



Community Mobility Plan

Cities of Manchester & Tullahoma, TN
October 2019



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5'

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8'

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Prepared by



Funded through the Community
Transportation Planning Grant Program



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CITIES OF MANCHESTER & TULLAHOMA, TN

Community Mobility Plan

The Tennessee Department of Transportation (TDOT) established the Community Transportation Planning Grant (CTPG) program to assist Tennessee's small and rural communities in developing transportation plans to address transportation, land use, and growth management issues. The program is designed to better integrate multimodal transportation systems with local land use objectives and achieve statewide transportation goals.

The Cities of Manchester and Tullahoma were jointly awarded one of the 22 grants from the CTBG program's 2018-2019 grant cycle. This report documents the findings and recommendations of the Community Mobility Plan.

Section 1.0

Overview

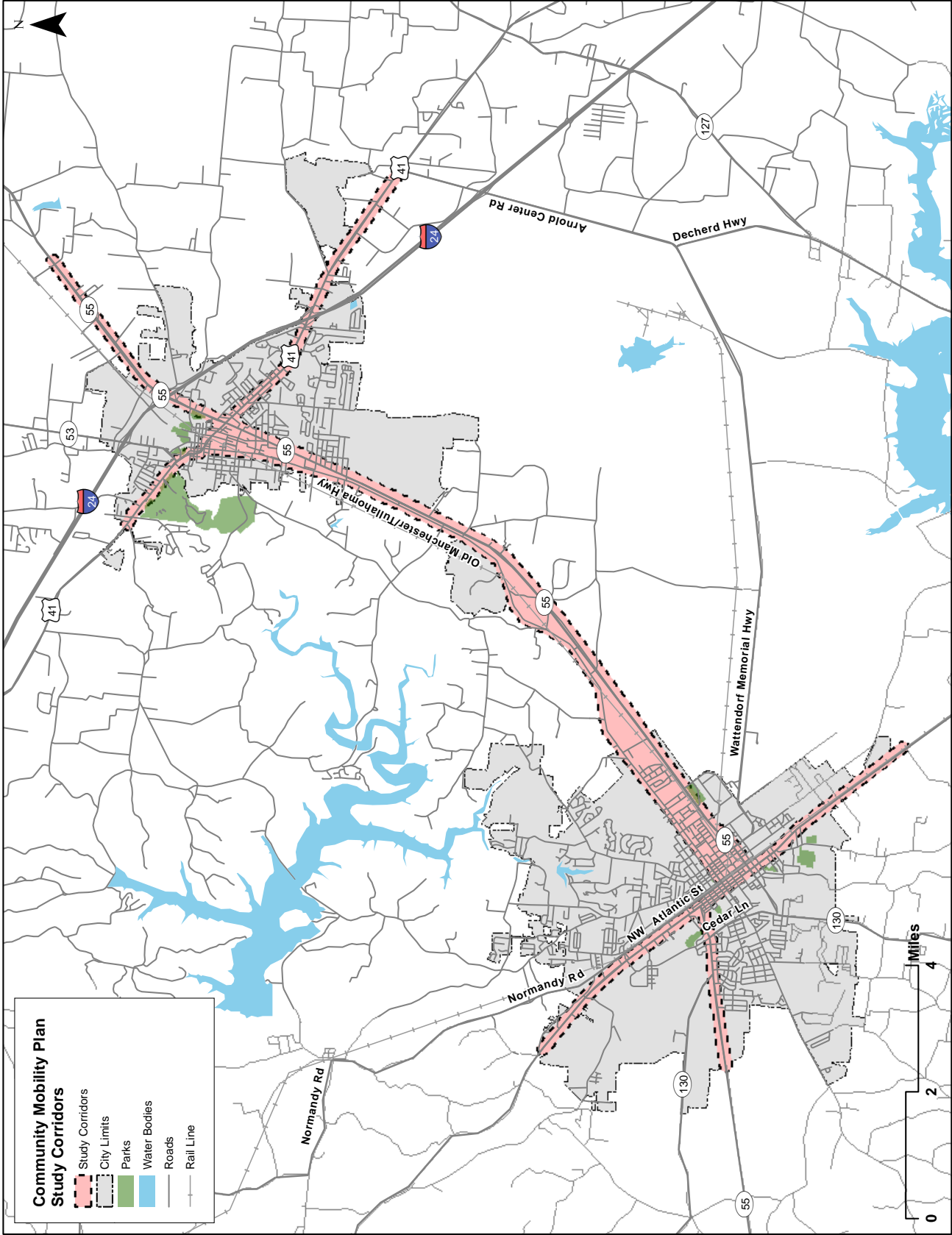
The Cities of Manchester and Tullahoma are the two primary cities in Coffee County, Tennessee. Manchester, with a 2018 population of 10,916, is the county seat while Tullahoma, with a 2018 population of 19,370, is the county's largest city. The cities' close proximity to one another – they are located approximately 12 miles apart – creates a natural interdependency between the two. Residents and visitors regularly commute from one city to the other for employment, shopping, recreation, and entertainment. The cities also share a Joint Industrial Park, located along State Route (SR) 55, which is currently home to four industries and 135 employees with approximately 300 available acres for additional industrial development.

This interdependency necessitates close coordination of decision-making, particularly for shared resources such as transportation infrastructure. The Community Mobility Plan focuses on a holistic regional evaluation of the mobility challenges and opportunities that both cities will face going forward. As the cities continue to grow, a shared vision for community mobility will ensure the continued safe and efficient movement of people within and between Manchester and Tullahoma. To this end, the plan focuses on the five primary corridors (Figure 1-1) serving the two cities:

- SR-55 between Manchester and Tullahoma;
- US-41 (SR-2) in Manchester;
- Old Manchester/Tullahoma Highway;
- US-41A (SR-16) in Tullahoma; and
- SR-55/Wilson Avenue in Tullahoma.

The Community Mobility Plan will act as a blueprint for multimodal mobility and safety along these five corridors and the parallel and intersecting routes that support them. The plan recommendations will promote multimodal safety, provide needed connections to community facilities and amenities, and ensure a coordinated approach to meeting the transportation needs of the region's population and employment growth.

Figure 1-1. Community Mobility Study – Study Corridors



Section 2.0

Issues & Opportunities

The transportation system in Manchester and Tullahoma is largely centered around the use of the personal automobile. Indeed, most residents use an automobile to move within and between the two cities. However, both cities have a relatively compact development pattern, making active transportation, including walking and biking, a viable choice for short trips to destinations close to home, work, or school. Improving the active transportation network while ensuring the safe and efficient movement of automobiles is the primary focus of the Community Mobility Plan. As both cities continue to grow and attract new residents and visitors, ensuring safety for all users of the transportation system will be paramount to securing a livable and attractive community. As such, the Community Mobility Plan directly addresses the following key issues and opportunities:

- A. Consider the safety and mobility needs of all travel modes and people of all ages and abilities;**
- B. Enhance and expand walking and biking facilities by providing a mix of new or improved facilities along both major and local streets;**
- C. Target transportation improvements in areas experiencing residential and commercial growth;**
- D. Connect key districts and activity centers, such as neighborhoods, schools, parks, and commercial areas; and**
- E. Improve transportation connections between Manchester and Tullahoma, particularly for pedestrians and bicyclists.**

Each of the issues and opportunities is discussed in greater detail below.

A. Consider All Travel Modes and People of All Ages & Abilities

The five study corridors form the foundation of the joint transportation system for Manchester and Tullahoma, accommodating through traffic and providing access to key destinations and activity centers. As the communities continue to grow, safety and mobility along these corridors will face additional challenges. Growth and increased local traffic create conflict between local commuters and through traffic, such as the heavy truck traffic that regularly travels through Tullahoma to and from the Jack Daniels distillery in nearby Lynchburg. Furthermore, the high traffic volumes and speeds, combined with often-frequent driveway cuts, create conflict points between vehicles and bicycles and pedestrians. Improvements are needed to ensure safe and efficient mobility for all users, including those who walk or bike.

B. Enhance & Expand Walking & Biking Facilities

Safe and comfortable walking and biking facilities provide a wide range of benefits to individuals, their communities, and the surrounding environment. From increased property values to better health outcomes, active transportation facilities are efficient ways to increase the quality of life for residents and provide a more attractive destination for visitors. While both Manchester and Tullahoma currently have both bicycle and pedestrian facilities, these tend to be isolated facilities, fragmented by network gaps and served by unsafe street crossings. These issues create barriers to existing and potential users, discouraging active transportation for short trips.

C. Target Improvements in Growth Areas

Both cities have a shared small town, rural history. As they attract new residents and jobs, the transportation infrastructure is often inadequate to accommodate the additional demand that accompanies such growth. Roads that originally served low-density residential development or agricultural land, such as Hills Chapel Road in Manchester and Cedar Lane in Tullahoma, are now experiencing safety and capacity issues as vehicle and active transportation traffic have increased. Such legacy facilities can actually increase demand on the study corridors as users seek established high-volume roads for local travel. Ensuring that transportation facilities are adequate to accommodate growth can strengthen the cities' overall transportation networks.

D. Connect Key Districts & Activity Centers

The current road network generally provides connections for automobiles to existing districts and activity centers. However, conditions at intersections serving these areas can be unsafe, particularly during peak hours. For bicyclists and pedestrians, conditions can be even less favorable, particularly around schools, parks, and public facilities. Strengthening multimodal connections to community facilities, as well as commercial districts, creates a more inviting environment for users as well as increased traffic and patronage for community facilities and local businesses.

E. Improve Connections Between Manchester & Tullahoma

Both SR-55 and Old Manchester/Tullahoma Highway provide the primary connections between Manchester and Tullahoma. Ensuring the safe and efficient movement of vehicles on these roads is paramount to both communities. Additionally, in recent years members of the community have advocated for a stronger bicycle and pedestrian connection between the two cities, which would provide better multimodal connectivity as well as an ideal route for recreational use.

Section 3.0

Evaluation of Existing Conditions & Future Needs

Existing conditions along the five corridors were evaluated to determine the multimodal solutions that would most effectively address the issues and opportunities discussed in Section 2.0.

Public Participation

Two rounds of public workshops were held concurrently with key project milestones to solicit feedback from local residents. The workshops were supported by an online survey and interactive map. The first round of outreach consisted of two workshops:

- May 14, 2019, D.W. Wilson Community Center – Tullahoma; and
- May 16, 2019, Manchester City Hall – Manchester.

This round of workshops focused on establishing a community vision for mobility along the study corridors by asking residents to consider two key questions:

1. What transportation goals are important to you?
2. What kind of improvements would you like to see?

Over 60 people participated either in-person at the public workshop or online through the survey and/or interactive map. Table 3-1 summarizes the responses received regarding community goals for the mobility study. Focusing walking and biking connections on local streets among key destinations and emphasizing improved connections along major streets and highways were identified as “More Important.” Table 3-2 shows the preferred types of improvements respondents identified. Sidewalks, separated bike lanes, and greenways were the most preferred walking, bicycling, and trail facility types or improvements. Mixed-use development and access management were identified as preferred complementary development strategies.

Participants were also encouraged to identify specific improvement suggestions in an interactive mapping exercise. Figures 3-1 and 3-2 show the improvement suggestions provided for Manchester and Tullahoma, respectively.

A final public workshop on August 27, 2019, presented the study’s draft recommendations.

Table 3-1. Corridor Goals

Goals/Objectives	More Important		Important		Less Important	
	Total	Percentage	Total	Percentage	Total	Percentage
Ensure that transportation improvements consider the needs of all travel modes and people of all ages and abilities	21	47%	20	44%	4	9%
Target transportation improvements in areas experiencing residential and commercial growth	23	55%	13	31%	6	14%
Improve transportation connections between Manchester and Tullahoma, especially for pedestrians and bicyclists	14	30%	9	20%	23	50%
Emphasize walking and biking improvements on major streets and highways	31	65%	12	25%	5	10%
Focus walking and bicycling connections on local streets between neighborhoods, schools, parks and commercial areas	31	66%	11	23%	5	11%

Table 3-2. Preferred Improvements

		Total	% of Category
Walking	Sidewalks	38	58%
	Streets Trees and Lighting	16	25%
	Crosswalks	10	15%
	Crossing Islands	1	2%
Bicycling	Separated Bike Lanes	24	53%
	Buffered Bike Lanes	12	27%
	Bike Lanes	7	16%
	Bike Boulevards	2	4%
Trails	Greenways	20	40%
	Sidepaths	18	36%
	Public Plazas and Squares	9	18%
	Trailheads	3	6%
Development Strategies	Mixed Use Development	19	37%
	Managing Driveway Access	17	33%
	Building Setbacks	8	16%
	Parking Behind or On Side	7	14%

Figure 3-1. Interactive Map Comments - Manchester

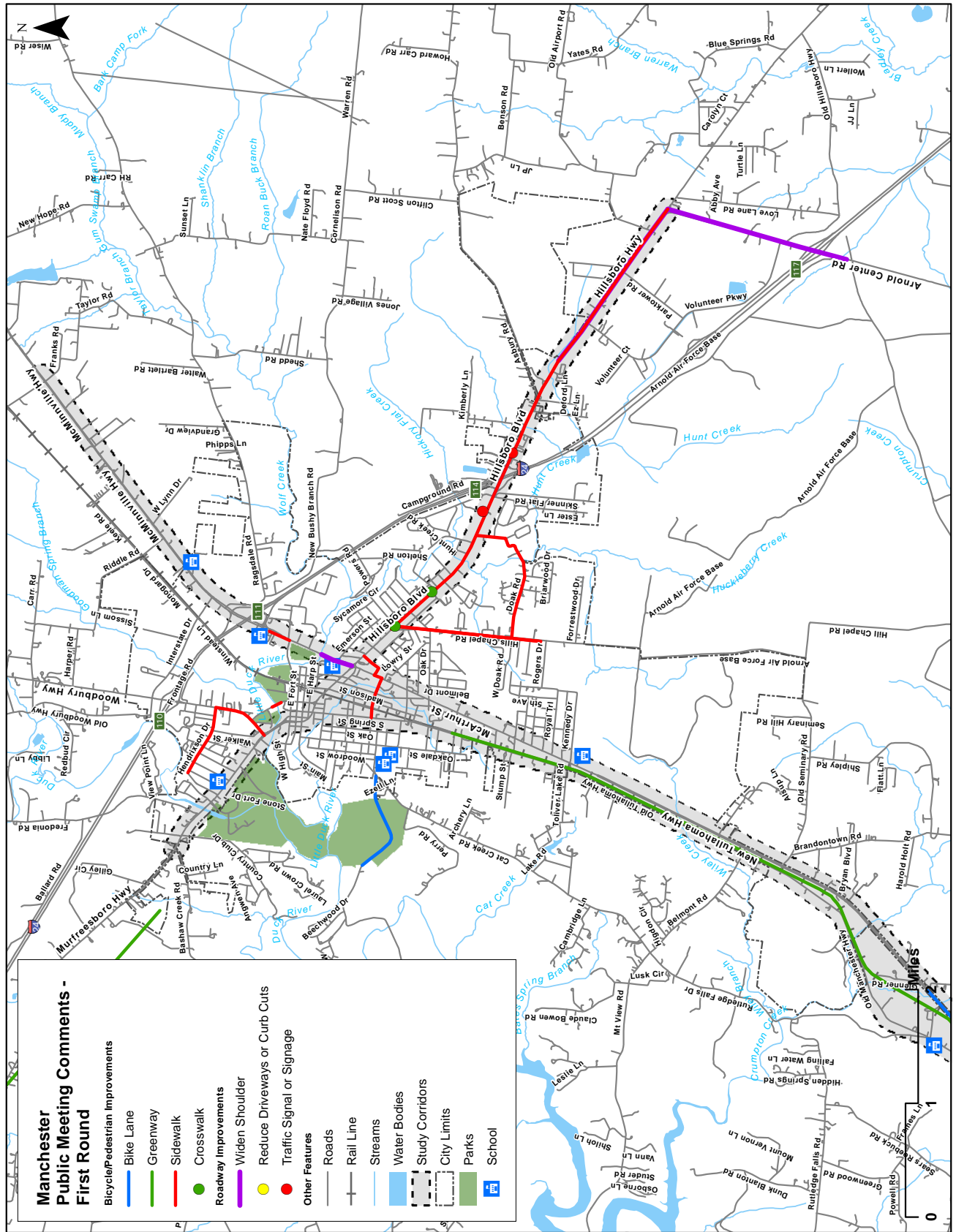
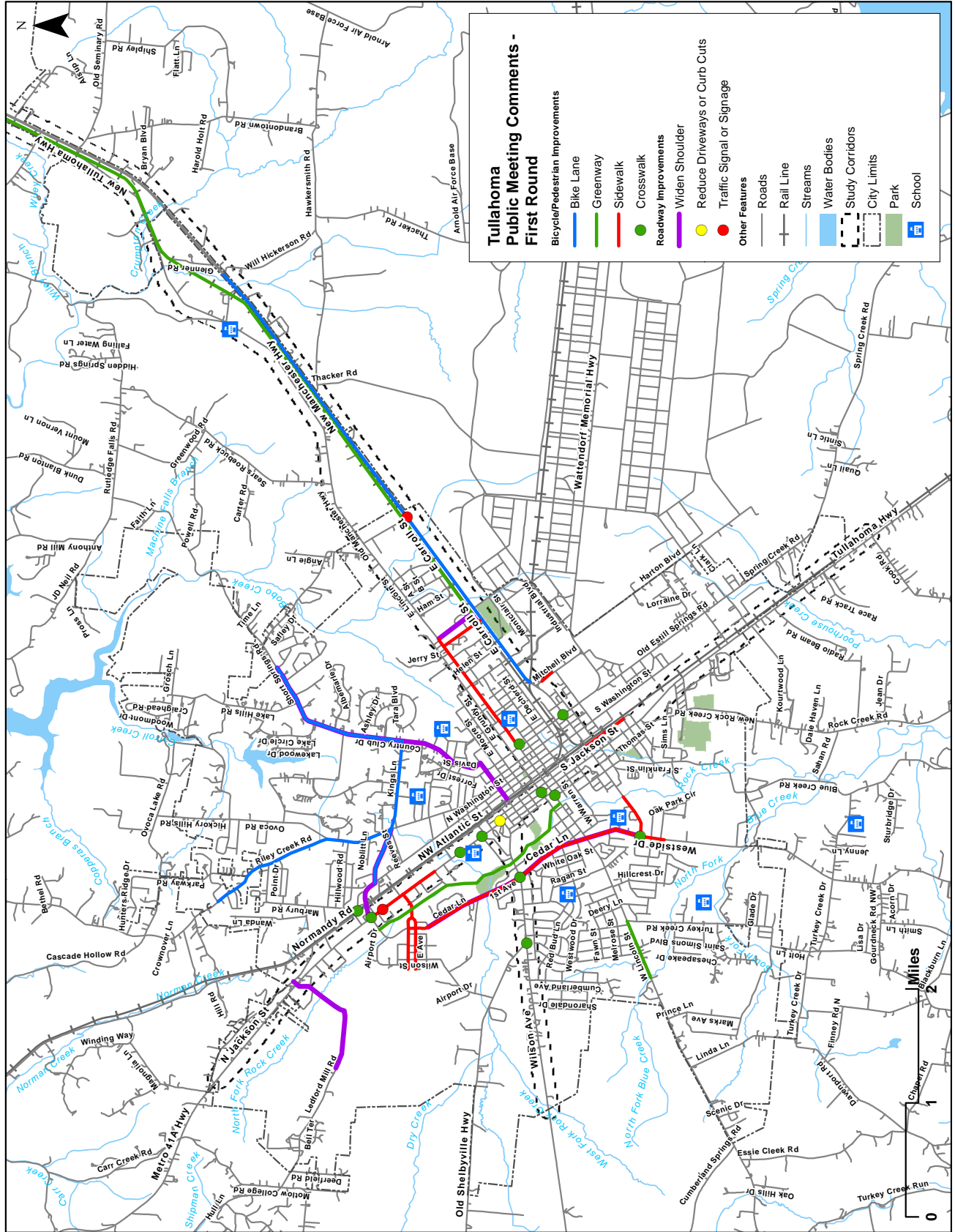


Figure 3-2. Interactive Map Comments – Tullahoma



Corridor Traffic Analysis

Both Manchester and Tullahoma recently updated their respective transportation plans. The Manchester Transportation Master Plan was last updated in 2018 and the Tullahoma Comprehensive Transportation Plan was last updated in 2013. These documents, as well as projects currently under development by TDOT, were reviewed to identify planned roadway improvement projects within both jurisdictions. Planned projects on key parallel or intersecting routes were reviewed as well. Tables 3-3 and 3-4 identify relevant planned roadway improvements for Manchester and Tullahoma, respectively.

Table 3-3. Planned Roadway Improvements - Manchester

Route	From	To	Description	Source	Agency	Horizon Year
US-41/Hillsboro Boulevard	Near Doak Road	Walmart Access Road	Signalization Integration	Transportation Master Plan	Manchester	2019
Kennedy Drive	SR-55/McArthur Street	Hills Chapel Road	Improvement and extension (new location)	Transportation Master Plan	Manchester	2022
US-41/Hillsboro Boulevard	Joe Hickerson Road	AEDC Road	Widening	TDOT STIP	TDOT	2022
Hills Chapel Road	Forrestwood Drive	US-41/Hillsboro Boulevard	Widening with sidewalks	Transportation Master Plan	Manchester	2027
Oak Drive/ Clover Lane	SR-55/McArthur Street	US-41/Hillsboro Boulevard	Widening	Transportation Master Plan	Manchester	2027
Skinner Flat Road	US-41/Hillsboro Boulevard	Forrestwood Drive	Widening	Transportation Master Plan	Manchester	2027
Forrestwood Drive	Hills Chapel Road	Skinner Flat Road	Improvement and extension (new location)	Transportation Master Plan	Manchester	2037
US-41/Murfreesboro Highway	Duncan Street	North City Limit	Widening	Transportation Master Plan	Manchester	2037
Burger Drive	US-41/Hillsboro Boulevard	Hunt Creek Road	Widening	Transportation Master Plan	Manchester	2037
Joe Hickerson Road	US-41/Hillsboro Boulevard	Southern Terminus	Widening	Transportation Master Plan	Manchester	2037

Table 3-4. Planned Roadway Improvements - Tullahoma

Route	From	To	Description	Source	Agency	Horizon Year
SR-55/Wilson Avenue	First Avenue	US-41A/North Jackson Street	Widening with sidewalks and bike lanes	TDOT STIP	TDOT	2018
SR-55/Wilson Avenue	First Avenue	Corporate Boundary	Widening with sidewalks and bike lanes	Metropolitan Transportation Plan	Tullahoma	2018
Cedar Lane*	US-41/North Jackson Street	William Northern Boulevard	Widening with sidewalks and bike lanes	Metropolitan Transportation Plan	Tullahoma	2018
Cedar Lane	William Northern Boulevard	Connector (Cedar Lane/SR-130)	Widening with sidewalks and bike lanes	Metropolitan Transportation Plan	Tullahoma	2018
Cedar Lane	Connector (Cedar Lane/SR-130)	SR-55/Wilson Avenue	Widening with sidewalks and bike lanes	Metropolitan Transportation Plan	Tullahoma	2018
Connector (Cedar Lane/SR-130)	Cedar Lane	SR-130	Extension (new location) with sidewalks and bike lanes	Metropolitan Transportation Plan	Tullahoma	2018
Cedar Lane/Westside Drive	SR-55/Wilson Avenue	Clement Drive	Widening with sidewalks and bike lanes	Metropolitan Transportation Plan	Tullahoma	2022
Atlantic Street	Kings Lane	US-41A/South Jackson Street	Widening with sidewalks and bike lanes	Metropolitan Transportation Plan	Tullahoma	2022
Kings Lane	Ovoca Road	Marbury Drive	Widening with sidewalks and bike lanes	Metropolitan Transportation Plan	Tullahoma	2027
Kings Lane	Country Club Drive	Ovoca Road	Widening with sidewalks and bike lanes	Metropolitan Transportation Plan	Tullahoma	2027

*Project has been constructed

Using these projects as a baseline, projected traffic volumes and levels of service (LOS) for the five study corridors were analyzed to determine whether additional improvements are necessary to address existing and/or projected traffic issues along the corridors.

Due to the varying presence of traffic signals along the corridors, both the Highway Capacity Software (HSC7) and ArtPlan2012 were used to analyze the non-signalized and signalized portions of the routes, respectively.

As shown in Tables 3-5 through 3-11, LOS along the routes remains largely static through the design year of 2040. All of the routes, when analyzed as a whole with a weighted average, operate at acceptable LOS for both current (2019) and future (2040) projections.

Table 3-5. US-41 Level of Service

US-41						2019			2040		
LM	ID	LM	ID	Calc.	Speed Limit	ADT	Avg. Speed	LOS	ADT	Avg. Speed	LOS
11.68	Enter Manchester City	12.35	Begin 40 mph	HCS	55	9,310	49.8	D	10,710	49.6	D
12.35	Begin 40 mph	13.02	Traffic Count STA 041	HCS	40	9,310	40.5	D	10,710	40.4	D
13.02	Traffic Count STA 041	13.47	Harmon Ln.	HCS	40	9,310	33.6	D	10,710	33.5	E
13.47	Harmon Ln.	13.60	Woodbury Hwy.	HCS	40	9,310	33.7	A	10,710	33.7	B
13.60	Woodbury Hwy.	13.91	W. Fort St.	ArtPlan	40	12,900	29.5	C	15,840	29.1	C
13.91	W. Fort St.	14.10	S. Spring St.	ArtPlan	40	12,900	16.8	E	15,840	15.9	E
14.10	S. Spring St.	14.65	McMinnville Hwy.	ArtPlan	40	13,950	28.1	C	15,410	27.7	C
14.65	McMinnville Hwy.	14.88	Jackson St.	ArtPlan	40	19,770	16.4	E	21,850	15.3	E
14.88	Jackson St.	15.12	Hills Chapel Rd.	ArtPlan	40	19,770	23.9	C	21,850	23.4	C
15.12	Hills Chapel Rd.	15.34	Clover Ln.	ArtPlan	40	19,770	21.7	D	21,850	20.8	D
15.34	Clover Ln.	16.31	Shopping Center	ArtPlan	40	19,290	31.4	B	21,780	30.3	C
16.31	Shopping Center	16.61	Expressway Dr.	ArtPlan	40	19,290	19.5	D	21,780	18.6	D
16.61	Expressway Dr.	16.69	I-24 S	ArtPlan	40	19,290	11.5	F	21,780	11.0	F
16.69	I-24 S	16.90	I-24 N	ArtPlan	40	19,290	22.0	D	21,780	21.2	D
16.90	I-24 N	17.11	Walmart Supercenter	ArtPlan	40	19,290	21.4	D	21,780	20.4	D
17.11	Walmart Supercenter	17.37	Traffic Count STA 090	HCS	40	19,290	41.0	B	21,780	41.0	C
17.37	Traffic Count STA 090	17.58	Leave Manchester City	HCS	40	16,470	36.8	C	22,330	36.8	C
Weighted Average Speed:					41.7	31.7			31.1		
Weighted Average LOS:						D			D		

Table 3-6. Spring Street Level of Service

Spring Street						2019			2040		
LM	ID	LM	ID	Calc.	Speed Limit	ADT	Avg. Speed	LOS	ADT	Avg. Speed	LOS
0.060	Begin 45 mph	0.127	Traffic Count STA 46	HCS	45	2,560	39.6	B	2,920	39.5	B
0.127	Traffic Count STA 46	0.800	Begin 30 mph	HCS	45	2,560	39.8	B	2,920	39.7	B
0.800	Begin 30 mph	1.06	End Study Route	HCS	30	2,560	27.3	B	2,920	27.2	C
Weighted Average Speed:					41.1	36.5			36.4		
Weighted Average LOS:						B			C		

Table 3-7. SR-55/McArthur Street Level of Service

SR-55/McArthur Street						2019			2040		
LM	ID	LM	ID	Calc.	Speed Limit	ADT	Avg. Speed	LOS	ADT	Avg. Speed	LOS
13.07	Oak Dr.	13.52	Coffee St.	ArtPlan	40	18,430	30.1	C	25,270	27.6	C
13.52	Coffee St.	13.79	SR2	ArtPlan	40	19,360	17.1	E	21,390	16.2	E
13.79	SR2	15.17	Interstate Dr.	ArtPlan	40	13,150	39.2	B	14,530	39.0	B
15.17	Interstate Dr.	15.40	Begin 55 mph	HCS	40	13,150	45.0	A	14,530	45.0	A
15.40	Begin 55 mph	15.49	Traffic Count STA 38	HCS	55	13,150	57.0	A	14,530	57.0	A
15.49	Traffic Count STA 38	15.55	Leave Manchester City	HCS	55	13,830	52.0	A	15,280	52.0	A
Weighted Average Speed:					40.9	36.6			36.0		
Weighted Average LOS:						C			C		

Table 3-8. US-41A/Jackson Street Level of Service

US-41A/Jackson Street						2019			2040		
LM	ID	LM	ID	Calc.	Speed Limit	ADT	Avg. Speed	LOS	ADT	Avg. Speed	LOS
0.00	Enter Coffee County	0.72	Begin 40 mph	HCS	55	20,820	56.0	B	24,930	56.0	B
0.72	Begin 40 mph	1.07	Ledford Mill Rd.	HCS	40	20,820	42.0	C	24,930	42.0	C
1.07	Ledford Mill Rd.	1.50	Hoover Ln.	ArtPlan	40	20,820	29.7	C	24,930	28.4	C
1.50	Hoover Ln.	1.52	Commerce Central	ArtPlan	40	20,820	3.1	F	24,930	2.8	F
1.52	Commerce Central	1.94	Washington St.	ArtPlan	40	20,820	23.2	C	24,930	21.5	D
1.94	Washington St.	2.19	Washburn St.	ArtPlan	40	20,820	24.0	C	24,930	22.9	D
2.19	Washburn St.	2.54	Jackson Cr.	ArtPlan	40	20,820	27.5	C	24,930	26.2	C
2.54	Jackson Cr.	3.37	Wilson Ave.	ArtPlan	40	18,570	35.6	B	20,520	35.2	B
3.37	Wilson Ave.	3.80	Grundy St.	ArtPlan	30	20,830	18.8	D	23,910	16.1	E
3.80	Grundy St.	3.88	Lincoln St.	ArtPlan	30	20,830	6.2	F	23,910	4.7	F
3.88	Lincoln St.	3.96	Lauderdale St.	ArtPlan	30	20,830	9.9	F	23,910	9.5	F
3.96	Lauderdale St.	4.36	Carroll St.	ArtPlan	30	19,990	18.8	D	23,960	16.0	E
4.36	Carroll St.	4.49	Traffic Count STA 99	HCS*	30	19,990	36.4	C	23,960	36.4	C
4.49	Traffic Count STA 99	4.92	Begin 45 mph	HCS*	30	14,470	36.6	B	15,990	36.6	B
4.92	Begin 45 mph	5.42	Exit Coffee County	HCS	45	14,470	43.6	B	15,990	43.6	B
Weighted Average Speed:					39.6	33.5			32.7		
Weighted Average LOS:						C			D		

Table 3-9. East Lincoln Street Level of Service

East Lincoln Street						2019			2040		
LM	ID	LM	ID	Calc.	Speed Limit	ADT	Avg. Speed	LOS	ADT	Avg. Speed	LOS
0.00	S. Jackson St.	0.10	Atlantic St.	ArtPlan	30	7,290	14.5	D	8,060	14.1	D
0.10	Atlantic St.	0.44	Anderson St.	ArtPlan	30	7,290	27.0	B	8,060	26.5	B
0.44	Anderson St.	0.66	Traffic Count STA 213	HCS	30	7,290	20.1	E	8,060	20.0	E
0.66	Traffic Count STA 213	1.86	Traffic Count STA 060	HCS	30	4,730	20.3	C	5,230	20.3	C
1.86	Traffic Count STA 060	2.27	Begin Speed Zone	HCS	30	4,730	20.3	C	5,230	20.2	D
2.27	Begin 45 mph	3.14	End Study Route	HCS	45	4,730	36.9	B	5,230	36.8	C
Weighted Average Speed:					34.2				25.3		
Weighted Average LOS:						C			D		

Table 3-10. SR-55/East Carroll Street Level of Service

SR-55/East Carroll Street						2019			2040		
LM	ID	LM	ID	Calc.	Speed Limit	ADT	Avg. Speed	LOS	ADT	Avg. Speed	LOS
2.59	SR16	3.03	Anderson St.	ArtPlan	30	18,920	22.0	C	24,120	13.7	F
3.03	Anderson St.	3.70	Begin 55 mph	HCS	40	18,920	41.0	B	24,120	41.0	C
3.70	Begin 55 mph	4.84	Traffic Count STA 59	HCS	55	18,920	57.4	A	24,120	57.4	B
4.84	Traffic Count STA 59	8.69	Leave Tullahoma City	HCS	55	15,550	57.8	A	20,210	57.8	A
8.69	Enter Manchester City	11.46	Begin 40 mph	HCS	55	15,550	58.4	A	20,210	58.4	B
11.46	Begin 40 mph	11.59	Traffic Count STA 47	HCS	40	15,550	43.0	B	20,210	43.0	B
11.59	Traffic Count STA 47	13.07	Oak Dr.	HCS	40	18,430	40.6	B	25,270	40.6	C
Weighted Average Speed:					50.7				52.4		
Weighted Average LOS:						B			B		

Table 3-11. SR-55/Wilson Avenue Level of Service

SR-55/Wilson Avenue						2019			2040		
LM	ID	LM	ID	Calc.	Speed Limit	ADT	Avg. Speed	LOS	ADT	Avg. Speed	LOS
0.00	Enter Coffee County	0.47	Begin 45 mph	HCS	55	7,400	58.6	C	8,180	60.8	C
0.47	Begin 45 mph	1.28	Traffic Count STA 157	HCS	45	7,400	39.3	C	8,180	39.2	C
1.28	Traffic Count STA 157	1.48	SR 130	HCS	45	7,400	39.3	C	8,180	39.2	C
1.48	SR 130	1.61	Traffic Count STA 156	HCS	45	7,400	46.2	A	8,180	46.2	A
1.61	Traffic Count STA 156	2.00	Begin 30 mph	HCS	45	10,120	36.2	D	12,610	36.0	E
2.00	Begin 30 mph	2.06	Cedar Ln.	HCS	30	10,120	19.9	E	12,610	19.8	E
2.06	Cedar Ln.	2.59	SR16	ArtPlan	30	10,550	24.8	B	13,400	23.4	B
Weighted Average Speed:					43.4				39.3		
Weighted Average LOS:						C			C		

Bicycle and Pedestrian Analysis

While the plan focuses on the five study corridors, a network-based approach was used for the development of bicycle and pedestrian solutions. Bicycle and pedestrian infrastructure is most successful when incorporated into a larger network framework, ensuring that users can safely and comfortably walk or bike among residential, employment, and leisure destinations. To this end key parallel and intersecting streets were also analyzed and considered for bicycle and pedestrian recommendations. Specifically, the analyses examined all road segments within one-half mile of the study corridors.

A review of existing planning documents established the foundation of the recommended bicycle and pedestrian network. Both the Manchester (2018) and Tullahoma (2013) Transportation Plans were reviewed for currently-planned bicycle and pedestrian facilities. As shown in Figures 3-3 and 3-4, both cities have planned bicycle and pedestrian networks. These recommendations were reviewed for consistency with national best practices and ultimately carried forward as part of the Community Mobility Plan's recommendations.

A desktop analysis was conducted to determine existing bicycle and pedestrian demand. The demand analysis determines where current bicycle and pedestrian demand might exist without regard to the presence or absence of existing facilities; in other words, where users would likely walk or bike, provided they felt comfortable doing so.

The analysis relies on five inputs to assign a composite demand score:

- Population density;
- Employment density;
- Retail, arts, entertainment, recreation, accommodations, and food services employment;
- Existing schools; and
- Existing parks.

As shown in Figures 3-5 and 3-6, these variables reveal areas of the study corridors and their environs where existing demand is located. Areas of higher demand tend to occur in areas with concentrated retail activity close to parks and schools. In Manchester, these areas consist of clearly-defined zones throughout the city. In Tullahoma, which has a relatively compact development pattern radiating away from downtown, much of the city center and its surrounding neighborhoods are included in a larger central zone of high demand, which decreases as one moves away from the city center.

Figure 3-3. Existing and Planned Bicycle and Pedestrian Facilities – Manchester

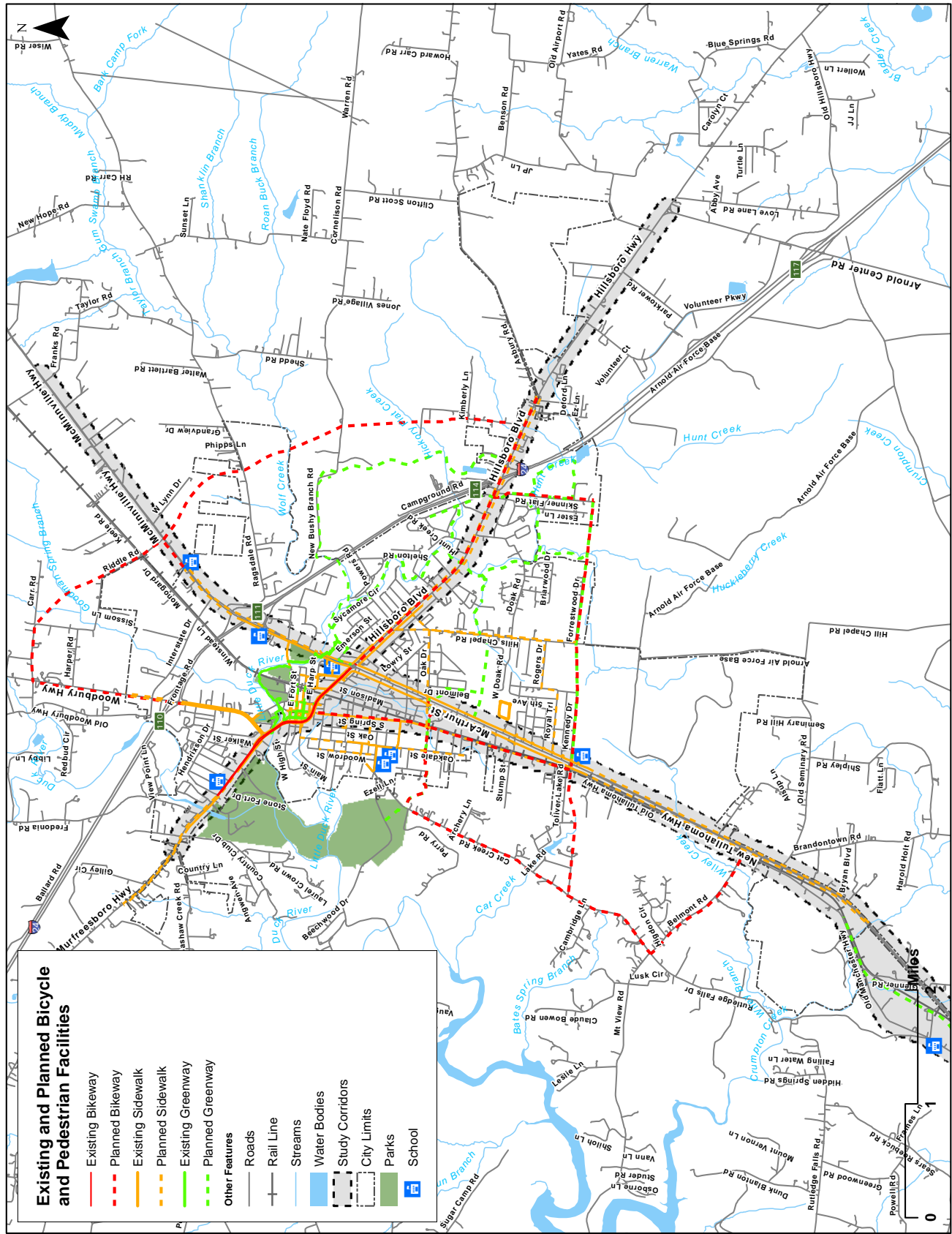


Figure 3-4. Existing and Planned Bicycle and Pedestrian Facilities – Tullahoma

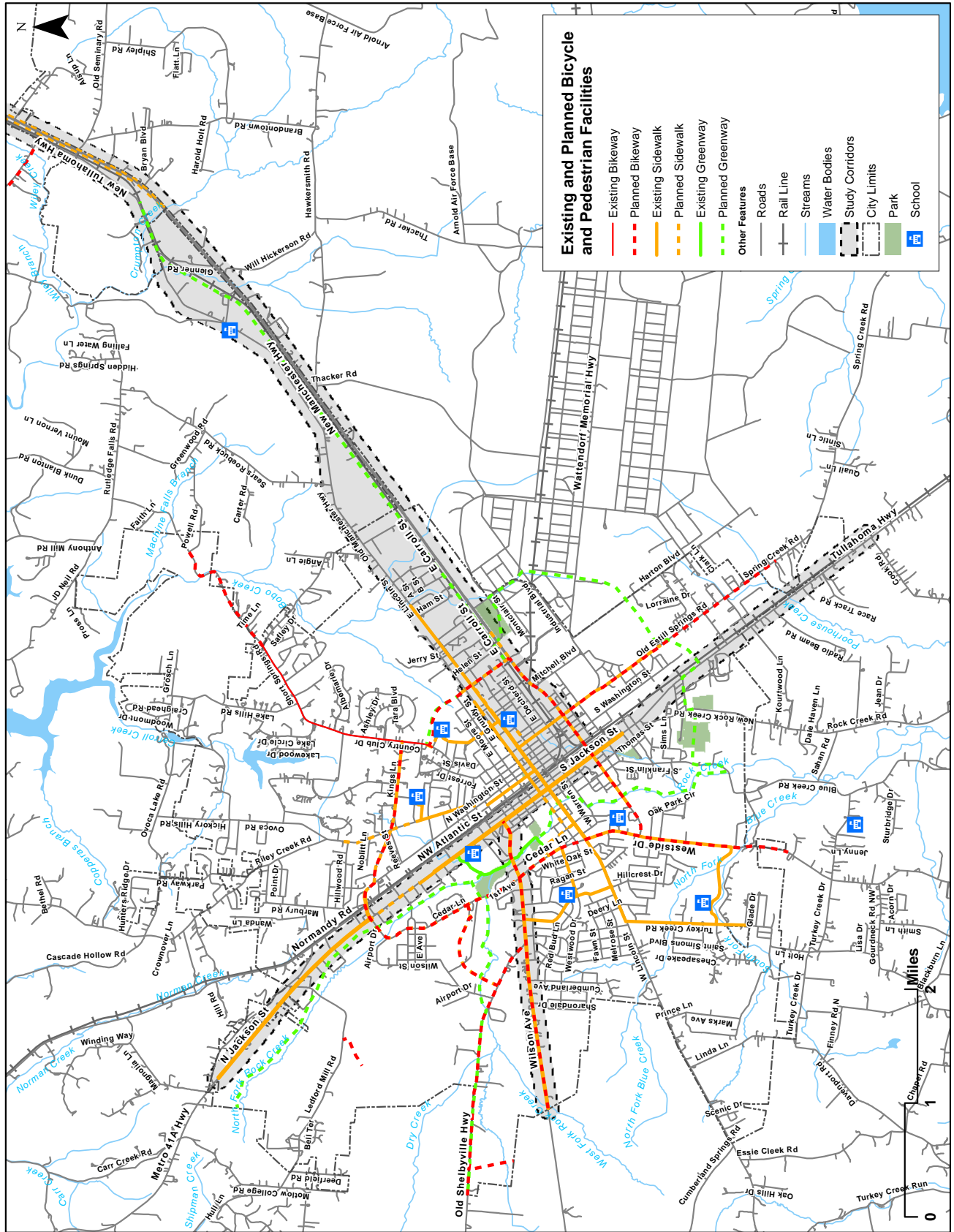


Figure 3-5. Existing Bicycle and Pedestrian Demand - Manchester

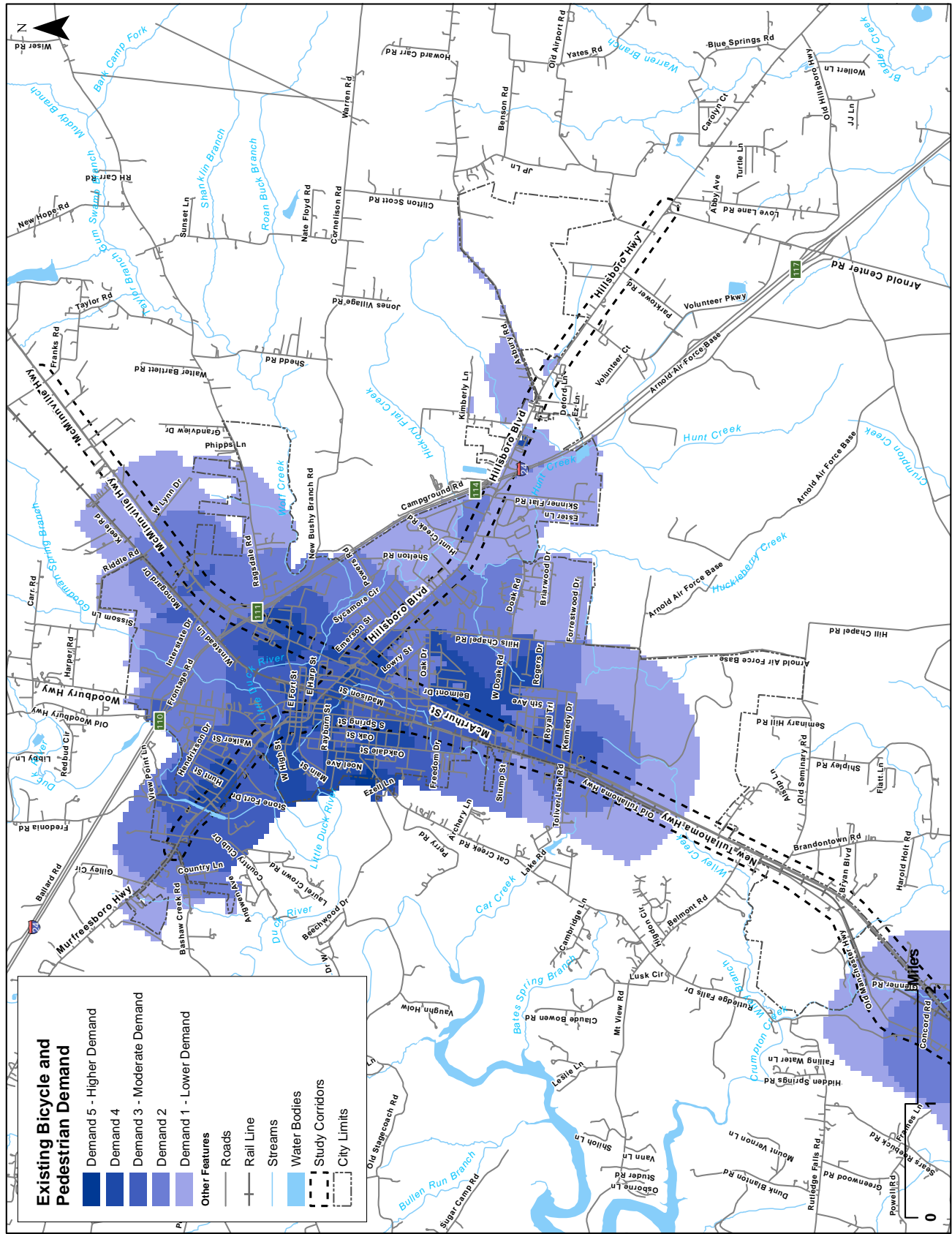
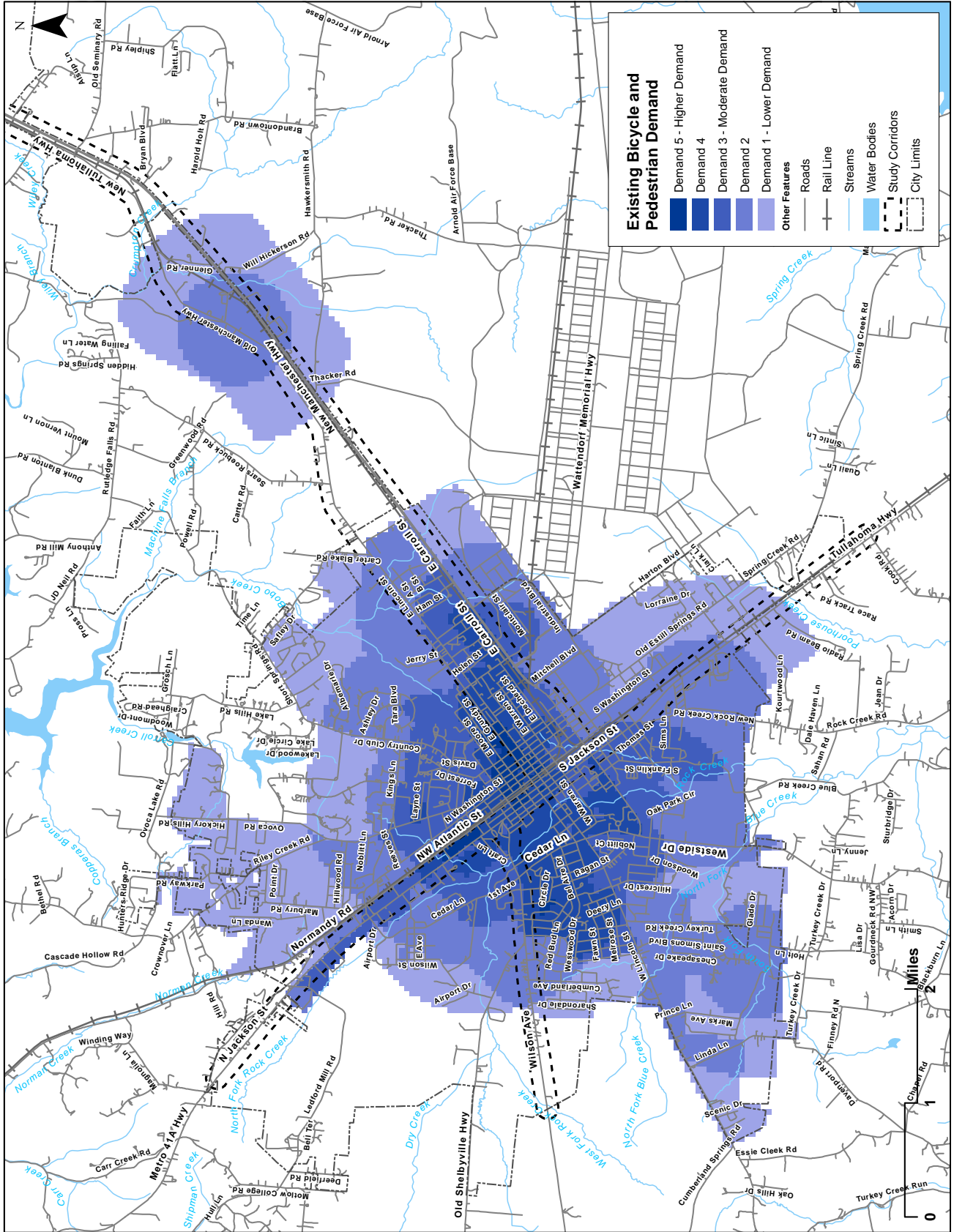


Figure 3-6. Existing Bicycle and Pedestrian Demand – Tullahoma



While the demand analysis examined walking and biking potential without regard to the presence or absence of existing facilities, a level of traffic stress (LTS) analysis evaluated the existing bicycle and pedestrian network for users. The LTS analysis assigns a value between one and four for each roadway segment evaluated; the score indicates how comfortable a user would be walking or biking on that particular segment. A lower score indicates that a user would likely be more comfortable and experience little stress from automobile traffic. A higher score indicates that a user would be less comfortable and experience higher levels of stress from automobile traffic.

The criteria, which evaluate roadway segments for users of all ages and abilities, include:

- Presence of existing facilities;
- Width of existing facilities (if applicable);
- Width of buffer between existing facilities and roadway (if applicable);
- Average Daily Traffic (ADT);
- Number of lanes; and
- Posted speed.

Zones within a half mile of public elementary and middle schools were highlighted and given specific attention in the LTS analysis.

As shown in Figures 3-7 and 3-8, bicycle LTS in both cities tends to be generally low-stress on local neighborhood streets with relatively low speeds and traffic volumes. User stress is much higher on major roads, particularly the five study corridors. While lower-stress alternatives are currently available for users, existing high-volume, high-speed roads are less inviting and act as natural barriers for bicyclists, limiting citywide bicycle connectivity.

As shown in Figures 3-9 and 3-10, pedestrian LTS is generally poor in both cities, underscoring the need for improved pedestrian infrastructure in both cities. The LOS calculation relies heavily on the presence of sidewalks, and does not take into account low-speed, low-volume neighborhood streets on which users may feel comfortable walking. However, providing dedicated pedestrian infrastructure improves user safety and comfort by providing a degree of separation between the user and adjacent vehicle traffic. Furthermore, dedicated infrastructure signals to both motorists and potential pedestrians that walking is an encouraged activity at that location.

Bicycle and pedestrian crashes were also examined to identify particular safety hot spots. Between 2014 and 2018 a total of 58 bicycle or pedestrian crashes occurred on the corridors or key parallel or intersecting routes. As shown in Figure 3-11, Manchester experienced 23 total crashes, consisting of 16 pedestrian crashes and seven bicycle crashes. As shown in Figure 3-12, Tullahoma experienced 35 total crashes, consisting of 25 pedestrian crashes and 10 bicycle crashes.

While the geographic distribution of crashes is fairly wide over the analysis period, several key segments are notable. These include:

- US-41/Hillsboro Boulevard between SR-55/MacArthur Street and Shelton Road;
- US-41/Hillsboro Boulevard between Campground Road and east of Asbury Road; and
- US-41A/North Jackson Street between Jack Farrar Lane and West Grundy Street.

Figure 3-7. Existing Bicycle Level of Traffic Stress (LTS) – Manchester

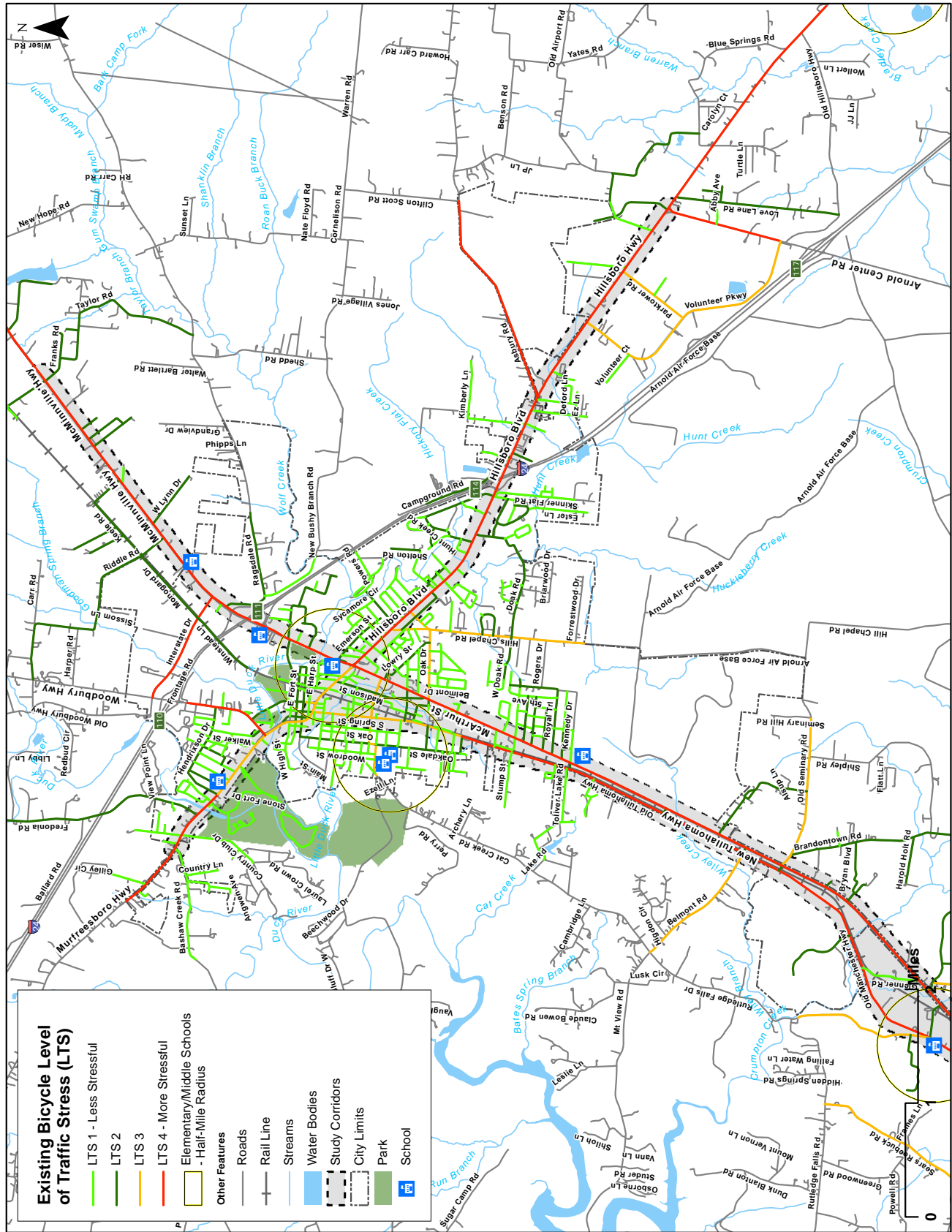


Figure 3-8. Existing Bicycle Level of Traffic Stress – Tullahoma

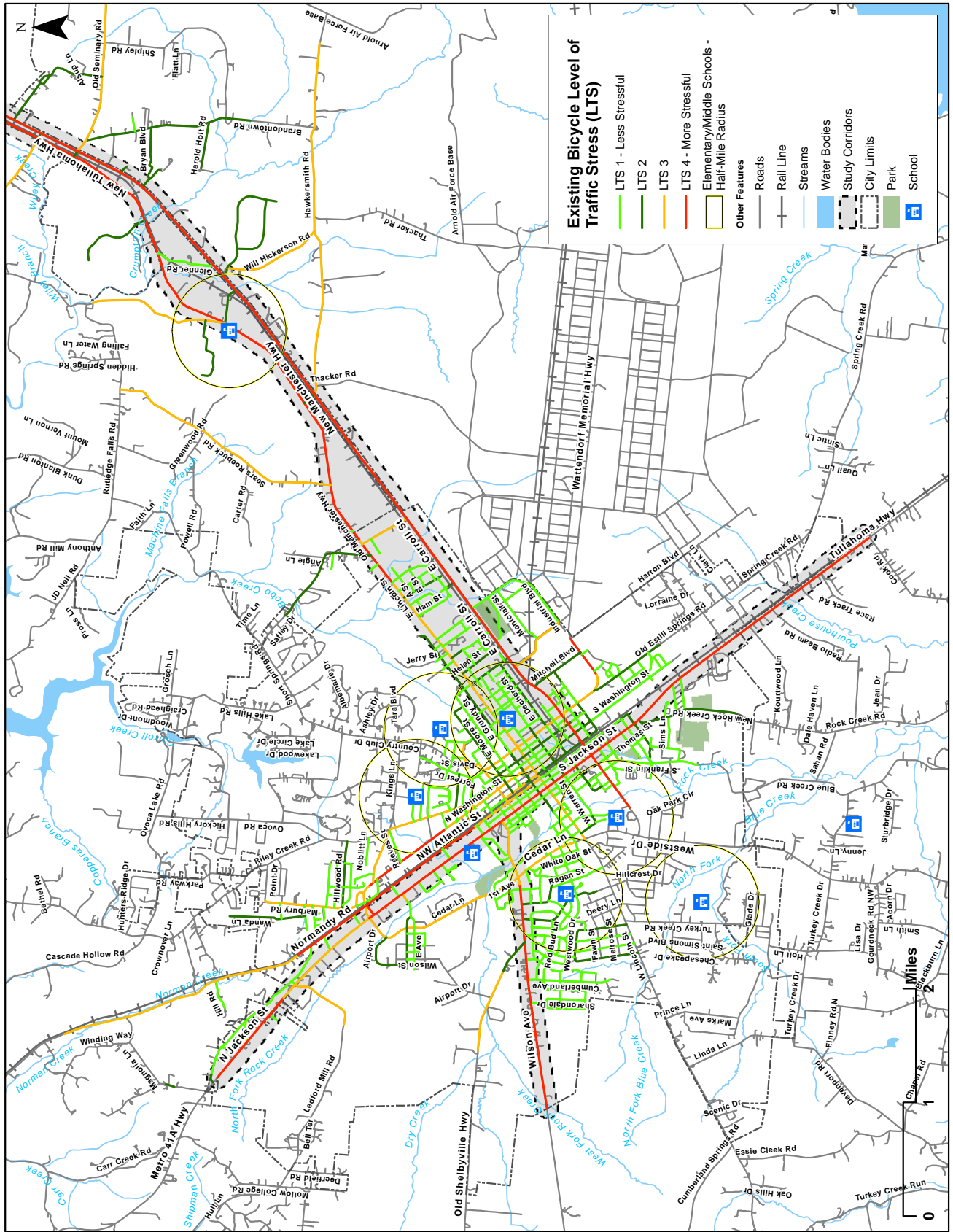


Figure 3-9. Existing Pedestrian Level of Traffic Stress (LOS) – Manchester

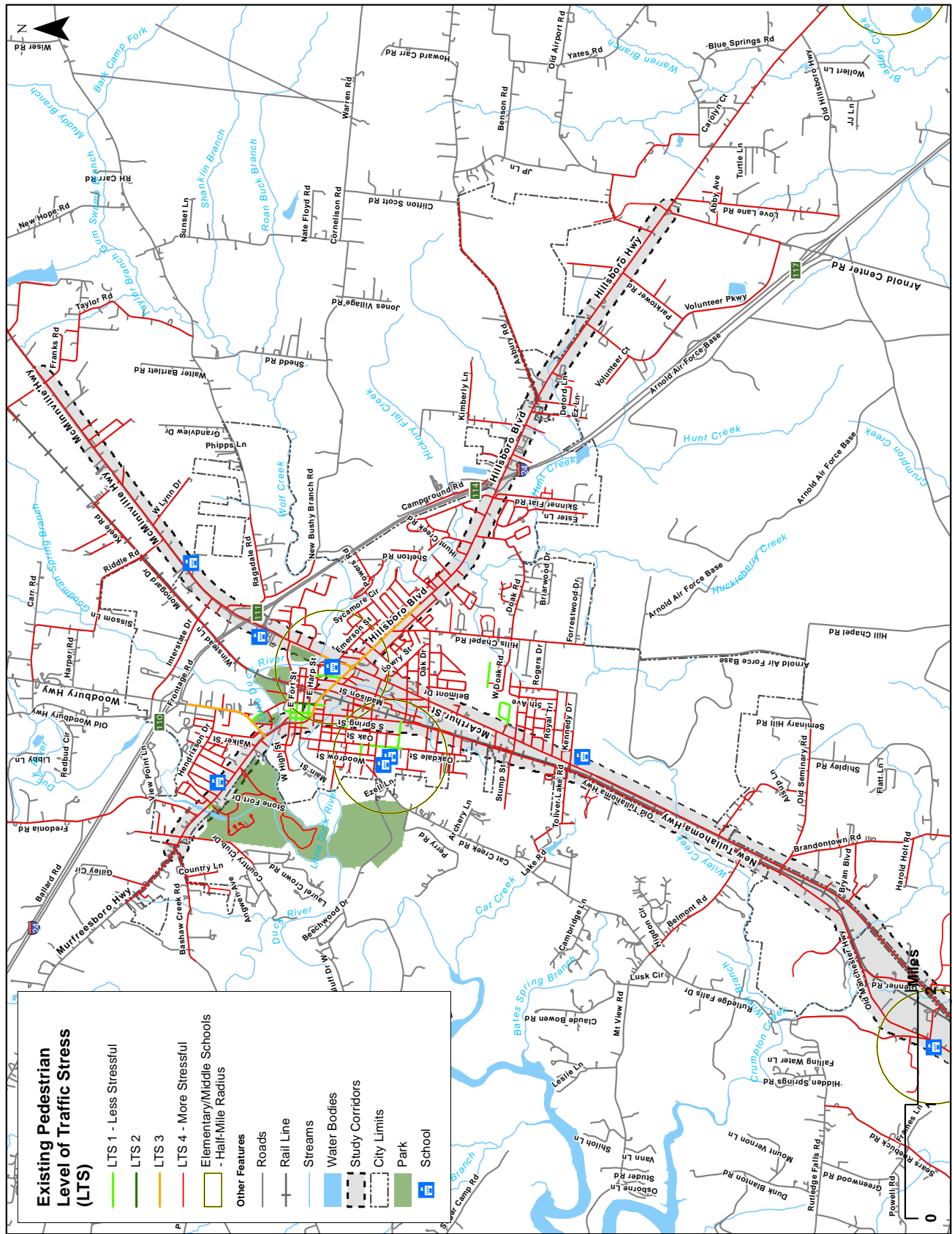


Figure 3-10. Existing Pedestrian Level of Traffic Stress (LOS) - Tullahoma

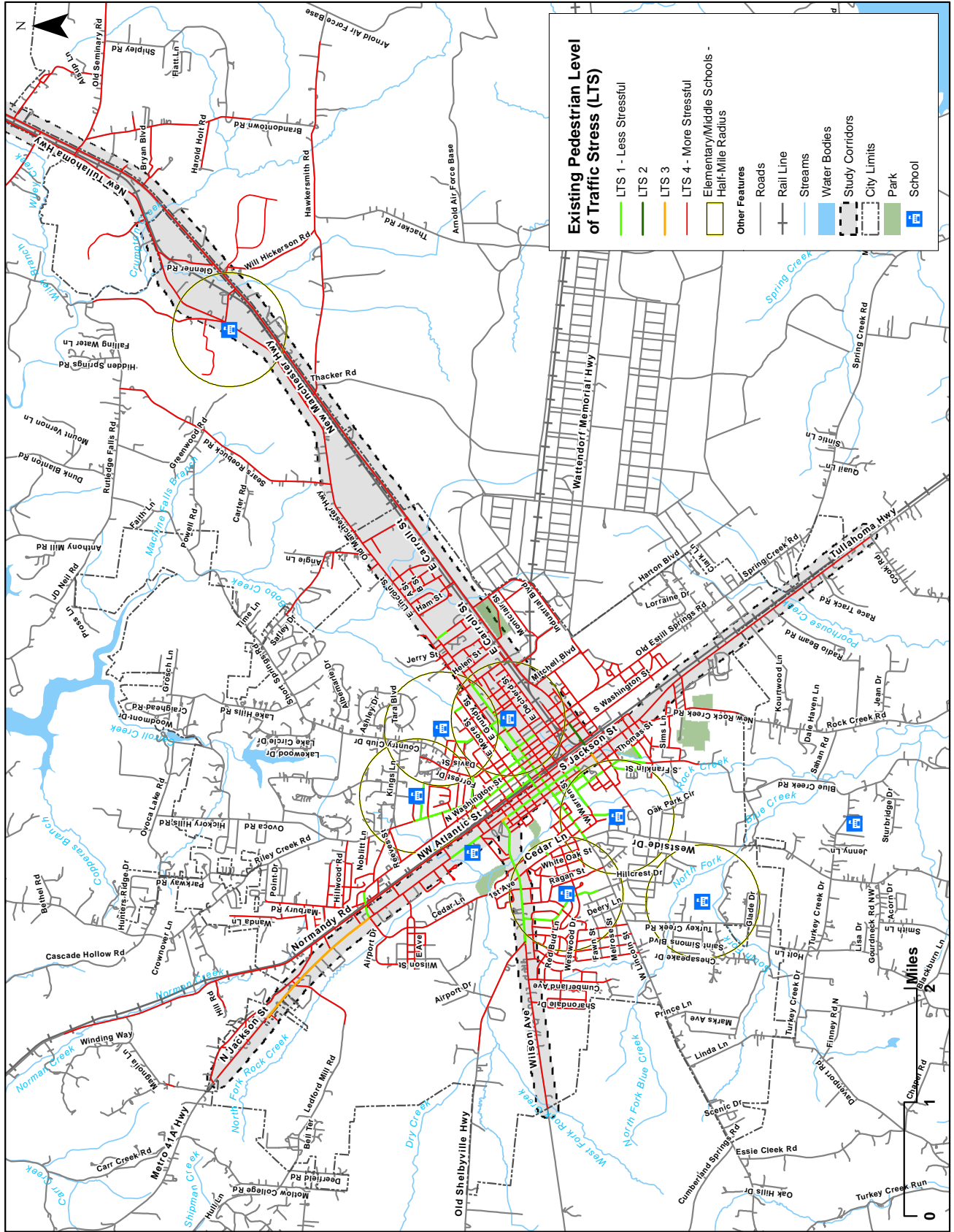


Figure 3-11. Bicycle and Pedestrian Crashes (2014 – 2018) – Manchester

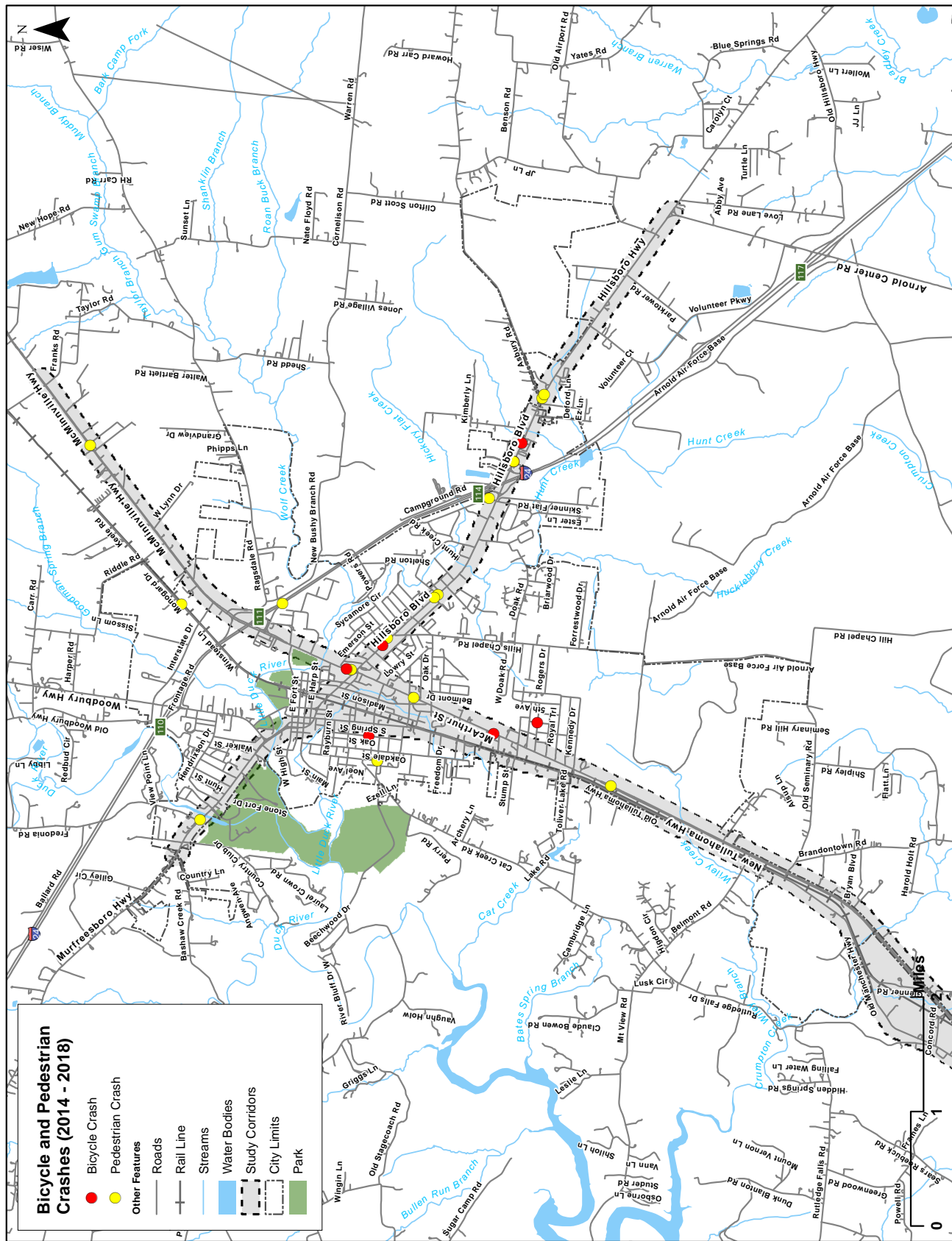
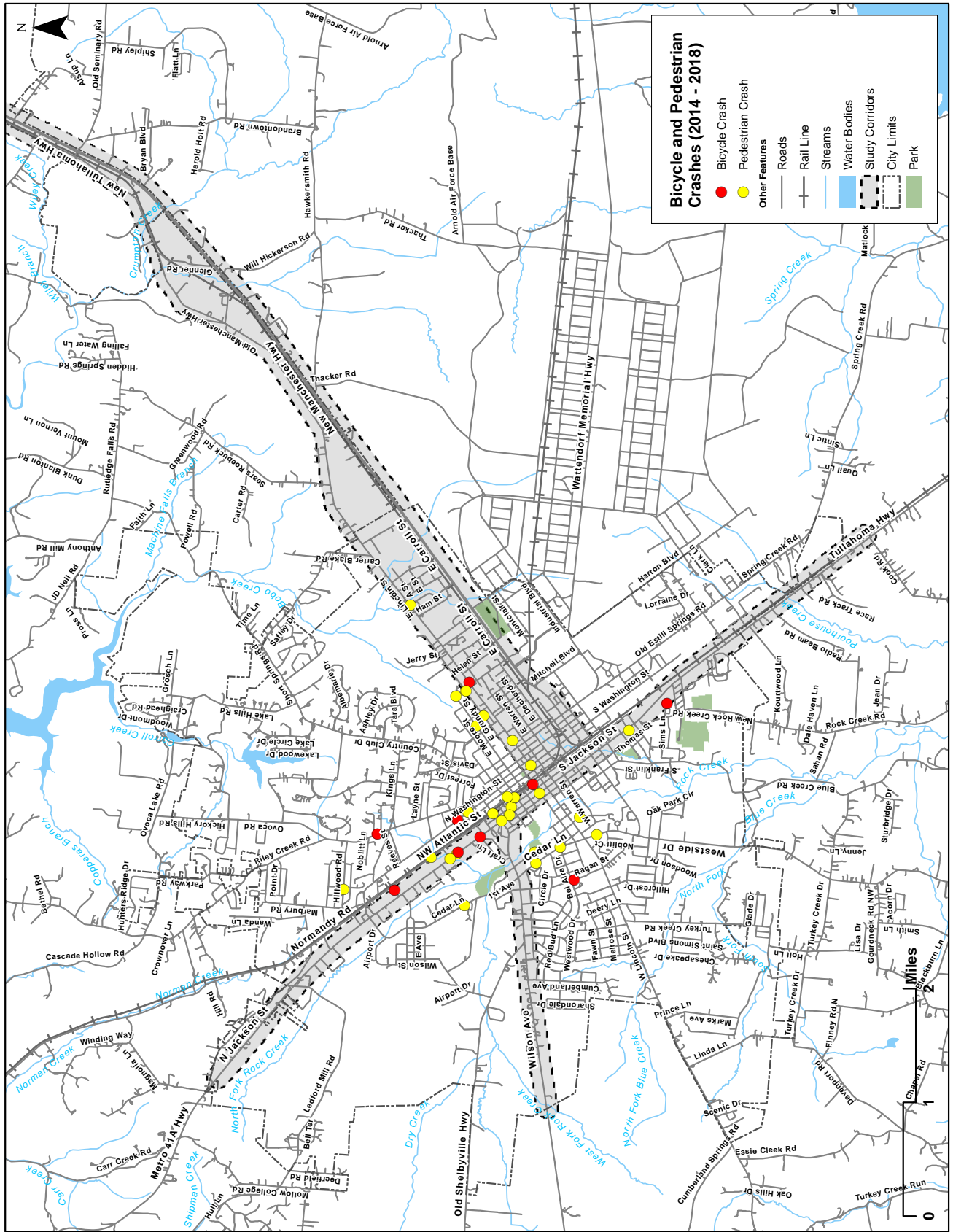


Figure 3-12. Bicycle and Pedestrian Crashes (2014 - 2018) – Tullahoma



Section 4.0

Multimodal Recommendations

Building on the key issues and opportunities, as well as the findings of the existing conditions evaluation, the multimodal recommendations provide a solid foundation for improved community mobility along the five study corridors in Manchester and Tullahoma. The multimodal recommendations address various aspects of mobility and specifically include:

- A. Roadway Project Recommendations;**
- B. Bicycle and Pedestrian Corridor Plans; and**
- C. Development Form Concepts.**

Taken together, the multimodal recommendations will establish a framework for improved mobility within and between Manchester and Tullahoma.

A. Roadway Project Recommendations

Based on the review of planned projects and the analysis of projected traffic volumes and levels of service (LOS) for both cities, a suite of roadway project recommendations was developed that will secure vehicular mobility along the five corridors going forward. These recommendations largely reflect the planned projects identified in the Manchester Transportation Master Plan (2018) and the Tullahoma Comprehensive Transportation Plan (2013). As shown in Figures 4-1 and 4-2, the recommended roadway projects will strengthen the transportation networks in both Manchester and Tullahoma. While some improvements are recommended along the study corridors, other strategic improvements will improve the operations of parallel and intersecting streets. This will provide local traffic with lower-speed, lower-volume routes for short trips while preserving capacity on higher-speed arterials for through and freight traffic.

Table 4-1 lists the recommended roadway projects in Manchester – covering approximately 12 miles of new or existing roadways at an estimated cost of \$29 million. Table 4-2 lists the recommended roadway projects in Tullahoma – covering approximately nine miles of new or existing roadways at an estimated cost of \$23 million.

Figure 4-1. Recommended Roadway Improvement Projects - Manchester

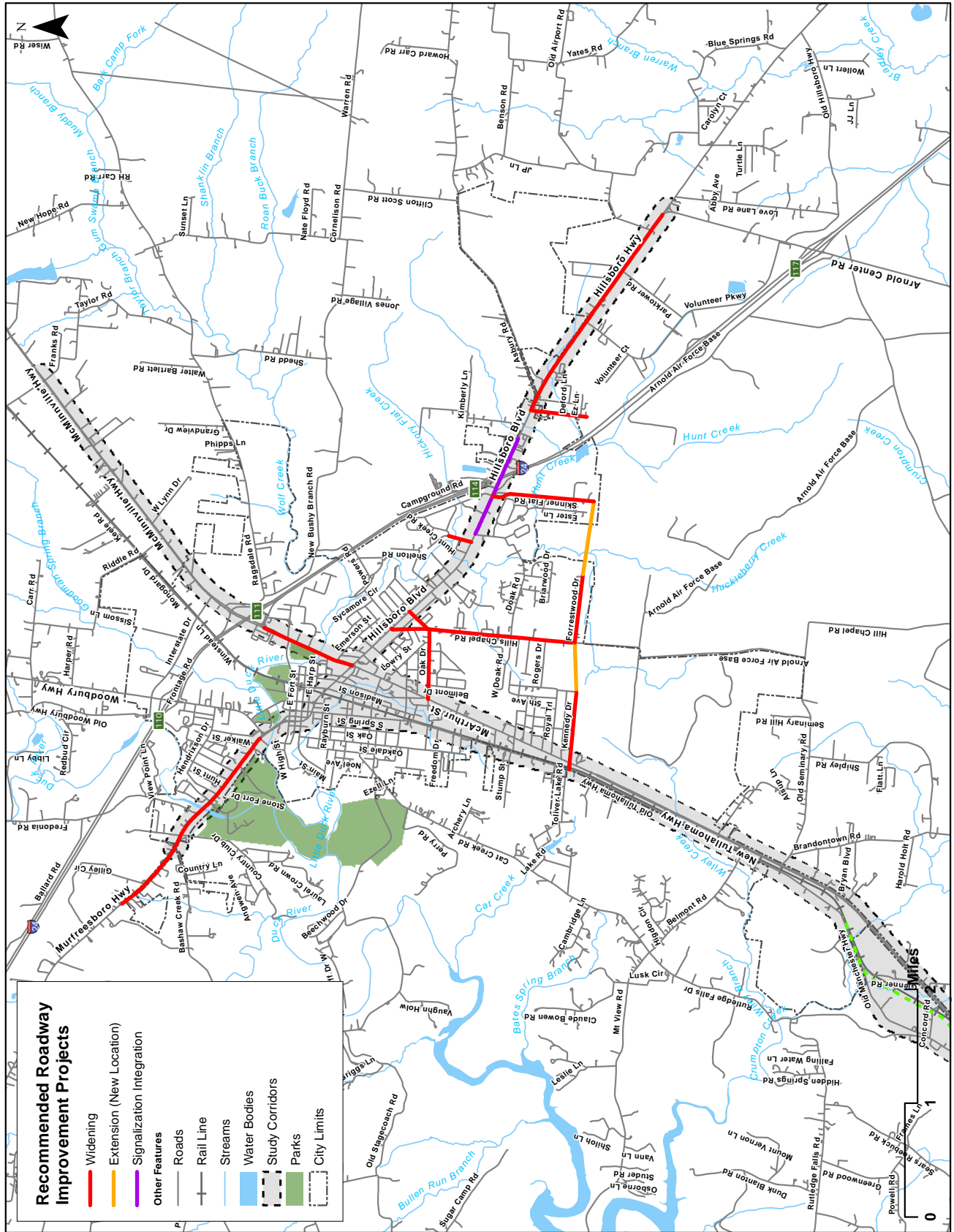


Figure 4-2. Recommended Roadway Improvement Projects – Tullahoma

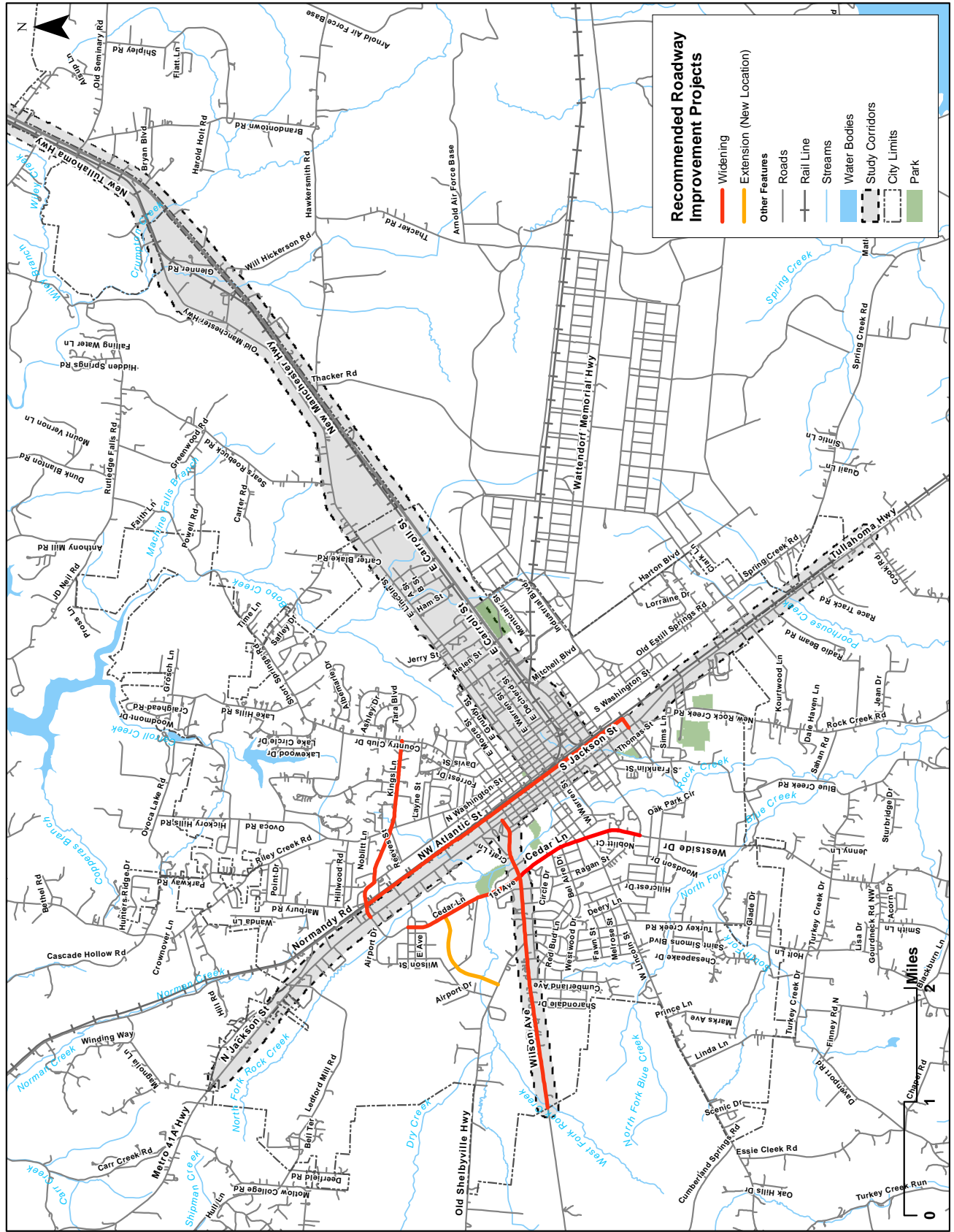


Table 4-1. Roadway Capital Improvements – Manchester

Route	From	To	Description	Miles	Estimated Cost	Horizon Year
US-41/Hillsboro Boulevard	Near Doak Road	Walmart Access Road	Signalization Integration	0.9	\$300,000	2019
Kennedy Drive	SR-55/McArthur Street	Hills Chapel Road	Improvement and extension (new location)	1.1	\$1,750,000	2022
US-41/Hillsboro Boulevard	Joe Hickerson Road	AEDC Road	Widening	2.2	\$8,000,000	2022
Hills Chapel Road	Forrestwood Drive	US-41/Hillsboro Boulevard	Widening with sidewalks	1.6	\$1,750,000	2027
Oak Drive/ Clover Lane	SR-55/McArthur Street	US-41/Hillsboro Boulevard	Widening	0.9	\$1,500,000	2027
Skinner Flat Road	US-41/Hillsboro Boulevard	Forrestwood Drive	Widening	0.7	\$2,000,000	2027
Forrestwood Drive	Hills Chapel Road	Skinner Flat Road	Improvement and extension (new location)	1.3	\$3,000,000	2037
US-41/Murfreesboro Highway	Duncan Street	North City Limit	Widening	1.9	\$6,500,000	2037
Burger Drive	US-41/Hillsboro Boulevard	Hunt Creek Road	Widening	0.2	\$800,000	2037
Joe Hickerson Road	US-41/Hillsboro Boulevard	Southern Terminus	Widening	0.5	\$900,000	2037
SR-55/McMinnville Highway	I-24 Westbound Off-Ramp	US-41/Hillsboro Boulevard	Widening	0.8	\$2,640,000	2037

Table 4-2. Roadway Capital Improvements – Tullahoma

Route	From	To	Description	Miles	Estimated Cost	Horizon Year
SR-55/Wilson Avenue	First Avenue	US-41A/North Jackson Street	Widening with sidewalks and bike lanes	0.6	\$3,000,000	2020
SR-55/Wilson Avenue	First Avenue	Corporate Boundary	Widening with sidewalks and bike lanes	1.9	\$7,000,000	2020
Cedar Lane	William Northern Boulevard	Connector (Cedar Lane/SR-130)	Widening with sidewalks and bike lanes	0.4	\$1,100,000	2020
Cedar Lane	Connector (Cedar Lane/SR-130)	SR-55/Wilson Avenue	Widening with sidewalks and bike lanes	0.3	\$900,000	2020
Connector (Cedar Lane/SR-130)	Cedar Lane	SR-130	Extension (new location) with sidewalks and bike lanes	0.8	\$2,200,000	2020
Cedar Lane/ Westside Drive	SR-55/Wilson Avenue	Clement Drive	Widening with sidewalks and bike lanes	0.9	\$3,500,000	2027
Atlantic Street	Kings Lane	US-41A/South Jackson Street	Widening with sidewalks and bike lanes	3.0	\$1,900,000	2027
Kings Lane	Ovoca Road	Marbury Drive	Widening with sidewalks and bike lanes	0.7	\$1,600,000	2027
Kings Lane	Country Club Drive	Ovoca Road	Widening with sidewalks and bike lanes	0.8	\$1,700,000	2027

Recommendations for Further Study

In addition to the roadway project recommendations, other improvements have the potential to address spot issues, though additional investigation would be warranted to identify need at specific locations. These recommendations for further study should be considered by Manchester and Tullahoma when their respective transportation plans are next updated. These include:

- Along signalized arterials investigate signal timings, coordination plans, and the elimination of left-turn signal phases on lightly-travelled side roads. Flashing yellow operations in place of traditional protected-permitted left-turn signal phase operations may also improve traffic operations;
- Investigate turn lane improvements at intersections with poor operations; and
- Investigate access management strategies to reduce driveways and improve their locations along routes.

Finally, improved connectivity between Tullahoma and I-24 was identified as a key issue by the public and key stakeholders. While existing and projected level of service (LOS) along SR-55 is generally acceptable in both 2019 and 2040, there are several choke points along SR-55 that prove frustrating to users. Specifically, users have identified the relatively high density of traffic signals at the corridor's northern end, and the three school speed zones located between south of Kennedy Drive and I-24 as particularly frustrating. Furthermore, these choke points also affect heavy truck traffic traveling along SR-55, including traffic associated with industries at the Joint Industrial Park.

Both local and truck traffic have been observed using unsigned, informal alternatives to SR-55 for accessing I-24 from the south. One route, following Riley Creek Road from the south, relies on narrow, winding local roads consisting of two 10-foot lanes with two-foot gravel shoulders. Consequently, an improved connection to I-24 should be considered a long-term priority for the local transportation system. While evaluating feasible alternatives for such a route is beyond the scope of the Community Mobility Plan, three potential alternatives that may improve connectivity between Tullahoma and I-24 warrant future study.

1. Riley Creek Road / Lyndell Bell Road – this route is already used by both local and truck traffic as an alternative to SR-55. The route would require substantial upgrades, including widening of the Lyndell Bell Road bridge over Normandy Lake.
2. Old Manchester/Tullahoma Highway / Cat Creek Road – this route provides a relatively short connection to I-24 from the Joint Industrial Park and could be used by through traffic during peak

or problem hours. A new connection to US-41 would likely be required, as the Spring Street environs are largely residential in nature.

3. Wattendorf Memorial Highway – this route already connects directly to the southern end of SR-55/East Carrol Street. A new roadway connecting the route to the Joint Industrial Park could provide a direct connection to I-24, by way of Exit 117. The new roadway would likely be located on Arnold Air Force Base property, so close coordination with the Department of Defense would be required.

B. Bicycle and Pedestrian Corridor Plans

Improved mobility for bicyclists and pedestrians was identified as a desired outcome of the Community Mobility Plan by the public, stakeholders, and local officials. Consistent with the approach to the analysis of existing conditions for bicyclists and pedestrians, the corridor plan recommendations represent a holistic, network-based approach to improved mobility, comfort, and safety for bicycle and pedestrian users of all ages and abilities.

The bicycle corridor plans emphasize building a supporting network of bikeways to support mobility along the five study corridors. This approach provides greater choices for users, as some may be more comfortable riding on or near higher-volume, higher-speed roads, while others may prefer routes that follow lower-volume roads and neighborhood streets. Table 4-3 provides a general overview of the proposed bikeway types. For planning purposes, several of the bikeway types are recommended together in the bicycle corridor plans, effectively providing a range of options for future project design phases.

City of Manchester Recommendations

The Manchester Bicycle Corridor Plan (Figure 4-3) builds upon the existing buffered bike lanes on US-41/Murfreesboro Highway just west of downtown. New buffered bike lanes will be extended along both US-41 and SR-55 in town, transitioning into bike lanes or paved shoulders as surrounding development becomes less intense. Additional buffered or separated bike lanes are recommended for high-activity or high-growth areas, specifically along Spring Street and Hills Chapel Road. A network of bike boulevards will connect these facilities along neighborhood streets in central Manchester. Extensions of the city's greenway system, proposed in the 2018 Transportation Master Plan, will provide enhanced connectivity in the city's eastern neighborhoods, which are poised for residential growth in the coming years. Additional bike lane or paved shoulder facilities will be included along Cat Creek Road, Belmont Road, and Old Manchester/Tullahoma Highway.

Table 4-4 lists the bikeway recommendations – a total of approximately 54 miles at an estimated cost of \$21 million.

Table 4-3. Types of Bikeways







Type	Example	Description
Paved Shoulders		<p>Paved shoulders are typical of highways and roads in rural areas, and provide important safety benefits to minimize run-off-the-road crashes, especially on higher speed (greater than 40 mph) roads. While paved shoulders are not dedicated bikeways, for bicyclists, paved shoulders provide important operating space. Adequate width (4' minimum) and bike friendly rumble strips are important design considerations.</p>
Bike Lanes		<p>Bike lanes provide dedicated operating space for bicyclists, and with paved shoulders, have traditionally served as the foundation for bike networks for more experienced bicyclists. While bike lanes remain a good option for urban streets with moderate traffic volumes and speeds, creating more lateral distance between bicyclists and motor vehicles either with buffers or physically separated facilities is important for people of all ages and abilities.</p>
Bike Boulevards		<p>Bike boulevards are lower volume, lower speed local streets that offer a safe and comfortable option for bicycling compared to major streets. Relatively low cost improvements such as shared lane pavement markings (sharrows), signage and mini-traffic circles reinforce the role of bike boulevards as safe and comfortable places to bicycle and discourage motor vehicle through traffic in neighborhoods.</p>
Buffered Bike Lanes		<p>Buffered bike lanes add a striped buffer space between the bicycle lane and the motor vehicle traffic lane, and where applicable, between an adjacent parking lane. Used on higher volume, higher speed streets, the buffered space effectively establishes the minimum 3 foot passing space required in many states, and additionally, provides room for bicyclists to pass each other and avoid obstacles in bike lanes including the opening of parked car doors.</p>
Separated Bike Lanes		<p>Separated bike lanes add a vertical element, such as plastic posts, bollards, medians or on-street parking, that physically separates bicyclists from motor vehicle traffic. Combining vertical and horizontal separation clearly delineates the designated space for bicyclists and ensures a relatively safe and comfortable facility on higher volume, higher speed streets, including multilane streets and streets with higher truck volumes.</p>
Shared Use Paths/Sidepaths		<p>Unlike the various bike lane types, shared use paths and sidepaths are designed for use by both pedestrians and bicyclists. Sidepaths are located within the street or road right-of-way, while shared use paths are located within an independent right-of-way. Shared use paths/sidepaths have become increasingly popular with the growing demand for walking and bicycling, and can provide important connections for longer distance trips.</p>

Figure 4-3. Bicycle Corridor Plan - Manchester

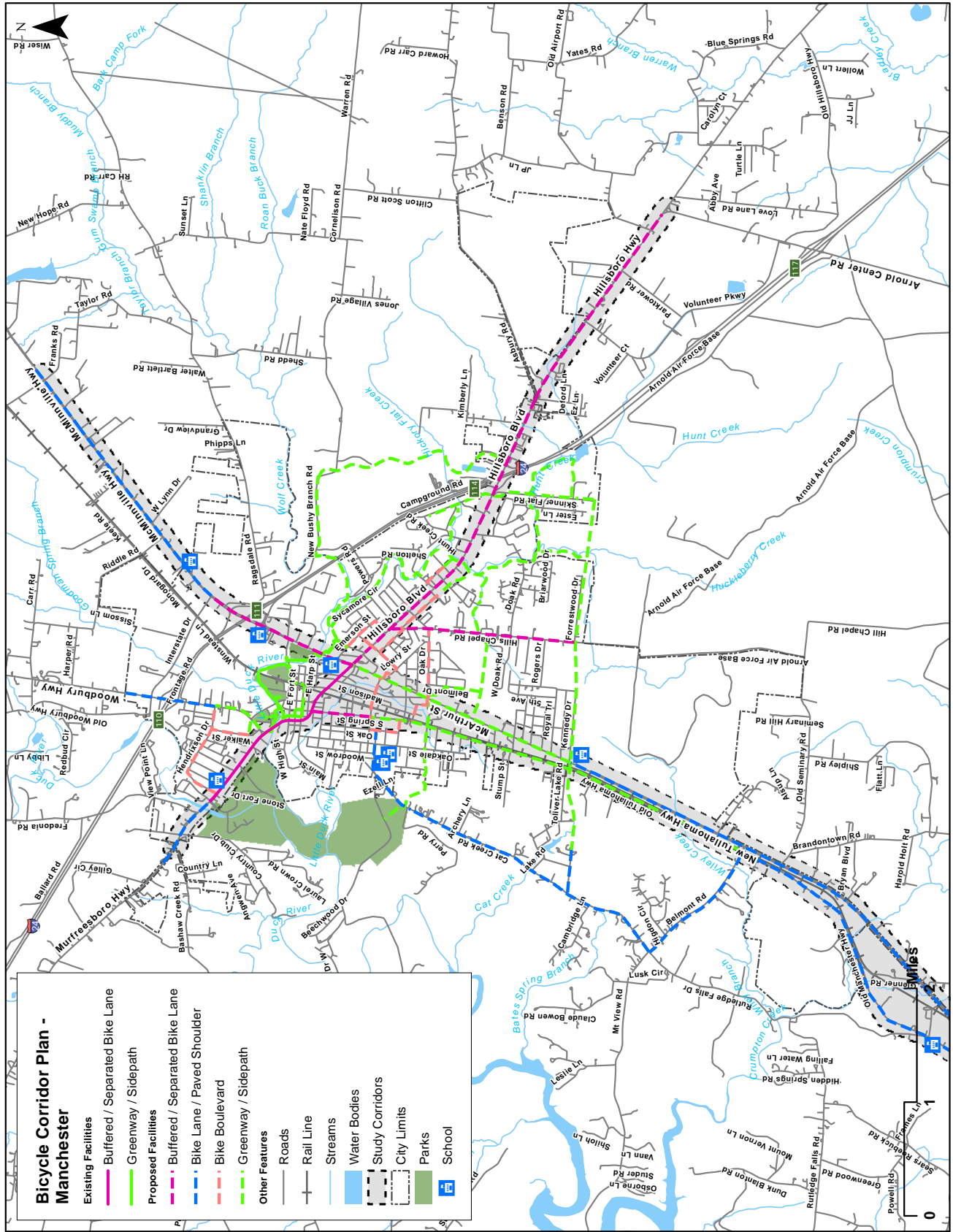


Table 4-4. Recommended New Bikeways - Manchester

ID	Road / Facility	From	To	Linear Feet	Facility Type	Unit Cost (per linear foot)	Estimated Cost
M-1	SR-55 / McMinnville Hwy	N of Vaughn Speckleton Rd	Keele Rd	6,558	BL/PS	\$20	\$131,154
M-2	SR-55 / McMinnville Hwy	Keele Rd	Interstate Dr	6,950	BL/PS	\$20	\$138,992
M-3	SR-53 / Woodbury Hwy	Manchester City Limit	Hendrixson Dr	4,239	BL/PS	\$20	\$84,775
M-4	SR-55 / McMinnville Hwy	Interstate Dr	Old Bushy Branch Rd	4,129	BBL/SPL	\$30	\$123,878
M-5	SR-55 / McMinnville Hwy	Old Bushy Branch Rd	US-41/Hillsboro Rd	3,185	BBL/SPL	\$30	\$95,548
M-6	US-41/Murfreesboro Hwy	K&M Ln	Monroe Lake Rd	3,773	BL/PS	\$20	\$75,469
M-7	US-41/Murfreesboro Hwy	Monroe Lake Rd	Hendrixson Dr	478	BBL/SPL	\$30	\$14,350
M-8	Hendrixson Dr	US-41/Murfreesboro Rd	SR-55 / McMinnville Hwy	5,098	BB	\$15	\$76,474
M-9	Walker St	Hendrixson Dr	Greenway Connector	1,752	BB	\$15	\$26,276
M-10	SR-53 / Woodbury Hwy	Hendrixson Dr	US-41/Murfreesboro Hwy	2,744	SUP	\$150	\$411,527
M-11	Greenway Connector	Hendrixson Dr	SR-53 / Woodbury Hwy	635	SUP	\$150	\$95,230
M-12	Rec Center Connector	N Woodland St	McGuire St	599	SUP	\$150	\$89,906
M-13	E Main St	S Woodland St	Bobby Layne Dr	702	SUP	\$150	\$105,295
M-14	Bobby Layne Dr	Dave King Park	S Main St	613	SUP	\$150	\$91,970
M-15	Dave King Park Greenway	Bobby Layne Dr	N Waite St	740	SUP	\$150	\$110,937
M-16	Great Stage Greenway	Little Duck River Greenway	New Bushy Branch Rd	9,165	SUP	\$150	\$1,374,708
M-17	Great Stage Greenway	New Bushy Branch Rd	Hospitality Blvd	10,169	SUP	\$150	\$1,525,335
M-18	Little Duck River Greenway Ext	Little Duck River Greenway	US-41 / Hillsboro Blvd	10,107	SUP	\$150	\$1,516,004
M-19	Little Duck River Greenway Ext	US-41 / Hillsboro Blvd	Forrestwood Dr Ext	6,745	SUP	\$150	\$1,011,758
M-20	Hickory Flat Greenway	Little Duck River Greenway Ext	Expressway Dr	1,890	SUP	\$150	\$283,463
M-21	Expressway Drive	S of Hunt Creek Rd	US-41 / Hillsboro Blvd	3,142	SUP	\$150	\$471,234
M-22	Emerson St / Kefauver St / Stroud Dr	Rye St	Haley Dr	6,319	BB	\$15	\$94,792
M-23	Greenway Connector	Stroud Dr	Little Duck River Greenway Ext	568	SUP	\$150	\$85,238
M-24	Jackson St	Emerson St	US-41 / Hillsboro Blvd	806	BB	\$15	\$12,093
M-25	US-41 / Hillsboro Blvd	SR-55 / McArthur St	Hills Chapel Rd	2,491	BBL/SPL	\$30	\$74,736
M-26	US-41 / Hillsboro Blvd	Hills Chapel Rd	Haley Dr	3,714	BBL/SPL	\$30	\$111,408
M-27	US-41 / Hillsboro Blvd	Haley Dr	Expressway Dr	4,137	BBL/SPL	\$30	\$124,121
M-28	US-41 / Hillsboro Blvd	Expressway Dr	Joe Hickerson Rd	4,375	BBL/SPL	\$30	\$131,261
M-29	US-41 / Hillsboro Blvd	Joe Hickerson Rd	AEDC Rd	10,950	BBL/SPL	\$30	\$328,511
M-30	Skinner Flat Rd	US-41 / Hillsboro Blvd	Forrestwood Dr Ext	4,658	SUP	\$150	\$698,691
M-31	Hunt Creek Greenway	Little Duck River Greenway Ext	Skinner Flat Rd	7,859	SUP	\$150	\$1,178,859
M-32	Hills Chapel Rd	US-41 / Hillsboro Blvd	Oak Dr	1,765	BBL/SPL	\$30	\$52,936
M-33	Hills Chapel Rd	Oak Dr	Forrestwood Dr	6,783	BBL/SPL	\$30	\$203,483
M-34	Spring St	US-41 / Murfreesboro Hwy	Coffee St	2,741	BB	\$15	\$41,114
M-35	Wiley St / Oak St / Coffee St	Spring St	SR-55 / McArthur St	4,487	BB	\$15	\$67,298

Table 4-4. Recommended New Bikeways – Manchester (continued)

ID	Road / Facility	From	To	Linear Feet	Facility Type	Unit Cost (per linear foot)	Estimated Cost
M-36	Lowry St / Jackson St	SR-55 / McArthur St	US-41 / Hillsboro Blvd	2,462	BB	\$15	\$36,923
M-37	Summer St	Jackson St	Hills Chapel Rd	1,578	BB	\$15	\$23,676
M-38	Summer St	Hills Chapel Rd	Carden Estates Apts	2,456	BB	\$15	\$36,837
M-39	Greenway Connector	Summer Dr	Little Duck River Greenway Ext	1,796	SUP	\$150	\$269,475
M-40	Oak Dr	SR-55 / McArthur St	Hills Chapel Rd	3,264	BB	\$15	\$48,955
M-41	Westwood Greenway	Powers Bridge Rd	Cat Creek Rd	1,188	SUP	\$150	\$178,145
M-42	Westwood Greenway	Cat Creek Rd	Oakdale St	3,347	SUP	\$150	\$502,122
M-43	Century St	Oakdale St	SR-55 / McArthur St	2,442	SUP	\$150	\$366,294
M-44	Belmont Dr Greenway	SR-55 / McArthur St	Southside Greenway	2,847	SUP	\$150	\$427,032
M-45	Southside Greenway	SR-55 / McArthur St	Hills Chapel Rd	4,087	SUP	\$150	\$613,120
M-46	Southside Greenway	Hills Chapel Rd	Little Duck River Greenway Ext	3,143	SUP	\$150	\$471,426
M-47	SR-55 / McArthur St	US-41 / Hillsboro Blvd	Oak Dr	3,879	SUP	\$150	\$581,850
M-48	SR-55 / McArthur St	Oak Dr	Kennedy Dr	7,238	SUP	\$150	\$1,085,700
M-49	Spring St	Coffee St	Century St	2,575	SUP	\$150	\$386,219
M-50	Oak Dr	S Spring St	SR-55 / McArthur St	1,509	BB	\$15	\$22,639
M-51	W Taylor St / Cat Creek Rd	Oak St	Perry Rd	4,390	BL/PS	\$20	\$87,793
M-52	Cat Creek Rd	Perry Rd	Sullivan Dr	8,277	BL/PS	\$20	\$165,530
M-53	Rail Trail Greenway	Century St	Kennedy Dr	6,985	SUP	\$150	\$1,047,797
M-54	Toliver Lake Rd	Cat Creek Rd	Kennedy Dr Greenway	2,040	BL/PS	\$20	\$40,802
M-55	Kennedy Dr Greenway	Toliver Lake Rd	SR-55 / McArthur St	4,269	SUP	\$150	\$640,285
M-56	Kennedy Dr	SR-55 / McArthur St	Hills Chapel Rd	5,441	SUP	\$150	\$816,124
M-57	Forrestwood Dr	Hills Chapel Rd	Little Duck River Greenway Ext	4,128	SUP	\$150	\$619,177
M-58	Forrestwood Dr Ext	Little Duck River Greenway Ext	Skinner Flat Rd	2,573	SUP	\$150	\$386,002
M-59	SR-55 / New Tullahoma Hwy	Kennedy Dr	Old Seminary Rd	10,831	BL/PS	\$20	\$216,618
M-60	SR-55 / New Tullahoma Hwy	Old Seminary Rd	N of HP Womack Rd	12,853	BL/PS	\$20	\$257,050
M-61	Rail Trail Greenway	Kennedy Dr	Belmont Dr	8,879	SUP	\$150	\$1,331,835
M-62	Cat Creek Rd	Toliver Lake Rd	Belmont Dr	4,904	BL/PS	\$20	\$98,070
M-63	Belmont Rd	Cat Creek Rd	Old Manchester/ Tullahoma Hwy	6,469	BL/PS	\$20	\$129,389
M-64	Old Manchester/ Tullahoma Hwy	Belmont Rd	HP Womack Rd	15,732	BL/PS	\$20	\$314,633

NOTE: BBL/SPL = Buffered/Separated Bike Lane; BL/PS = Bike Lane/Paved Shoulder; BB = Bike Boulevard; SUP = Shared-Use Path/Sidepath

The Manchester Pedestrian Corridor Plan (Figure 4-4) complements the bikeway recommendations by building on the city's existing sidewalk system and extending it into key growth and activity centers. Specifically, sidewalks will be extended along the both US-41 and SR-55 to provide pedestrian connectivity to existing development. Strategic sidewalk extensions in the existing residential area west of SR-55 will provide a continuous pedestrian network for residents, and new sidewalks east of SR-55 will set the stage for anticipated residential growth.

Table 4-5 lists the sidewalk recommendations – a total of approximately 24 miles and an estimated cost of \$32.6 million.

Additionally, 21 intersections in the city were identified for pedestrian safety improvements. While the exact scope of improvements will vary at each location, state-of-the-practice intersection improvements at these locations would complement the pedestrian recommendations and further improve multimodal user safety and comfort. Table 4-6 lists the recommended intersection improvement locations.

Figures 4-5 through 4-7 show illustrative schematic drawings of what pedestrian crossing improvements would look like at three key locations in Manchester: US-41/Hillsboro Boulevard at Spring Street, SR-55/McArthur Street at East Coffee Street, and US-41/Hillsboro Boulevard at Hills Chapel Road.

Improvements proposed include the installation of cross walks, relocation of existing stop bars, update or installation of crosswalk signals, and installation of ADA-compliant ramps.

Figure 4-4. Pedestrian Corridor Plan - Manchester

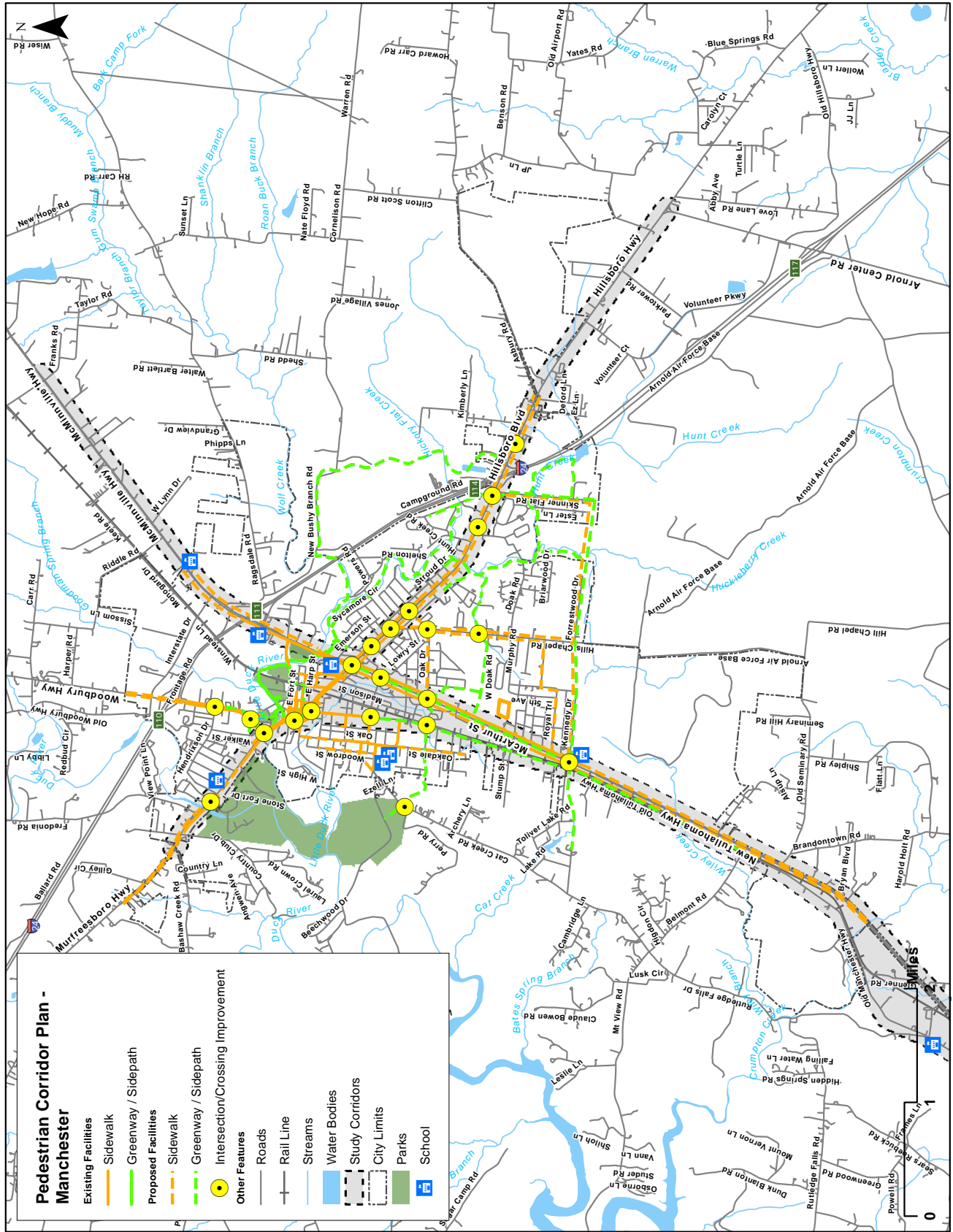


Table 4-5. Recommended New Sidewalks – Manchester

ID	Road	From	To	Linear Feet	Unit Cost (per linear foot)	Estimated Cost
M-1	SR-53 / Woodbury Hwy	Manchester City Limit	Frontage Rd	5,745	\$250	\$1,436,250
M-2	US-41 / Murfreesboro Hwy	N of Dobbert Rd	E of Lakeview St	9,392	\$250	\$2,348,000
M-3	US-41 / Murfreesboro Hwy	E of Lakeview St	Hendrixson Dr	2,065	\$250	\$516,250
M-4	US-41 / Murfreesboro Hwy	Hendrixson Dr	Service Area Rd	1,699	\$250	\$424,750
M-5	SR-55 / McMinnville Hwy (north side)	N of JB Deadman Ln	S of I-24 EB On-Ramp	3,615	\$250	\$903,750
M-6	SR-55 / McMinnville Hwy (south side)	N of JB Deadman Ln	S of Hillcrest Rd	7,525	\$250	\$1,881,250
M-7	Oakdale St	W Main St	Cherry St	2,499	\$250	\$624,750
M-8	Woodrow St	W Moore St	W Taylor St	2,664	\$250	\$666,000
M-9	Oakdale St	N of Westwood School Rd	S of Elm St	3,449	\$250	\$862,250
M-10	US-41 / Hillsboro Blvd	Walls St	Expressway Dr	12,088	\$250	\$3,022,000
M-11	US-41 / Hillsboro Blvd	Expressway Dr	Asbury Rd	10,136	\$250	\$2,534,000
M-12	Oak Dr	SR-55 / McArthur St	Hills Chapel Rd	3,221	\$250	\$805,250
M-13	Clover Ln	Hills Chapel Rd	US-41 / Hillsboro Blvd	1,005	\$250	\$251,250
M-14	Hills Chapel Rd	US-41 / Hillsboro Blvd	Clover Ln	1,529	\$250	\$382,250
M-15	Hills Chapel Rd	Clover Ln	Rogers Dr	10,694	\$250	\$2,673,500
M-16	Hills Chapel Rd	Rogers Dr	Forrestwood Dr	1,439	\$250	\$359,750
M-17	Royal Trl	SR-55 / McArthur St	Rogers Dr	3,603	\$250	\$900,750
M-18	Rogers Dr	Royal Trl	Hills Chapel Rd	2,195	\$250	\$548,750
M-19	Kennedy Dr	SR-55 / McArthur St	Kennedy Dr (northbound)	3,172	\$250	\$793,000
M-20	Kennedy Dr Ext	Kennedy Dr (northbound)	Hills Chapel Rd	2,208	\$250	\$552,000
M-21	Forrestwood Dr	Hills Chapel Rd	John Mark Ct	3,348	\$250	\$837,000
M-22	Forrestwood Dr Ext	John Mark Ct	Skinner Flat Rd	3,223	\$250	\$805,750
M-23	Skinner Flat Rd	Scott Swinney Dr	Forrest Dr Ext	3,987	\$250	\$996,750
M-24	SR-55 / McArthur St	N of Harper Ln	Belmont Dr	16,302	\$250	\$4,075,500
M-25	SR-55 / McArthur St	Belmont Dr	S of Bryan Ln	13,626	\$250	\$3,406,500

Table 4-6. Recommended Intersection Improvements – Manchester

ID	N/S Cross Street	E/W Cross Street	ID	N/S Cross Street	E/W Cross Street
M-1	SR-53 / Woodbury Hwy	Hendrixson Rd	M-12	Expressway Dr	US-41 / Hillsboro Blvd
M-2	SR-53 / Woodbury Hwy	N Woodland St	M-13	Walmart Entrance	US-41 / Hillsboro Blvd
M-3	SR-53 / Woodbury Hwy	US-41 / Murfreesboro Hwy	M-14	Cat Creek Rd	Perry Rd
M-4	Stone Fort Dr	US-41 / Murfreesboro Hwy	M-15	Spring St	Coffee St
M-5	Fort St	US-41 / Murfreesboro Hwy	M-16	Spring St	Century St
M-6	Spring St	US-41 / Murfreesboro Hwy	M-17	SR-55 / McArthur St	Coffee St
M-7	SR-55 / McMinnville Hwy	US-41 / Hillsboro Blvd	M-18	SR-55 / McArthur St	Oak Dr
M-8	Jackson St	US-41 / Hillsboro Blvd	M-19	SR-55 / McArthur St	Kennedy Dr
M-9	Hills Chapel Rd	US-41 / Hillsboro Blvd	M-20	Hills Chapel Rd	Oak Dr
M-10	Clover Ln	US-41 / Hillsboro Blvd	M-21	Hills Chapel Rd	Brook Hollow Cir
M-11	Whispering Pines Shopping Center Entrance	US-41 / Hillsboro Blvd			

Figure 4-5. Crossing Schematic – US-41/Hillsboro Boulevard at Spring Street



Figure 4-6. Crossing Schematic – SR-55/McArthur Street at East Coffee Street

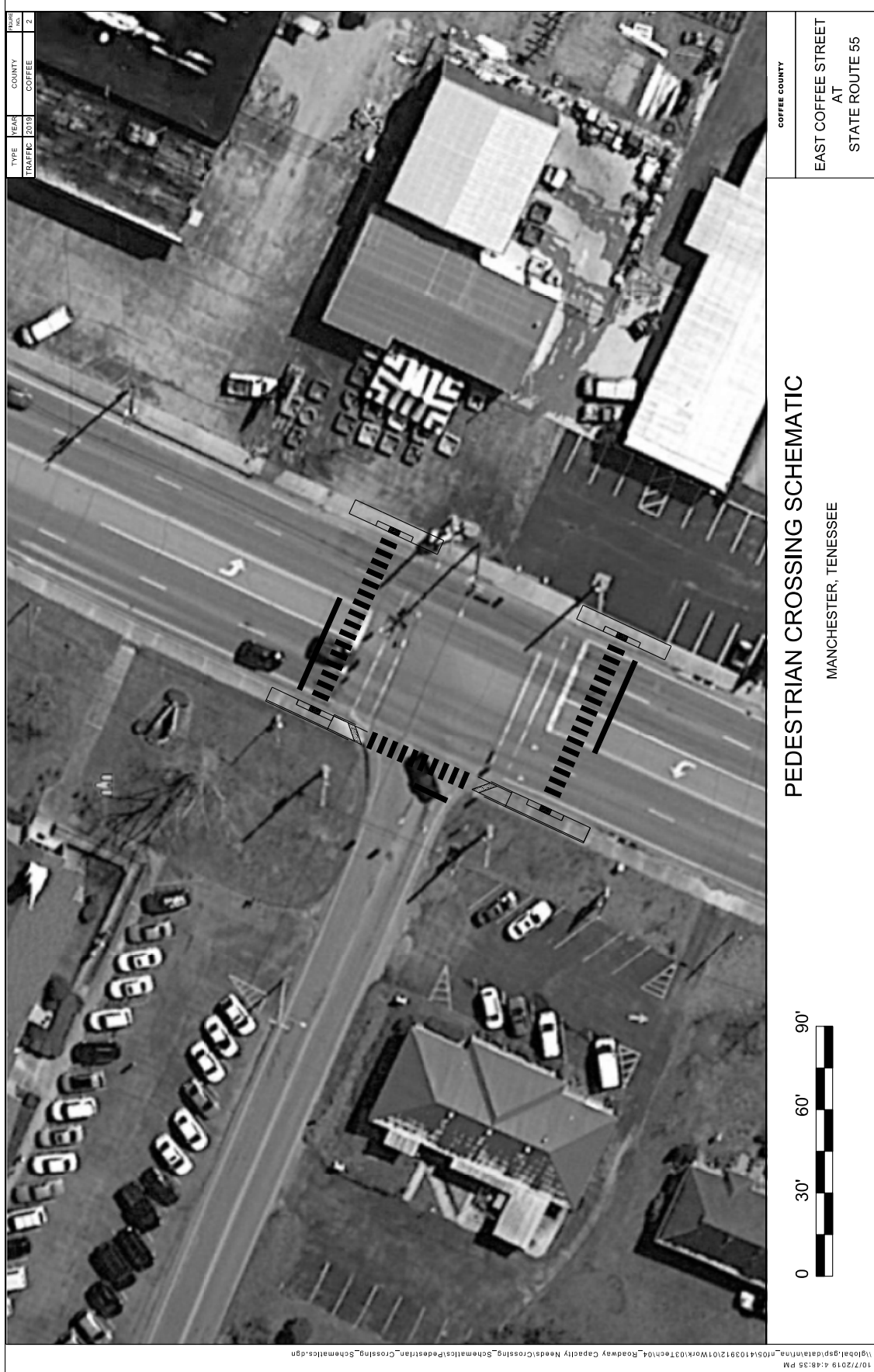


Figure 4-7. Crossing Schematic - US-41/Hillsboro Boulevard at Hills Chapel Road



City of Tullahoma Recommendations

The Tullahoma Bicycle Corridor Plan (Figure 4-8) provides buffered or separated bike lanes along major thoroughfares in the city, including US-41A/North Jackson Street, North Washington Street, East Lincoln Street, and Cedar Lane, with some facilities transitioning to bike lanes or paved shoulders as they enter more suburban or rural portions of the city. The existing Rock Creek Greenway will be extended to provide a high-quality bicycle and pedestrian route through the eastern sector of town, providing an active transportation corridor with minimal conflict points with vehicles. Bike lanes on SR-55/New Manchester Highway and Old Manchester/Tullahoma Highway will provide a direct bicycle connection between the two cities.

Table 4-7 lists the bikeway recommendations – a total of approximately 69 miles at an estimated cost of \$26 million.

Table 4-7. Recommended New Bikeways – Tullahoma

ID	Road / Facility	From	To	Linear Feet	Facility Type	Unit Cost (per linear foot)	Estimated Cost
T-1	US-41A / N Jackson St	Tullahoma City Limit	N of Ledford Mill Rd	4,501	BL/PS	\$20	\$90,020
T-2	US-41A / N Jackson St	N of Ledford Mill Rd	S of Ledford Mill Rd	5,760	BBL/SPL	\$30	\$172,797
T-3	Rock Creek Greenway	Tullahoma City Limit	Cedar Ln	11,125	SUP	\$150	\$1,668,776
T-4	Hunters Ln / Normandy Rd	US-41A / N Jackson St	N Washington St	1,179	BBL/SPL	\$30	\$35,359
T-5	Veterans Dr	Normandy Rd	N Washington St	1,119	BBL/SPL	\$30	\$33,575
T-6	N Washington St / Kings Ln	Veterans Dr	Ovaca Rd	3,244	BBL/SPL	\$30	\$97,325
T-7	Cedar Ln	US-41A / N Jackson St	William Northern Blvd	2,272	BBL/SPL	\$30	\$68,160
T-8	US-41A / N Jackson St	Cedar Ln	Jackson Cir	3,683	BBL/SPL	\$30	\$110,484
T-9	US-41A / N Jackson St	Jackson Cir	Big Springs Ave	2,721	BBL/SPL	\$30	\$81,629
T-10	US-41A / N Jackson St	Big Springs Ave	Lincoln St	3,845	BBL/SPL	\$30	\$115,340
T-11	Rock Creek Greenway	Cedar Ln	William Northern Blvd	1,841	SUP	\$150	\$276,193
T-12	Rock Creek Greenway	William Northern Blvd	Big Spring Park	3,158	SUP	\$150	\$473,634
T-13	Cedar Ln	William Northern Blvd	Connector Rd	1,761	BBL/SPL	\$30	\$52,837
T-14	Cedar Ln	Connector Rd	SR-55 / Wilson Ave	3,938	BBL/SPL	\$30	\$118,126
T-15	Connector Rd	SR-130 / Old Shelbyville Hwy	Cedar Ln	4,597	BL/PS	\$20	\$91,935
T-16	SR-130 / Old Shelbyville Hwy	Tullahoma City Limit	E of Chandelle Ln	8,504	SUP	\$150	\$1,275,651
T-17	Rock Creek Greenway	E of Chandelle Ln	Big Spring Park	6,219	SUP	\$150	\$932,832
T-18	SR-130 / Old Shelbyville Hwy	E of Chandelle Ln	SR-55 / Wilson Ave	3,712	BL/PS	\$20	\$74,237
T-19	SR-55 / Wilson Ave	Tullahoma City Limit	SR-130 / Old Shelbyville Hwy	7,637	BL/PS	\$20	\$152,746

Figure 4-8. Bicycle Corridor Plan - Tullahoma

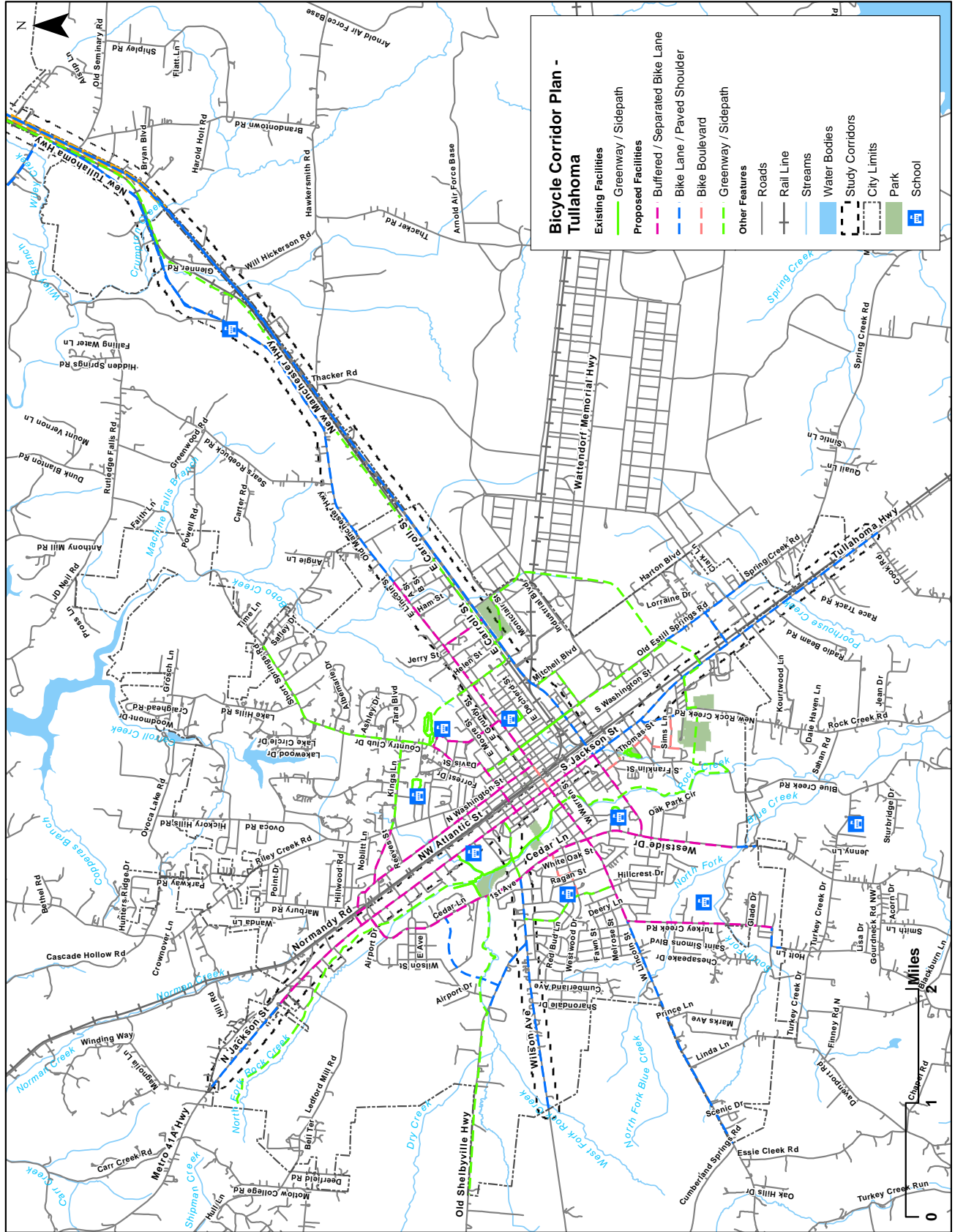


Table 4-7. Recommended New Bikeways – Tullahoma (continued)

ID	Road / Facility	From	To	Linear Feet	Facility Type	Unit Cost (per linear foot)	Estimated Cost
T-20	SR-55 / Wilson Ave	SR-130 / Old Shelbyville Hwy	Cedar Ln	3,142	BL/PS	\$20	\$62,838
T-21	SR-55 / Wilson Ave	Cedar Ln	US-41A / N Jackson St	2,797	SUP	\$150	\$419,496
T-22	N Washington St	Kings Ln	Fort St	5,858	BBL/SPL	\$30	\$175,741
T-23	N Washington St	Fort St	Hogan St	1,335	BBL/SPL	\$30	\$40,064
T-24	N Washington St	Hogan St	E Lincoln St	1,872	BBL/SPL	\$30	\$56,146
T-25	Kings Ln	Riley Creek Rd	Short Springs Rd	7,047	SUP	\$150	\$1,056,988
T-26	Short Springs Rd	Country Club Ln	N College St	4,234	SUP	\$150	\$635,056
T-27	Short Springs Rd	Carter Blake Rd	Country Club Ln	5,797	SUP	\$150	\$869,551
T-28	Short Springs Rd	E of Powell Rd	Carter Blake Rd	8,169	BL/PS	\$20	\$163,385
T-29	Hogan St	US-41A / N Jackson St	Country Club Ln	2,801	BBL/SPL	\$30	\$84,025
T-30	Country Club Ln	Hogan St	N College St	6,386	BBL/SPL	\$30	\$191,579
T-31	Greenway Connector	Country Club Ln	N Roosevelt St	2,861	SUP	\$150	\$429,106
T-32	Roosevelt St	E Moore St	SR-55 / E Carroll St	2,943	SUP	\$150	\$441,396
T-33	E Lincoln St	US-41A / N Jackson St	Washington St	1,280	BB	\$15	\$19,204
T-34	E Lincoln St	Washington St	Roosevelt St	4,652	BBL/SPL	\$30	\$139,550
T-35	E Lincoln St	Roosevelt St	Crest Dr	5,993	BBL/SPL	\$30	\$179,797
T-36	Old Manchester/ Tullahoma Hwy	Crest Dr	N of Cobb Rd	3,191	BL/PS	\$20	\$63,826
T-37	Old Manchester/ Tullahoma Hwy	N of Cobb Rd	Concord Rd	11,705	BL/PS	\$20	\$234,091
T-38	Old Manchester/ Tullahoma Hwy	Concord Rd	N of Waterford Dr	7,946	BL/PS	\$20	\$158,914
T-39	Rail Trail Greenway	Roosevelt St	N of Waterford Dr	27,559	SUP	\$150	\$4,133,871
T-40	US-41A / N Jackson St	Lincoln St	SR-55 / E Carroll St	2,553	BBL/SPL	\$30	\$76,581
T-41	SR-55 / E Carroll St	US-41A / N Jackson St	Mitchell Blvd	4,137	BL/PS	\$20	\$82,744
T-42	SR-55 / E Carroll St	Mitchell Blvd	Industrial Blvd	4,678	SUP	\$150	\$701,707
T-43	SR-55 / E Carroll St	Industrial Blvd	Hawkersmith Rd	12,362	BL/PS	\$20	\$247,231
T-44	SR-55 / E Carroll St	Hawkersmith Rd	Bryan Ln	12,518	BL/PS	\$20	\$250,358
T-45	S Anderson St	East Lincoln St	SR-55 / E Carroll St	4,978	SUP	\$150	\$746,728
T-46	S Anderson St	SR-55 / E Carroll St	Old Estill Springs Rd	1,981	SUP	\$150	\$297,203
T-47	Mitchell Blvd	SR-55 / E Carroll St	E Monroe St	1,135	SUP	\$150	\$170,232
T-48	E Monroe St	S Anderson St	Mitchell Blvd	1,877	SUP	\$150	\$281,624
T-49	Old Estill Springs Rd	S Anderson St	Coffee County Line	3,936	SUP	\$150	\$590,326
T-50	Old Estill Springs Rd	Coffee County Line	Wiseman Rd	2,248	BL/PS	\$20	\$44,961
T-51	East Side Greenway	SR-55 (at Waggoner Park)	Wattendorf Hwy	6,564	SUP	\$150	\$984,562
T-52	East Side Greenway	Wattendorf Hwy	Old Estill Springs Rd	5,637	SUP	\$150	\$845,519
T-53	East Side Greenway	New Rock Creek Rd	Old Estill Springs Rd	4,562	SUP	\$150	\$684,284
T-54	East Side Greenway	Coffee County Line	Vocational Ln	4,827	SUP	\$150	\$723,991
T-55	US-41A / S Jackson St	SR-55 / E Carroll St	New Rock Creek Rd	2,731	BL/PS	\$20	\$54,618
T-56	US-41A / S Jackson St	New Rock Creek Rd	Wiseman Rd	5,370	BL/PS	\$20	\$107,396
T-57	US-41A / S Jackson St	Wiseman Rd	Cook Rd	8,346	BL/PS	\$20	\$166,917

ID	Road / Facility	From	To	Linear Feet	Facility Type	Unit Cost (per linear foot)	Estimated Cost
T-58	Wiseman Rd / Spring Creek Rd	US-41A / S Jackson St	Tulahoma City Limit	4,176	BL/PS	\$20	\$83,519
T-59	Stone Blvd	SR-55 / Wilson Ave	W Lincoln St	4,708	SUP	\$150	\$706,159
T-60	Cedar Ln	SR-55 / Wilson Ave	W Lincoln St	4,325	BBL/SPL	\$30	\$129,743
T-61	Bel Aire Dr / Lee St / Hickory St	Stone Blvd	Cedar Ln	2,748	BB	\$15	\$41,226
T-62	W Hogan St	Cedar Ln	N Collins St	485	BB	\$15	\$7,278
T-63	W Lincoln St	Coffee County Line	Turkey Creek Rd	11,412	BL/PS	\$20	\$228,233
T-64	W Lincoln St	Turkey Creek Rd	Cedar Ln	4,263	BBL/SPL	\$30	\$127,891
T-65	W Lincoln St	Cedar Ln	US-41A / S Jackson St	2,962	BBL/SPL	\$30	\$88,862
T-66	Turkey Creek Rd	W Lincoln St	Holt Ln	6,713	BBL/SPL	\$30	\$201,398
T-67	Holt Ln	Turkey Creek Rd	Tulahoma City Limit	1,354	BL/PS	\$20	\$27,074
T-68	Westside Dr	W Lincoln St	Clement Dr	2,620	BBL/SPL	\$30	\$78,609
T-69	Westside Dr	Clement Dr	Hermitage Dr	4,250	BBL/SPL	\$30	\$127,506
T-70	Westside Dr	Hermitage Dr	Tulahoma City Limit	1,109	BL/PS	\$20	\$22,172
T-71	Rock Creek Greenway	W Lauderdale St	Clement Dr	2,867	SUP	\$150	\$430,080
T-72	Rock Creek Greenway	Clement Dr	East Side Greenway	5,788	SUP	\$150	\$868,139
T-73	Clement Dr / W Carroll St	Westside Dr	US-41A / S Jackson St	4,471	BBL/SPL	\$30	\$134,136
T-74	Franklin St / Monroe St	W Carroll St	Greenway Connector	1,084	BB	\$15	\$16,255
T-75	Greenway Connector	Monroe Street	W Cook St	835	SUP	\$150	\$125,204
T-76	Thomas St / Weaver St / Johnson Ln	W Cook St	Johnson Ln Fields	2,669	BB	\$15	\$40,040
T-77	Sims Ln	Johnson Ln	New Rock Creek Rd	1,477	BB	\$15	\$22,156
T-78	New Rock Creek Rd	US-41A / S Jackson St	Vocational Ln	2,289	BL/PS	\$20	\$45,776
T-79	Freeman St	E Lincoln St	SR-55 / E Carroll St	2,155	BBL/SPL	\$30	\$64,636
T-80	N Anderson St	E Lincoln St	E Hogan St	1,870	SUP	\$150	\$280,500

NOTE: BBL/SPL = Buffered/Separated Bike Lane; BL/PS = Bike Lane/Paved Shoulder; BB = Bike Boulevard; SUP = Shared-Use Path/Sidepath

The Tullahoma Pedestrian Network Plan (Figure 4-9) builds upon the city's existing sidewalk system and provides improved connectivity among key activity centers. Supported by the extensive greenway extensions around the city's perimeter, new sidewalks fill in existing gaps in the network, such as those along US-41A/North Jackson Street, and provide improved connectivity in residential areas south of downtown, particularly along Cedar Lane, Old Shelbyville Highway, and Stone Boulevard. The city's park system will be connected by the network of sidewalks and greenways and schools will be served by direct sidewalk access.

Table 4-8 lists the sidewalk recommendations – a total of approximately six miles and an estimated cost of \$8.2 million.

Additionally, 18 intersections in the city were identified for bicycle and pedestrian safety improvements. While the exact scope of improvements will vary at each location, state-of-the-practice intersection improvements at these locations would complement the bicycle and pedestrian recommendations and further improve multimodal user safety and comfort. Table 4-9 lists the recommended intersection improvement locations.

Figures 4-10 and 4-11 show illustrative schematic drawings of what pedestrian crossing improvements would look like at two key locations in Manchester: US-41A/North Jackson Street at SR-55/Wilson Avenue and US-41A/North Jackson Street at Tullahoma High School.

Improvements proposed at each location include the installation of crosswalks, update or installation of crosswalk signals, and installation of pedestrian refuge islands.

Figure 4-9. Pedestrian Corridor Plan – Tullahoma

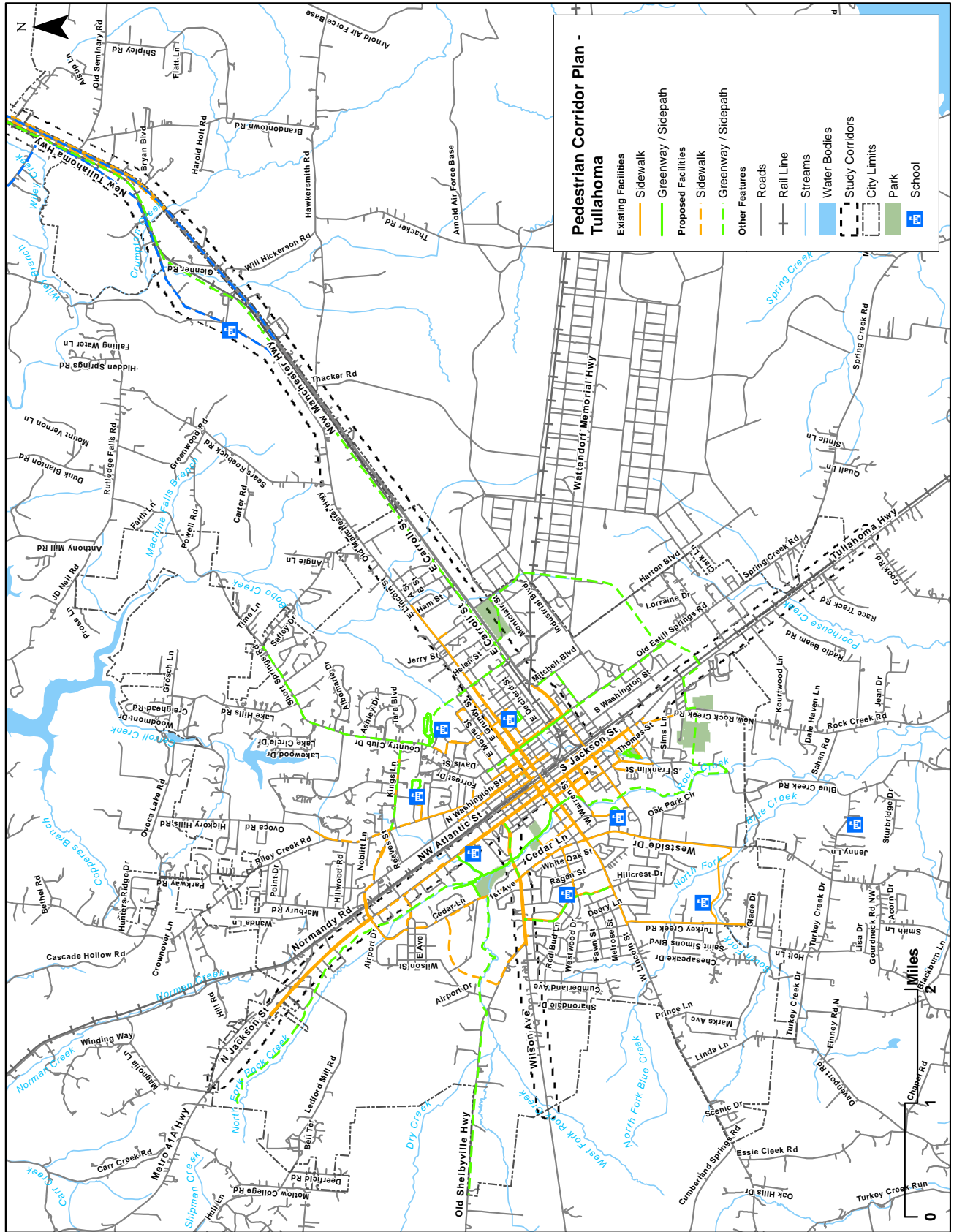


Table 4-8. Recommended New Sidewalks – Tullahoma

ID	Road	From	To	Linear Feet	Unit Cost (per linear foot)	Estimated Cost
T-1	Ovaca Rd	Fairways Blvd	Kings Ln	2,525	\$250	\$631,250
T-2	Ovaca Rd	Kings Ln	Layne St	1,411	\$250	\$352,750
T-3	N Washington St / Kings Ln	Veterans Dr	E of Oakmont Dr	1,122	\$250	\$280,500
T-4	Kings Ln	E of Oakmont Dr	Ovaca Rd	1,582	\$250	\$395,500
T-5	Cedar Ln	US-41A / N Jackson St	Forrest Gallery Entrance	171	\$250	\$42,750
T-6	US-41A / N Jackson St	N Washington St / Cedar Ln	William Northern Blvd	1,838	\$250	\$459,500
T-7	US-41A / N Jackson St	William Northern Blvd	Jackson Cir	824	\$250	\$206,000
T-8	William Northern Blvd	Cedar Ln	US-41A / N Jackson St	1,682	\$250	\$420,500
T-9	Connector Rd	Old Shelbyville Hwy	Cedar Ln	4,072	\$250	\$1,018,000
T-10	SR-139 / Old Shelbyville Hwy	Connector Rd	SR-55 / Wilson Ave	2,371	\$250	\$592,750
T-11	Cedar Ln	N of Brandywine Apts	SR-55 / Wilson Ave	3,915	\$250	\$978,750
T-12	Cedar Ln	SR-55 / Wilson Ave	W Hogan St	1,677	\$250	\$419,250
T-13	Cedar Ln	Bel Aire Dr	W Lincoln St	1,089	\$250	\$272,250
T-14	W Grundy St	US-41A / N Jackson St	N Collins St	2,002	\$250	\$500,500
T-15	N Collins St	N of W Lincoln St	W Lincoln St	203	\$250	\$50,750
T-16	Ovaca Rd / E Caltron St	Druid Ln	N Washington St	1,037	\$250	\$259,250
T-17	Country Club Dr / N College St	East Middle School Entrance	Stuart St	1,714	\$250	\$428,500
T-18	E Grundy St	N College St	N of Birch Aly	1,008	\$250	\$252,000
T-19	E Lauderdale St	Anderson St	East Lincoln Elementary	946	\$250	\$236,500
T-20	S Anderson St	S of E Lauderdale St	SR-55 / E Carroll St	1,417	\$250	\$354,250

Table 4-9. Recommended Intersection Improvements

ID	N/S Cross Street	E/W Cross Street
T-1	US-41 / N Jackson St	Ledford Mill Rd
T-2	N Washington St	Kings Ln
T-3	US-41 / N Jackson St	(Dunham's Sports Entrance)
T-4	US-41 / N Jackson St	(Northgate Mall Entrance)
T-5	US-41 / N Jackson St	(Tullahoma HS) (Midblock)
T-6	US-41 / N Jackson St	W Ogee St
T-7	US-41 / N Jackson St	SR-55 / Wilson Ave
T-8	Cedar Ln	SR-55 / Wilson Ave
T-9	SR-130 / Old Shelbyville Hwy	SR-55 / Wilson Ave
T-10	US-41 / N Jackson St	W Grizzard St
T-11	US-41 / N Jackson St	Lincoln St
T-12	Atlantic St	E Lincoln St
T-13	Anderson St	E Lincoln St
T-14	Cedar Ln	W Lincoln St
T-15	US-41 / N Jackson St	SR-55 / E Carroll St
T-16	S Anderson St	SR-55 / E Carroll St
T-17	S Roosevelt St	SR-55 / E Carroll St (Midblock)
T-18	Freeman St	SR-55 / E Carroll St (Midblock)

Figure 4-10. Crossing Schematic – US-41A/North Jackson Street at SR-55/Wilson Avenue



Figure 4-11. Crossing Schematic - US-41A/North Jackson Street at Tullahoma High School



C. Development Form Concepts

Two development concepts help better illustrate the transformative potential of the recommendations of the Community Mobility Plan. The concepts show how, taken together, the recommendations and a corresponding change in land use patterns could create walkable centers in key growth areas in Manchester and Tullahoma.

Figure 4-12 shows the intersection of US-41/Hillsboro Boulevard and Hills Chapel Road, emphasizing the new buffered bike lanes along US-41/Hillsboro Boulevard and the recommended pedestrian safety improvements at the Hills Chapel Road intersection. The multimodal improvements could be paired with a zoning overlay to create a neighborhood activity center with some businesses oriented to the sidewalk.

Figure 4-13 shows US-41A/North Jackson Street near the intersection of West Grizzard Street, showing two different means of bikeway implementation along US-41A/North Jackson Street, emphasizing the flexibility of implementation. Buffered bike lanes could be provided on both sides of street. Alternatively, within the same right-of-way, a separated bike lane, facilitating two-way traffic, could be provided on a single side of the street. Under both scenarios, adjacent businesses would benefit from increased foot traffic and enhanced bicycle and pedestrian access.

Figure 4-12. Development Concept – Manchester

Walkable Centers Hillsboro Blvd. & Hills Chapel Rd.

Existing



Proposed



Figure 4-13. Development Concept – Tullahoma

Walkable Centers N. Jackson St. & W. Grizzard St.

Existing



Proposed – Buffered Bicycle Lanes



Proposed – Separated Bicycle Lane



Section 5.0

Implementation

The roadway, bicycle, pedestrian, and intersection recommendations provide the overall framework for improving community mobility in Manchester and Tullahoma. The roadway recommendations, having been largely drawn from earlier community-driven planning processes, represent specific projects suitable for the project development process.

While the lists of bicycle, pedestrian, and intersection improvements in Section 4.0 identify recommendations by street or road, they do not necessarily represent specific projects. The project development phase begins with a formal project definition, which usually describes the project's purpose and need, logical termini, and feasibility. As part of the Community Mobility Plan, prioritization criteria were developed to help prioritize the bicycle, pedestrian, and intersection improvements identified in the network plans. The criteria are closely tied to the plan's goals and objectives and can be used by both jurisdictions to evaluate and weigh different needs. As shown below, the criteria include different metrics that can evaluate the project benefits with respect to user safety and estimated demand.

Safety

- **ADT** – Is the improvement adjacent to a high traffic volume roadway?
- **Crash** – How many bicycle and pedestrian crashes (2014 – 2017) have occurred within the improvement alignment?
- **Gap** - Does the improvement fill a gap in the existing network or extend an existing facility?

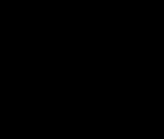
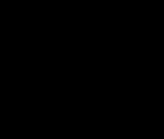
Demand

- **Schools** – Does the improvement provide access to a school?
- **Parks** – Does the improvement provide access to a state or local park?
- **Population Density** – Is the improvement located in a Census Block Group with a high population density?
- **Commercial/Retail** – Does the improvement provide access to land zoned for or determined to consist of a commercial/retail or office use?

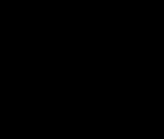
The prioritization tools for the bicycle, pedestrian, and intersection improvements will provide a flexible framework for local officials in both Manchester and Tullahoma to respond to current and future local priorities. For example, the ability to focus primarily on projects with safety benefits, or those that provide better access to schools, facilitates the targeted prioritization of projects meeting specific criteria for certain types of funding.

Ultimately, the implementation of project improvements will require an ongoing partnership between Manchester, Tullahoma, and TDOT. Many project recommendations can be implemented through regularly-scheduled capital projects, such as streetscape projects, street resurfacings, or public or private development. Other projects may be eligible for regular grant opportunities, such as the Transportation Alternatives Program (TAP) Grants.

While full implementation of the Community Mobility Plan may seem challenging, the plan itself represents a critical first step in achieving a shared vision for mobility within and between Manchester and Tullahoma – and making the case for funding. There are, of course, multiple, often competing, needs and priorities in all communities. Because they fundamentally tie communities together, investments in shared mobility offer an opportunity to achieve multiple community goals simultaneously and, in the process, deliver a great return on investment. With the Community Mobility Plan, Manchester and Tullahoma are poised to respond to future residential and employment growth while providing an excellent quality of life for their residents.



Community Mobility Plan



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