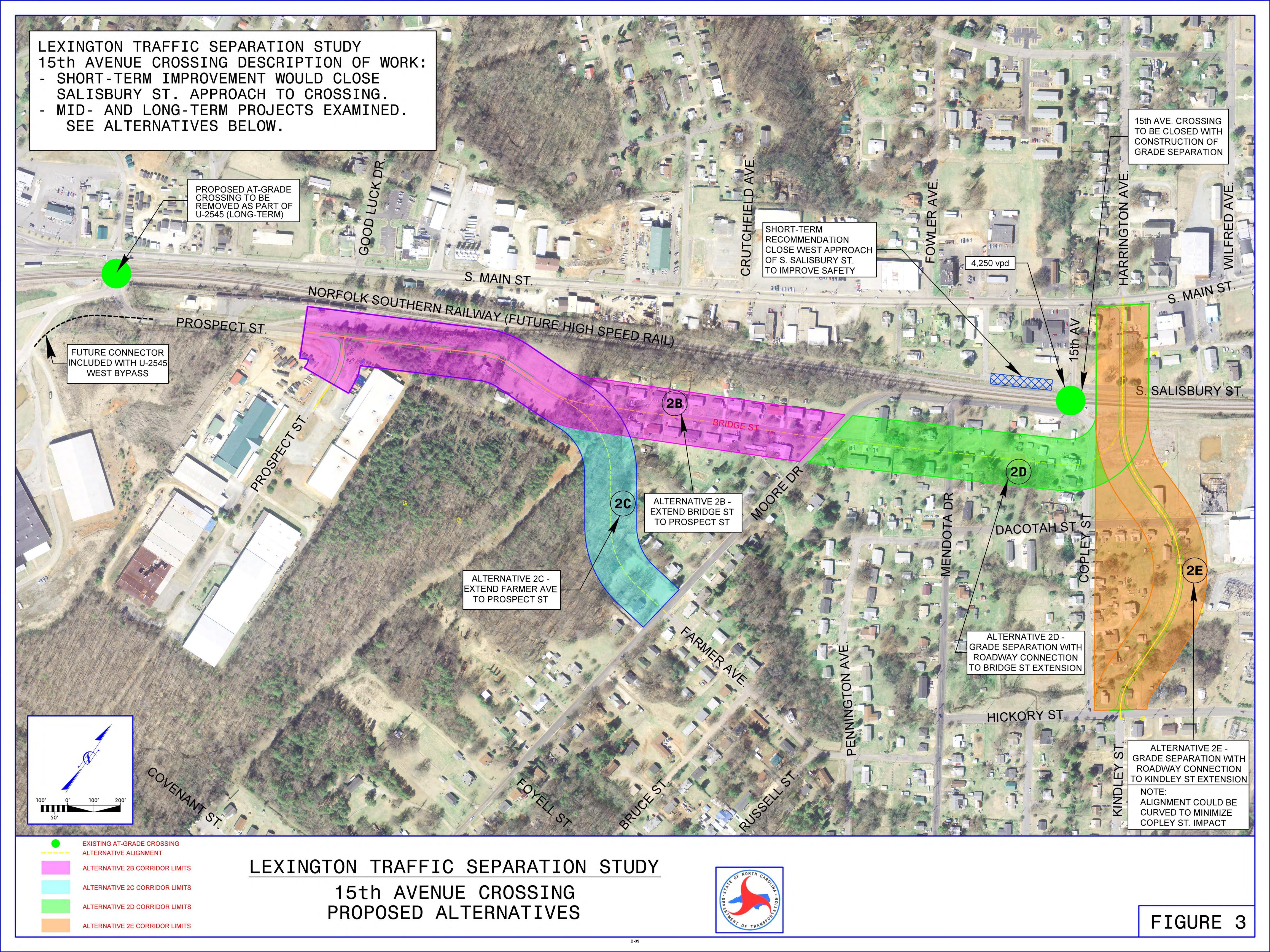


NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RAIL DIVISION 7th Avenue Crossing

- Near-term recommendation
 - Signing & marking improvements
- Long-term recommendation
 - Study & construct either Alt. 1A or Alt. 1B underpass depending upon Depot District plan (\$8.3-\$9.0 million)
 - At-grade crossing will not be closed until underpass provided









NORTH CAROLINA DEPARTMENT OF TRANSPORTATION-RAIL DIVISION 15th Avenue Crossing

- Near-term recommendation
 - Signing & marking improvements
 - Closure of Salisbury Street approach to 15th Avenue
- Long-term recommendation
 - Study & construct Alt. 2E overpass (\$5.3 million)
 - At-grade crossing will not be closed until overpass provided







- Complete TSS Process
 - Approval of TSS
 - City Resolution
- Implementation Agreement for near-term improvements
- Future work
 - Requires identification of future funding opportunities
 - Feasibility studies, environmental analysis, and preliminary engineering for improvements, including grade separations



NCDOT Rail Division Sandra Stepney, PE, CPM

sastepney@ncdot.gov

919-715-0296

Parsons Brinckerhoff Michael Fendrick, PE, PTOE

fendrick@pbworld.com

919-836-4053





DIGEST OF CITY COUNCIL ACTION

CITY OF LEXINGTON LEXINGTON, NORTH CAROLINA

CITY COUNCIL MEETING

AUGUST 8, 2011 CITY HALL

7:00 P.M.

I. CALL TO ORDER

Absent: None.

- II. **INVOCATION** (Mayor Pro-Tem Larry G. Beck)
- III. PLEDGE OF ALLEGIANCE
- IV. APPROVAL OF MINUTES
 - 1. City Council Regular Meeting July 11, 2011 *Approved*.
 - 2. City Council Special Meeting July 21, 2011 *Approved*.
- V. <u>PETITIONS FROM CITIZENS</u> Members of the public may address the City Council on items not listed on the printed agenda. Please state your name, address, and observe the three-minute time limit. *There were none.*
- VI. <u>ADOPT AGENDA</u> Adopted.

VII. **RECOGNITIONS**

- 1. Recognitions Lexington Area Chamber of Commerce, Lexington City Schools and Uptown Lexington, Inc. Representatives *Recognized*.
- 2. Introduction of New Lexington Senior High School Principal and Update on Lexington City Schools by Lexington City Schools Superintendent Rick Kriesky

Superintendent Kriesky introduced new LSHS Principal Travis Taylor and updated City Council on school system goals and student test scores.

VIII. PUBLIC HEARINGS

1. Public Hearing – Lexington Traffic Separation Study – 7th and 15th Avenues Railroad Crossing Improvements – Public Works Department and N.C. Department of Transportation

Held Public Hearing.

Speakers: None.

Approved the preliminary recommendations of the 7th Avenue and 15th Avenue railroad crossings study based upon the following principles:

- Both crossings are vital and necessary
- Crossings to be maintained by either bridges or tunnels
- These improvements are in the long term planning
- Short term improvements to include closing one lane alley from 15th Avenue to 17th Avenue.
- 2. Public Hearing and Second Reading Application for Zoning Map Amendment Rezoning from Business District and Mixed Use District to Industrial District Burgin Street Johnson Concrete Company, Inc. and Others Ordinance No. 12-01 Community Development Department

<u>Held Public Hearing.</u>

Speakers in opposition of rezoning application:

- 1. Ray Williams, 509 Westside Drive, spoke against the rezoning application for Johnson Concrete Company, Inc. due to the noise and dust being caused by the company.
- 2. Patty Miller, 603 Westside Drive, spoke against the rezoning application for Johnson Concrete Company, Inc. due to the environmental impact that the industry is having on the neighborhood, such as increased truck traffic, dust, damage to neighborhood property, basement flooding at 600 block of Westside Drive. Ms. Miller encouraged Johnson Concrete to expand their business somewhere else and not in a residential area.

Speakers in favor of rezoning application:

1. Starling Johnson, Johnson Concrete Corporate Sales Manager, granddaughter of Johnson Concrete Founder. Ms. Johnson stated that the company was started in 1947 and to this day is a locally owned and operated business. Ms. Johnson stated that Johnson Concrete makes a positive contribution to this community, employs 40 full-time individuals, is a member

- of the Chamber of Commerce, has donated products for Habitat homes, Eagle Scout projects. Ms. Johnson stated that every effort has been made and will continue to be made to address the concerns of the neighbors in the Westside Drive area.
- 2. Burr Sullivan, Executive Director of the Lexington Area Chamber of Commerce, spoke in favor of the rezoning and indicated that he believes Johnson Concrete is a pillar in this community and that every effort should be made to accommodate their business which has become a bright spot in Lexington's economy.

IX. REGULAR BUSINESS

- 1. Authorize Budget Amendment and Installment Financing Debt Agreement for Fire Pumper Truck Finance and Fire Departments
 - A. Transfer Funds from General Administration to Debt Service for Installment Financing Debt Contract Payments Resolution No. 02-12
 - Adopted Resolution No. 02-12 to transfer funds from the General Administration Fund to the Debt Service Fund in the amount of \$10,529 to cover the semi-annual debt payments proposed by BB&T beginning August, 2011, for the Fire Pumper Truck.
 - B. Award Bid for Installment Financing Debt Agreement Resolution No. 03-12
 - Adopted Resolution No. 03-12 to award the \$460,402 installment financing agreement to BB&T at a rate of 2.19% for a 7-year semi-annual debt repayment schedule with payments to be made in advance, contingent upon City Attorney approval.
- 2. Year-End Encumbrances for Fiscal Year 2010-2011 <u>Budget Ordinance No. 12-03</u> Finance Department

 <u>Adopted Budget Ordinance No. 12-03 to make necessary appropriations from various funds to cover expenditures encumbered in Fiscal Year Ended June 30, 2011, but finalized in the current Fiscal Year 2011-2012.</u>

- 3. Authorize Submission of 2011 Grant Applications Police Department
 - A. U.S. Department of Justice Edward Byrne Memorial Justice Assistance (JAG) Local Solicitation Grant

Authorized submission of the U.S. Department of Justice Edward Byrne Memorial Justice Assistance (JAG) Local Solicitation Grant application including all notification requirements necessary for receiving the grant.

B. N.C. Governor's Crime Commission Project Safe Neighborhoods (PSN) Grant

Authorized submission of the N.C. Governor's Crime Commission <u>Project Safe Neighborhoods (PSN) Grant application including all</u> notification requirements necessary for receiving the grant.

- 4. Allocate Funds from City Council Neighborhood Revitalization Program Finance Department
 - A. Assistance for Drainage Pipe Installation Costs in Ward 3 at 413 Hillside Drive Resolution No. 01-12 Councilor Linwood Bunce

Adopted Resolution No. 01-12 to allocate \$667 from City Councilor Linwood Bunce's allotment of Neighborhood Revitalization Funds to assist with one-third of the cost incurred for the installation of drainage piping at 413 Hillside Drive in Ward 3.

B. Donation to Hotdog Heaven Second Annual Back to School and Community Day Celebration at Washington Park Pool – Resolution No. 04-12 – Councilor Ronald Reid

Adopted Resolution No. 04-12 to allocate \$200 from City Councilor Ronald Reid's allotment of Neighborhood Revitalization Funds as a donation to the Hotdog Heaven Second Annual Back to School and Community Day Celebration in order to help with food costs.

- 5. Approve Amendments to City's Land Use Plan Community Development Department
 - Properties along Cotton Grove Road between Harkey Street and Federal Street Reclassify from Traditional Neighborhood to Neighborhood Center
 - Neighborhood Center Description for Businesses to Exclude Outdoor Operations and Storage

Approved the following two amendments to the City's Land Use Plan:

- Amended the Land Use Plan and Map by reclassifying properties located along Cotton Grove Road between Harkey Street and Federal Street from Traditional Neighborhood to Neighborhood Center; and
- Revised the description for Neighborhood Center by adding the following statement to the end of the paragraph: "Businesses should be limited to indoor uses with limited outdoor display and no outdoor storage, activity, or operational effects."

X. CONSENT AGENDA

The following item(s) have either been recommended by the Lexington Utilities Commission, require a call for public hearing or are routine, non-controversial items. Consent Agenda item(s) will be enacted by one motion and one vote. There will be no separate discussion of item(s). If discussion is desired, that item will be removed from the Consent Agenda and will be considered separately.

All items under the Consent Agenda were unanimously approved by one vote. No items were removed for discussion.

- 1. Ratify Execution of N.C. Department of Transportation (NCDOT) Right-of-Way Encroachment Agreement for Abbotts Creek Bridge Replacement Project East Center Street (SR 1243) Public Works Department *Approved*.
- 2. Call for Public Hearing and First Reading Amendment to City's Code of Ordinances, Appendix A, Land Use Ordinance, to include Chapter 16, Airport Height Restrictions Ordinance No. 12-02 Community Development Department

 Public Hearing will be held on August 22, 2011, at 7:00 p.m. at City Hall.

XI. CITY MANAGER'S REPORTS

1. Set Date for 2012 City Council Annual Retreat

<u>Date for 2012 Council Retreat will be Tuesday, February 7, 2012</u>

and Wednesday, February 8, 2012.

2. Lexington City Schools Teachers and Support Staff Breakfast – Friday, August 19, 2011, at 8:00 a.m. at Charles England Cafeteria/Multi-Purpose Room

For information only.

3. City Offices to Close for Labor Day – Monday, September 5, 2011 *For information only.*

XII. CLOSED SESSION

In accordance with N.C. General Statute 143-318.11(a)(3) and (6) for the purpose of discussing matters relating to attorney-client privilege and personnel.

Recessed into Closed Session.

XIII. RECONVENE TO OPEN SESSION

Reconvened into Open Session.

XIV. ADJOURNMENT

Adjourned.